

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 501

TRT#: 1

SEX: Male

DAY ON TEST: 642

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-501

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Skin
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Spinal Cord, Thoracic
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Adrenal Medulla
 - Hyperplasia
- * Brain
 - Compression
- * Heart
 - Cardiomyopathy
- * Kidney
 - Nephropathy
- * Liver
 - Bile Duct
 - Hyperplasia
 - Hepatocyte
 - Vacuolation, Cytoplasmic
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Respirat Epith
 - Accumulation, Hyaline Droplet
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- Note: Majority of Level 3 absent.
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Adenoma
- * Preputial Gland
 - [Adenoma TGLs = 2-4]
 - Duct
 - Dilation
 - Inflammation
- * Prostate
 - [Dilation TGLs = 3-16]
 - Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

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Lab: IIT

ANIMAL ID: 501

TRT#: 1

SEX: Male

DAY ON TEST: 642

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-501

ORGAN AND ACCOUNTABLE SITE STATUS

* Salivary Glands	Parotid GI	Atrophy	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen	Red Pulp	Atrophy	Mild
		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		Inflammation	Chronic Active, Moderate
		Ulcer	Mild
Testis	Interstit Cell	Hyperplasia	Minimal
* Thymus		Atrophy	Minimal
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

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P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 502

TRT#: 1

SEX: Male

DAY ON TEST: 732

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-502

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Islets, Pancreatic
- * Trachea
- * Bone
- * Intestine Large, Rectum
- * Mammary Gland
- * Urinary Bladder
- * Brain
- * Intestine Small, Duodenum
- * Skin
- * Esophagus
- * Intestine Small, Jejunum
- * Stomach, Forestomach

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Necrosis
 - * Adrenal Medulla
 - Bilateral
 - [Pheochromocytoma Benign TGLs = 4,5-7]
 - Pheochromocytoma Benign
 - * Bone Marrow
 - Hypercellularity
 - * Epididymis
 - Exfoliated Germ Cell
 - Hypospermia
 - * Eye
 - Cornea, Epithelium
 - Cornea
 - Cornea
 - Hyperplasia
 - Inflammation
 - Neovascularization
 - * Heart
 - Cardiomyopathy
 - Cardiomyopathy
 - Ventricl Rgt
 - * Intestine Large, Cecum
 - Inflammation
 - Artery
 - * Intestine Large, Colon
 - Inflammation
 - Artery
 - * Intestine Small, Ileum
 - Inflammation
 - Artery
 - * Kidney
 - Nephropathy
 - [Nephropathy TGLs = 6,7,8,10-13]
 - * Liver
 - Hyperplasia
 - Bile Duct
 - * Lung
 - Infiltration Cellular
 - Alveolus
 - Lymph Node
 - Erythrophagocytosis
 - Mediastinal
 - * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- [Hyperplasia TGLs = 12-9]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 502

TRT#: 1

SEX: Male

DAY ON TEST: 732

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-502

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric		Erythrophagocytosis	Minimal
Mesentery	Artery	Inflammation	Chronic Active, Mild
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
	Respirat Epith	Hyperplasia	Goblet Cell, Minimal
* Pancreas	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Moderate
	[Hyperplasia TGLs = 16-6]		
* Parathyroid Gland		Hyperplasia	Moderate
	[Hyperplasia TGLs = 14-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Craniophar Dct	Cyst	
	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Mild
	Note: One of pair available for evaluation.		
	[Dilation TGLs = 1,2-16]		
* Prostate		Inflammation	Chronic Active, Minimal
* Salivary Glands	Parotid GI	Atrophy	Mild
	Artery	Inflammation	Chronic Active, Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Mild
	[Decreased Secretory Fluid TGLs = 11-16]		
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Hyperplasia	Lymphocyte, Minimal
		Pigment	Mild
* Stomach, Glandular	Artery	Inflammation	Chronic Active, Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 502

TRT#: 1

SEX: Male

DAY ON TEST: 732

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-502

ORGAN AND ACCOUNTABLE SITE STATUS

Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Marked
[Degeneration TGLs = 3-16A]			
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Animal Note: TGL 13 = NCL (No Corresponding Lesion)

Animal Note: TGL 15 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 503

TRT#: 1

SEX: Male

DAY ON TEST: 590

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-503

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
Mesentery	Artery	Inflammation	Chronic Active, Mild
	Artery	Mineral	Mild
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Hyperplasia	Minimal
	Artery	Inflammation	Chronic Active, Minimal
* Parathyroid Gland		Hyperplasia	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Mild
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
	[Decreased Secretory Fluid TGLs = 4-16]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Pigment	Mild
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Mild
	[Degeneration TGLs = 10-16A]		
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 1,5,6 = NCL (No Corresponding Lesion)

Animal Note: TGLs 7,8 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 504

TRT#: 1

SEX: Male

DAY ON TEST: 294

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-504

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|-----------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland | * Nerve Trigeminal |
| * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Sciatic | * Peripheral Nerve, Tibial |
| * Pituitary Gland | * Preputial Gland | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Spinal Cord, Lumbar |
| * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

Trigeminal Ganglion

AUTO PRECLUDES DIAG.

* Intestine Small, Ileum

OBSERVATIONS

- | | | | |
|----------------|---|-------------------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Congestion | Moderate |
| | [Congestion TGLs = 1 - 10] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Metaplasia | Respiratory, Minimal |
| * Preputial GI | | | |
| | Note: One of pair available for evaluation. | | |
| * Prostate | | Inflammation | Chronic Active, Minimal |
| * Spleen | | Extramedullary Hematopoiesis | Minimal |
| | | Pigment | Minimal |
| * Thymus | | Hemorrhage | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 504

TRT#: 1

SEX: Male

DAY ON TEST: 294

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-504

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- UNCERTAIN

Animal Note: TGL 2 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 506

TRT#: 1

SEX: Male

DAY ON TEST: 655

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-506

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Moderate
Note: Longitudinal section available for evaluation.			
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Mild
* Prostate	Epithelium	Hyperplasia	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
Testis	Germ Cell	Degeneration	Moderate
	Rete Testis	Dilation	Mild
Note: One testis normal			
[Degeneration TGLs = 3,5-16A]			
[Dilation TGLs = 4-16A]			
* Thymus		Atrophy	Minimal

PRIMARY CAUSE OF DEATH - UNCERTAIN

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 509

TRT#: 1

SEX: Male

DAY ON TEST: 681

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-509

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skin
- * Trachea
- * Esophagus
- * Intestine Small, Duodenum
- * Lung
- * Spinal Cord, Thoracic
- * Urinary Bladder
- * Harderian Gland
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Stomach, Forestomach
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Mammary Gland
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Necrosis
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
- * Aorta
 - Mineral
- [Mineral TGLs = 5-11]
- * Bone
 - Fibrous Osteodystrophy
- * Brain
 - Necrosis
- * Epididymis
 - Exfoliated Germ Cell
 - Hypospermia
- [Hypospermia TGLs = 13-16A]
- * Eye
 - Cornea
 - Inflammation
 - Cornea
 - Neovascularization
- * Heart
 - Cardiomyopathy
 - Ventricl Rgt
 - Cardiomyopathy
 - Myocardium
 - Mineral
 - Artery
 - Mineral
- [Cardiomyopathy TGLs = 8-12]
- * Intestine Large, Colon
 - Artery
 - Mineral
- * Kidney
 - Renal Tubule
 - Cyst
 - Nephropathy
- [Cyst TGLs = 1,2,3-13,20]
- [Nephropathy TGLs = 6,7-13]
- * Liver
 - Hepatocyte
 - Vacuolation, Cytoplasmic

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 509

TRT#: 1

SEX: Male

DAY ON TEST: 681

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-509

ORGAN AND ACCOUNTABLE SITE STATUS

Lymph Node	Pancreatic	Erythrophagocytosis	Mild
[Erythrophagocytosis	TGLs = 4-6]		
* Lymph Node, Mandibular	Lymph Sinus	Ectasia	Mild
Mesentery	Artery	Inflammation	Chronic Active, Mild
	Artery	Mineral	Moderate
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Atrophy	Minimal
	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland		Hyperplasia	Mild
[Hyperplasia	TGLs = 9-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Intermed	Cyst	
	Pars Intermed	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Mild
[Dilation	TGLs = 10-16]		
* Prostate		Decreased Secretory Fluid	Mild
[Decreased Secretory Fluid	TGLs = 12-16]		
* Salivary Glands	Parotid GI	Atrophy	Mild
* Seminal Vesicle		Decreased Secretory Fluid	Marked
[Decreased Secretory Fluid	TGLs = 14-16]		
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Mild
		Pigment	Moderate
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 509

TRT#: 1

SEX: Male

DAY ON TEST: 681

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-509

ORGAN AND ACCOUNTABLE SITE STATUS

Artery	Inflammation	Chronic Active, Moderate
[Degeneration TGLs = 11-16A]		
* Thymus	Atrophy	Marked
Trigeminal Ganglion	Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 15,16 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 510

TRT#: 1

SEX: Male

DAY ON TEST: 691

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-510

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Lymph Node, Mandibular | * Mammary Gland | * Parathyroid Gland |
| * Prostate | * Salivary Glands | * Spinal Cord, Cervical | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

MISSING

- * Nerve Trigeminal

OBSERVATIONS

- | | | | |
|-----------------------------|----------------------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Vacuolation, Cytoplasmic | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricle Rgt | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Carcinoma | |
| | [Carcinoma TGLs = 4-6] | | |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Infiltration Cellular | Mixed Cell, Minimal |
| | | Mixed Cell Focus | |
| | Hepatocyte | Vacuolation, Cytoplasmic | Minimal |
| * Lung | | Congestion | Mild |
| | [Congestion TGLs = 3-10] | | |
| * Lymph Node, Mesenteric | | Erythrophagocytosis | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Preputial Gland | Duct | Dilation | Mild |

Note: One of pair available for evaluation.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 510

TRT#: 1

SEX: Male

DAY ON TEST: 691

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-510

ORGAN AND ACCOUNTABLE SITE STATUS

* Seminal Vesicle		Decreased Secretory Fluid	Moderate
	[Decreased Secretory Fluid TGLs = 2-16]		
Skeletal Muscle		Degeneration	Mild
* Skin		Keratoacanthoma	
	[Keratoacanthoma TGLs = 1-20]		
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	Red Pulp	Atrophy	Minimal
		Pigment	Moderate
* Stomach, Forestomach		Edema	Mild
	Epithelium	Hyperplasia	Mild
		Ulcer	Mild
Testis	Germ Cell	Degeneration	Mild
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - Islets, Pancreatic Carcinoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 511

TRT#: 1

SEX: Male

DAY ON TEST: 580

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-511

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Esophagus
- * Intestine Small, Ileum
- * Lung
- * Pituitary Gland
- * Thyroid Gland
- * Harderian Gland
- * Intestine Small, Jejunum
- * Lymph Node, Mandibular
- * Salivary Glands
- * Trachea
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Mammary Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Intestine Small, Duodenum
- * Liver
- * Peripheral Nerve, Sciatic
- * Stomach, Forestomach

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Brain
- * Epididymis
- * Eye
- * Heart
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Kidney
- * Lymph Node, Mesenteric
- Mesentery
- Pineal Gland
- Retina
- Cornea, Epithelium
- Cornea
- Ventricl Rgt
- Myocardium
- Artery
- Artery
- Artery
- Renal Tubule
- Artery
- Hyperplasia
- Hyperplasia
- Mineral
- Fibrous Osteodystrophy
- Hypercellularity
- Necrosis
- Vacuolation, Cytoplasmic
- Exfoliated Germ Cell
- Hypospermia
- Degeneration
- Hyperplasia
- Inflammation
- Cardiomyopathy
- Cardiomyopathy
- Mineral
- Mineral
- Inflammation
- Inflammation
- Hyperplasia
- Nephropathy
- Infiltration Cellular
- Inflammation
- Minimal
- Minimal
- Moderate
- Minimal
- Minimal
- Mild
- Moderate
- Moderate
- Mild
- Mild
- Minimal
- Minimal
- Moderate
- Acute, Moderate
- Marked
- Minimal
- Mild
- Marked
- Chronic Active, Mild
- Chronic Active, Mild
- Oncocytic, Minimal
- Chronicprogr, Marked
- Polymorphnuclr, Mild
- Chronic Active, Mild

[Cardiomyopathy TGLs = 5,6-11]

[Nephropathy TGLs = 1,7,9-13]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 511

TRT#: 1

SEX: Male

DAY ON TEST: 580

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-511

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
		Inflammation	Suppurative, Minimal
* Pancreas		Adenoma	
	Acinus	Atrophy	Mild
	Artery	Inflammation	Chronic Active, Moderate
	Artery	Mineral	Mild
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland		Atrophy	Mild
		Inflammation	Chronic Active, Mild
	[Atrophy TGLs = 8-16]		
* Prostate		Inflammation	Chronic Active, Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Mild
	[Decreased Secretory Fluid TGLs = 4-16]		
Skeletal Muscle		Degeneration	Minimal
* Skin		Cyst Epithelial Inclusion	
	[Cyst Epithelial Inclusion TGLs = 2-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Mild
	[Degeneration TGLs = 3-16A]		
* Thymus		Atrophy	Marked
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 513

TRT#: 1

SEX: Male

DAY ON TEST: 527

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-513

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Epididymis
- * Esophagus
- * Harderian Gland
- * Heart
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Islets, Pancreatic
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Pancreas
- * Parathyroid Gland
- * Peripheral Nerve, Tibial
- * Preputial Gland
- * Prostate
- * Salivary Glands
- * Seminal Vesicle
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Spinal Cord, Thoracic
- * Stomach, Forestomach
- * Stomach, Glandular
- * Testis
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

INSUFFICIENT TISSUE

- * Nerve Trigeminal
- Trigeminal Ganglion

OBSERVATIONS

- * Brain
- * Kidney
- Renal Tubule
- Bilateral, Renal Tubule
- Renal Tubule
- Renal Tubule
- [Carcinoma TGLs = 4,6,7-13,21]
- [Cyst TGLs = 5-20]
- * Liver
- * Lung
- Bile Duct
- Alveolus
- [Congestion TGLs = 1-10]
- * Nose
- * Peripheral Nerve, Sciatic
- * Pituitary Gland
- [Adenoma TGLs = 8-4]
- Mineral
- Adenoma
- Carcinoma
- Cyst
- Hyperplasia
- Hyperplasia
- Congestion
- Infiltration Cellular
- Accumulation, Hyaline Droplet
- Degeneration
- Adenoma
- Minimal
- Atypical, Mild
- Minimal
- Mild
- Histiocyte, Minimal
- Moderate
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 513

TRT#: 1

SEX: Male

DAY ON TEST: 527

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-513

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Pigment	Moderate
* Thymus		Atrophy	Moderate
		Hemorrhage	Mild
[Atrophy TGLs = 3-6]			
[Hemorrhage TGLs = 2-6]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 514

TRT#: 1

SEX: Male

DAY ON TEST: 541

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-514

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland [Adenoma TGLs = 6-4]	Pars Distalis	Adenoma	
* Preputial Gland	Duct	Dilation Inflammation	Moderate Chronic Active, Mild
* Prostate		Infiltration Cellular	Mononuclear CI, Mild
* Salivary Glands	Parotid GI	Atrophy	Moderate
* Seminal Vesicle [Decreased Secretory Fluid TGLs = 5-16]		Decreased Secretory Fluid	Moderate
Skeletal Muscle		Degeneration	Minimal
* Spleen [Hemangiosarcoma TGLs = 1,2-12,20]		Hemangiosarcoma	
* Stomach, Forestomach		Edema	Mild
	Epithelium	Hyperplasia Inflammation	Moderate Chronic Active, Minimal
* Stomach, Glandular		Erosion	Mild
Testis	Germ Cell	Degeneration	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Carcinoma	
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Spleen Hemangiosarcoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 515

TRT#: 1

SEX: Male

DAY ON TEST: 654

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-515

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Skin
- Testis
- * Aorta
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder

MISSING

- * Parathyroid Gland

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Large, Cecum

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Heart
- * Kidney
- [Adenoma TGLs = 3-13,22.1RC]
- * Liver
- * Lung
- [Infiltration Cellular TGLs = 4-10]
- Lymph Node
- [Hemorrhage TGLs = 13,14-6]
- [Hemorrhage TGLs = 1,2-22.1]
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Nose
- * Peripheral Nerve, Sciatic
- Bilateral, Renal Tubule
- Hepatocyte
- Alveolus
- Pancreatic
- Mediastinal
- Olfactory Epi
- Adenoma
- Hypercellularity
- Cardiomyopathy
- Adenoma
- Nephropathy
- Necrosis
- Infiltration Cellular
- Hemorrhage
- Hemorrhage
- Proliferation
- Degeneration
- Accumulation, Hyaline Droplet
- Degeneration
- Marked
- Minimal
- Multiple
- Chronicprogr, Minimal
- Mild
- Histiocyte, Moderate
- Mild
- Moderate
- Plasma Cell, Mild
- Minimal
- Moderate
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 515

TRT#: 1

SEX: Male

DAY ON TEST: 654

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-515

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 7-4]			
* Preputial Gland		Inflammation	Chronic Active, Mild
[Inflammation TGLs = 6-16]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Hemangiosarcoma	
[Hemangiosarcoma TGLs = 9,20.1RC,21]			
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Carcinoma	
[Carcinoma TGLs = 12-8]			

PRIMARY CAUSE OF DEATH - Kidney Bilateral Renal Tubule Adenoma

CONTRIBUTORY CAUSE OF DEATH - Spleen Hemangiosarcoma

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Animal Note: TGL 8 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 516

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-516

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Lung
- * Prostate
- * Skin
- * Thyroid Gland
- * Bone
- * Eye
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Cervical
- * Trachea
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Brain
 - Mineral
- * Harderian Gland
 - Atrophy
- * Heart
 - Cardiomyopathy
 - Ventricl Rgt
 - Cardiomyopathy
 - Adenoma
- * Islets, Pancreatic
 - Nephropathy
- * Kidney
 - Chronicprogr, Moderate
 - Clear Cell Focus
- * Liver
 - Bile Duct
 - Hyperplasia
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Foreign Body
 - Respirat Epith
 - Hyperplasia
 - Inflammation
- * Pancreas
 - Adenoma
 - Acinus
 - Hyperplasia
 - Artery
 - Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 516

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-516

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 2-20]

* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland		Inflammation	Granulomatous, Marked
Note: One of pair available for evaluation.			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 517

TRT#: 1

SEX: Male

DAY ON TEST: 677

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-517

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Seminal Vesicle
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Lung
- * Parathyroid Gland
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Prostate
- Testis
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Ileum
- * Mammary Gland
- * Salivary Glands
- * Thyroid Gland

INSUFFICIENT TISSUE

- * Peripheral Nerve, Tibial

OBSERVATIONS

- * Adrenal Cortex
Ductus Deferens
[Granuloma TGLs = 1,2,3-20,21,22]
- * Epididymis
- * Heart
- * Intestine Small, Duodenum
- * Islets, Pancreatic
[Carcinoma TGLs = 8-22]
- * Kidney
[Nephropathy TGLs = 4-13]
- * Liver
[Clear Cell Focus TGLs = 5-12]
- * Lymph Node, Mandibular
- * Nose
- * Pancreas
- * Peripheral Nerve, Sciatic
- * Pituitary Gland
- * Preputial Gland
- Hyperplasia
- Granuloma
- Exfoliated Germ Cell
- Cardiomyopathy
- Ulcer
- Carcinoma
- Nephropathy
- Basophilic Focus
- Clear Cell Focus
- Ectasia
- Hyperplasia
- Accumulation, Hyaline Droplet
- Hyperplasia
- Degeneration
- Hyperplasia
- Dilation
- Mild
- Marked
- Minimal
- Minimal
- Moderate
- Chronicprogr, Moderate
- Moderate
- Lymphocyte, Mild
- Mild
- Moderate
- Moderate
- Marked
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 517

TRT#: 1

SEX: Male

DAY ON TEST: 677

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-517

ORGAN AND ACCOUNTABLE SITE STATUS

[Dilation TGLs = 6-20]

Skeletal Muscle

Degeneration

Moderate

[Degeneration TGLs = 9-11]

* Skin

Keratoacanthoma

[Keratoacanthoma TGLs = 7-21]

* Spinal Cord, Cervical

Degeneration

Minimal

* Spinal Cord, Lumbar

Nerve

Degeneration

Moderate

* Spinal Cord, Thoracic

Degeneration

Mild

* Spleen

Extramedullary Hematopoiesis

Minimal

* Stomach, Forestomach

Epithelium

Hyperplasia

Marked

Inflammation

Chronic Active, Moderate

* Thymus

Atrophy

Moderate

Trigeminal Ganglion

Degeneration

Minimal

* Urinary Bladder

Muscularis

Degeneration

Minimal

PRIMARY CAUSE OF DEATH

- Islets, Pancreatic Carcinoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 518

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-518

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Prostate
- * Skin
- Testis
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Salivary Glands
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Pituitary Gland
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder

INSUFFICIENT TISSUE

- * Thymus
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Heart
- * Kidney
- * Liver
- * Lung
- * Nerve Trigeminal
- * Nose
- * Pancreas
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Preputial Gland
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- Hyperplasia
- Hyperplasia
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Mixed Cell Focus
- Infiltration Cellular
- Degeneration
- Accumulation, Hyaline Droplet
- Hyperplasia
- Degeneration
- Degeneration
- Inflammation
- Degeneration
- Degeneration
- Mild
- Minimal
- Mild
- Minimal
- Chronicprogr, Mild
- Histiocyte, Minimal
- Minimal
- Mild
- Moderate
- Moderate
- Moderate
- Chronic Active, Moderate
- Moderate
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 518

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-518

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

Extramedullary Hematopoiesis

Minimal

Pigment

Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 519

TRT#: 1

SEX: Male

DAY ON TEST: 498

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-519

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Harderian Gland
- * Intestine Small, Jejunum
- * Lymph Node, Mandibular
- * Prostate
- * Skin
- * Trachea
- * Bone Marrow
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Mammary Gland
- * Salivary Glands
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Esophagus
- * Intestine Small, Duodenum
- * Liver
- * Nerve Trigeminal
- * Seminal Vesicle
- * Spinal Cord, Thoracic
- * Urinary Bladder
- * Eye
- * Intestine Small, Ileum
- * Lung
- * Pituitary Gland
- Skeletal Muscle
- * Stomach, Forestomach

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Mild
- * Aorta
 - Hypertrophy
 - Mild
- * Bone
 - Mineral
 - Moderate
- * Brain
 - Meninges
 - Fibrous Osteodystrophy
 - Minimal
- * Epididymis
 - Hyperplasia
 - Minimal
 - Exfoliated Germ Cell
 - Marked
 - Hypospermia
 - Marked
- * Heart
 - Cardiomyopathy
 - Moderate
 - Ventricl Rgt
 - Cardiomyopathy
 - Minimal
- * Intestine Large, Cecum
 - Artery
 - Inflammation
 - Chronic Active, Moderate
 - Inflammation
 - Acute, Moderate
 - Ulcer
 - Moderate
- * Intestine Large, Rectum
 - [Ulcer TGLs = 5-15]
 - Epithelium
 - Regeneration
 - Mild
- * Kidney
 - [Nephropathy TGLs = 7-13]
 - Nephropathy
 - Chronicprogr, Marked
- * Lymph Node
 - Renal
 - Erythrophagocytosis
 - Moderate
 - [Erythrophagocytosis TGLs = 8,9-20]
- * Lymph Node, Mesenteric
 - Erythrophagocytosis
 - Minimal
 - Infiltration Cellular
 - Polymorphnuclr, Mild
- * Mesentery
 - Artery
 - Inflammation
 - Chronic Active, Mild
 - Inflammation
 - Chronic, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 519

TRT#: 1

SEX: Male

DAY ON TEST: 498

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-519

ORGAN AND ACCOUNTABLE SITE STATUS

	Artery	Mineral	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Minimal
	Artery	Inflammation	Chronic Active, Marked
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Preputial Gland		Inflammation	Chronic Active, Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Moderate
		Pigment	Mild
	[Atrophy TGLs = 6-12]		
* Stomach, Glandular		Mineral	Mild
Testis	Germ Cell	Degeneration	Moderate
* Thymus		Atrophy	Marked
	[Atrophy TGLs = 1-6]		
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 2,3,4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 520

TRT#: 1

SEX: Male

DAY ON TEST: 563

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-520

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Lung
- * Preputial Gland
- * Skin
- * Thyroid Gland
- * Aorta
- * Eye
- * Lymph Node, Mandibular
- * Prostate
- * Spinal Cord, Cervical
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Mammary Gland
- * Salivary Glands
- * Spinal Cord, Thoracic
- Trigeminal Ganglion
- * Brain
- * Islets, Pancreatic
- * Pituitary Gland
- Skeletal Muscle
- * Stomach, Forestomach
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Intestine Large, Rectum
- * Stomach, Glandular
- * Intestine Small, Duodenum

OBSERVATIONS

- * Adrenal Cortex
 - * Bone
 - * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
 - * Epididymis
 - * Heart
 - * Kidney
 - [Nephropathy TGLs = 1-13]
 - * Liver
 - * Lymph Node, Mesenteric
 - Mesentery
 - * Nerve Trigeminal
 - * Nose
 - * Pancreas
 - * Parathyroid Gland
 - * Peripheral Nerve, Sciatic
 - * Peripheral Nerve, Tibial
 - * Seminal Vesicle
- | | | |
|---------------|-------------------------------|----------------------|
| | Hyperplasia | Minimal |
| | Fibrous Osteodystrophy | Minimal |
| | Exfoliated Germ Cell | Moderate |
| | Cardiomyopathy | Mild |
| Ventricle Rgt | Cardiomyopathy | Minimal |
| | Nephropathy | Chronicprogr, Marked |
| | Eosinophilic Focus | |
| | Erythrophagocytosis | Mild |
| | Mineral | Mild |
| | Degeneration | Moderate |
| | Accumulation, Hyaline Droplet | Mild |
| | Hyperplasia | Moderate |
| | Mineral | Mild |
| | Hyperplasia | Moderate |
| | Degeneration | Minimal |
| | Degeneration | Mild |
| | Decreased Secretory Fluid | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 520

TRT#: 1

SEX: Male

DAY ON TEST: 563

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-520

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
		Pigment	Mild
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 2,3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 521

TRT#: 1

SEX: Male

DAY ON TEST: 552

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-521

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- * Stomach, Forestomach
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Thyroid Gland
- * Eye
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea
- * Harderian Gland
- * Intestine Small, Ileum
- * Mammary Gland
- * Spinal Cord, Thoracic
- * Urinary Bladder

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|-------------------------------------|--------------------------|----------------------|
| * Adrenal Cortex | | Vacuolation, Cytoplasmic | Minimal |
| * Adrenal Medulla | | Hyperplasia | Marked |
| * Aorta | | Mineral | Mild |
| * Bone | | Fibrous Osteodystrophy | Minimal |
| * Brain | Pineal Gland | Vacuolation, Cytoplasmic | Marked |
| * Epididymis | | Exfoliated Germ Cell | Moderate |
| * Heart | | Cardiomyopathy | Moderate |
| | Ventricle Rgt | Cardiomyopathy | Minimal |
| | Artery | Mineral | Mild |
| * Intestine Large, Cecum | | Edema | Minimal |
| | Artery | Inflammation | Chronic Active, Mild |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 4-13] | | |
| * Liver | | Eosinophilic Focus | |
| | | Mixed Cell Focus | |
| * Lung | | Hemorrhage | Mild |
| Lymph Node | Mediastinal | Erythrophagocytosis | Mild |
| | [Erythrophagocytosis TGLs = 1-20] | | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Minimal |
| Mesentery | | Hemorrhage | Moderate |
| | Artery | Inflammation | Chronic Active, Mild |
| | Artery | Mineral | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 521

TRT#: 1

SEX: Male

DAY ON TEST: 552

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-521

ORGAN AND ACCOUNTABLE SITE STATUS

[Hemorrhage TGLs = 2-20]

* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Minimal
	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Intermed	Cyst	
* Preputial Gland	Duct	Dilation	Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Mild
	[Decreased Secretory Fluid TGLs = 3-16]		
* Skin		Keratoacanthoma	
	[Keratoacanthoma TGLs = 5-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Pigment	Mild
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Mild
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 522

TRT#: 1

SEX: Male

DAY ON TEST: 719

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-522

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Prostate
- * Thyroid Gland
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Spinal Cord, Cervical
- * Trachea
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Stomach, Forestomach
- * Urinary Bladder
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Necrosis Mild
 - Vacuolation, Cytoplasmic Mild
- * Adrenal Medulla
 - Hyperplasia Marked
- * Bone
 - Fibrous Osteodystrophy Minimal
- * Brain
 - Chor Plexus
 - Degeneration Mild
 - Mineral Minimal
- * Epididymis
 - Exfoliated Germ Cell Minimal
 - Hypospermia Marked
- * Eye
 - [Hypospermia TGLs = 3-16A]
 - Antr Chamber
 - Inflammation Acute, Minimal
 - Cornea
 - Inflammation Acute, Minimal
 - Retinal Detachment Moderate
- * Heart
 - Cardiomyopathy Minimal
- * Kidney
 - Ventricle Rgt
 - Cardiomyopathy Minimal
 - Nephropathy Chronicprogr, Marked
 - [Nephropathy TGLs = 4-13]
- * Liver
 - Eosinophilic Focus
 - Bile Duct
 - Hyperplasia Minimal
 - Hepatocyte
 - Vacuolation, Cytoplasmic Minimal
- * Lung
 - Alveolus
 - Hemorrhage Minimal
 - Infiltration Cellular Histiocyte, Minimal
 - [Infiltration Cellular TGLs = 5-10]
- Lymph Node
 - Iliac, Lymph Sinus
 - Ectasia Minimal
 - Mediastinal
 - Erythrophagocytosis Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 522

TRT#: 1

SEX: Male

DAY ON TEST: 719

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-522

ORGAN AND ACCOUNTABLE SITE STATUS

	Renal	Erythrophagocytosis	Mild
	Iliac	Erythrophagocytosis	Minimal
	Renal	Proliferation	Plasma Cell, Mild
	[Ectasia TGLs = 13-21]		
	[Erythrophagocytosis TGLs = 11-6]		
	[Proliferation TGLs = 12-20]		
* Lymph Node, Mandibular	Lymph Sinus	Ectasia	Mild
		Proliferation	Plasma Cell, Mild
* Lymph Node, Mesenteric		Erythrophagocytosis	Moderate
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas		Adenoma	
	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Mild
	[Adenoma TGLs = 1-6]		
* Parathyroid Gland		Hyperplasia	Marked
* Peripheral Nerve, Sciatic		Degeneration	Moderate
	Note: Longitudinal section available for evaluation.		
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Cyst	
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Mild
	[Dilation TGLs = 14-16]		
* Salivary Glands	Parotid GI	Atrophy	Mild
	Artery	Inflammation	Chronic Active, Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 7-16]		
Skeletal Muscle		Degeneration	Mild
* Skin	Subcut Tiss	Sarcoma	
	[Sarcoma TGLs = 8-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 522

TRT#: 1

SEX: Male

DAY ON TEST: 719

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-522

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Moderate
	Red Pulp	Atrophy	Mild
	[Atrophy TGLs = 9-12]		
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Moderate
	[Degeneration TGLs = 10-16A]		
* Thymus		Atrophy	Marked
	Artery	Inflammation	Chronic Active, Moderate
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Sarcoma

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Animal Note: TGL 2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 523

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-523

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Aorta | * Bone | * Bone Marrow | * Esophagus |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lung | * Lymph Node, Mesenteric | * Mammary Gland | * Nerve Trigeminal |
| * Parathyroid Gland | * Salivary Glands | * Seminal Vesicle | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|--------------------------|----------------------------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Brain | | Compression | Minimal |
| | [Compression TGLs = 8-2] | | |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| * Eye | Retina | Atrophy | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 4,5-13] | | |
| * Liver | Bile Duct | Cyst | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| | [Cyst TGLs = 9-20] | | |
| | [Mixed Cell Focus TGLs = 2-21] | | |
| Lymph Node | Iliac, Lymph Sinus | Ectasia | Mild |
| | [Ectasia TGLs = 6-20] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | Respirat Epith | Hyperplasia | Minimal |
| | | Inflammation | Suppurative, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 523

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-523

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Artery	Inflammation	Chronic Active, Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland [Adenoma TGLs = 7-4]	Pars Distalis	Adenoma	
* Preputial Gland	Duct	Dilation	Moderate
* Prostate	Epithelium	Hyperplasia	Minimal
		Inflammation	Chronic Active, Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild
	Artery	Inflammation	Chronic Active, Moderate
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGLs 1,3,10 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 524

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-524

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- * Thymus
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pituitary Gland
- Skeletal Muscle
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Lung
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Medulla
- * Brain
- * Epididymis
- * Kidney
- [Cyst TGLs = 6-20]
- [Nephropathy TGLs = 5-13]
- * Liver
- [Cyst TGLs = 4-20]
- Lymph Node
- * Lymph Node, Mandibular
- [Hyperplasia TGLs = 1-9]
- * Lymph Node, Mesenteric
- [Hyperplasia TGLs = 11-15]
- * Nerve Trigeminal
- * Nose
- * Pancreas
- [Hyperplasia TGLs = 12-6]
- Pineal Gland
- Renal Tubule
- Bile Duct
- Bile Duct
- Mediastinal
- Olfactory Epi
- Acinus
- Artery
- Hyperplasia
- Vacuolation, Cytoplasmic
- Exfoliated Germ Cell
- Cyst
- Nephropathy
- Cyst
- Hyperplasia
- Mixed Cell Focus
- Erythrophagocytosis
- Hyperplasia
- Proliferation
- Hyperplasia
- Degeneration
- Accumulation, Hyaline Droplet
- Hyperplasia
- Inflammation
- Moderate
- Mild
- Minimal
- Chronicprogr, Marked
- Minimal
- Mild
- Lymphocyte, Moderate
- Plasma Cell, Mild
- Lymphocyte, Minimal
- Moderate
- Mild
- Moderate
- Chronic Active, Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 524

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-524

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland [Hyperplasia TGLs = 9-8]		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland [Dilation TGLs = 2,3-16]	Duct	Dilation	Marked
* Skin [Inflammation TGLs = 10-20]	Subcut Tiss	Inflammation	Chronic, Mild
	Artery, Subcut Tiss	Inflammation	Chronic Active, Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thyroid Gland	C Cell	Adenoma	

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Animal Note: TGL 8 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 527

TRT#: 1

SEX: Male

DAY ON TEST: 565

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-527

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Brain
- * Islets, Pancreatic
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- * Urinary Bladder
- * Esophagus
- * Liver
- * Pituitary Gland
- Skeletal Muscle
- * Thyroid Gland
- * Harderian Gland
- * Lymph Node, Mandibular
- * Prostate
- * Skin
- * Trachea

AUTO PRECLUDES DIAG.

- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

INSUFFICIENT TISSUE

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 Minimal
- * Adrenal Medulla
 - Hyperplasia
 Mild
- * Aorta
 - Mineral
 Mild
- * Bone
 - Fibrous Osteodystrophy
 Minimal
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Epididymis
 - Exfoliated Germ Cell
 Mild
- * Eye
 - Cornea
 - Inflammation
 Acute, Moderate
- * Heart
 - Note: Retina autolysis precludes evaluation.
 - Cardiomyopathy
 - Congestion
 - Mineral
 Moderate
- [Congestion TGLs = 3-11]
 - Artery
 Moderate
- * Intestine Large, Cecum
 - Artery
 - Inflammation
 Chronic Active, Mild
- * Intestine Large, Rectum
 - Artery
 - Inflammation
 Chronic Active, Minimal
- * Kidney
 - Artery
 - Mineral
 - Nephropathy
 Mild
- Chronicprogr, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 527

TRT#: 1

SEX: Male

DAY ON TEST: 565

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-527

ORGAN AND ACCOUNTABLE SITE STATUS

[Nephropathy TGLs = 1,2-13]

* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Mesentery	Artery	Inflammation	Chronic Active, Minimal
	Artery	Mineral	Mild
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
* Pancreas	Acinus	Hyperplasia	Marked
	Artery	Mineral	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Mild
Skel Muscle			
Note: Skeletal muscle adjacent to vertebrae.			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Mild
	Arteriole	Mineral	Mild
		Pigment	Mild
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Mild
* Thymus		Atrophy	Marked
		Cyst	

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 529

TRT#: 1

SEX: Male

DAY ON TEST: 731

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-529

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Epididymis |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular |
| Testis | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|--|-----------------------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | Meninges | Hyperplasia | Gran Cell, Minimal |
| | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| Note: Meningeal Hyperplasia composed of granular cells | | | |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| | [Nephropathy TGLs = 4-13] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | | Inflammation | Suppurative, Minimal |
| * Pancreas | | Adenoma | |
| | [Adenoma TGLs = 3-20] | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| * Preputial Gland | Duct | Dilation | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 529

TRT#: 1

SEX: Male

DAY ON TEST: 731

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-529

ORGAN AND ACCOUNTABLE SITE STATUS

[Dilation TGLs = 2-16]	Inflammation	Chronic Active, Mild
* Prostate	Adenoma	
* Skin	Squamous Cell Papilloma	
[Squamous Cell Papilloma TGLs = 1-20]		
* Spinal Cord, Lumbar Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic	Degeneration	Mild
* Spleen	Extramedullary Hematopoiesis	Mild
	Pigment	Minimal
* Thymus	Atrophy	Moderate
Trigeminal Ganglion	Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 530

TRT#: 1

SEX: Male

DAY ON TEST: 715

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-530

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Intestine Small, Ileum
- * Preputial Gland
- * Skeletal Muscle
- * Stomach, Glandular
- * Bone Marrow
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Prostate
- * Skin
- * Thyroid Gland
- * Brain
- * Intestine Large, Rectum
- * Liver
- * Salivary Glands
- * Spinal Cord, Cervical
- * Trigeminal Ganglion
- * Eye
- * Intestine Small, Duodenum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration Minimal
 - Hyperplasia Mild
 - Hypertrophy Minimal
- * Adrenal Medulla
 - Hyperplasia Mild
- * Bone
 - Fibrous Osteodystrophy Minimal
- * Epididymis
 - Exfoliated Germ Cell Minimal
- * Esophagus
 - Dilation Marked
- [Dilation TGLs = 5-8]
- * Heart
 - Cardiomyopathy Minimal
- * Kidney
 - Nephropathy Chronicprogr, Marked
- [Nephropathy TGLs = 7,8,10-13]
- * Lung
 - Alveolus Infiltration Cellular Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Infiltration Cellular Polymorphnuclr, Mild
- * Lymph Node, Mesenteric
 - Erythrophagocytosis Minimal
- * Nerve Trigeminal
 - Degeneration Moderate
- * Nose
 - Olfactory Epi Accumulation, Hyaline Droplet Moderate
 - Foreign Body
 - Inflammation Suppurative, Moderate
- Note: Plant-based material within nasal lumen.
- * Pancreas
 - Acinus Hyperplasia Moderate
 - Artery Inflammation Chronic Active, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 530

TRT#: 1

SEX: Male

DAY ON TEST: 715

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-530

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland		Hyperplasia	Moderate
	[Hyperplasia TGLs = 6-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
	Note: Longitudinal section available for evaluation.		
* Peripheral Nerve, Tibial		Degeneration	Moderate
	Note: Longitudinal section available for evaluation.		
* Pituitary Gland	Pars Distalis	Adenoma	
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Minimal
	Red Pulp	Atrophy	Mild
		Pigment	Mild
	[Atrophy TGLs = 9-12]		
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Marked
		Hyperplasia	Epithelial, Minimal
* Trachea	Epithelium	Metaplasia	Squamous, Minimal

PRIMARY CAUSE OF DEATH - Esophagus Dilation

Animal Note: TGLs 1,2,3,4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 533

TRT#: 1

SEX: Male

DAY ON TEST: 731

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-533

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Seminal Vesicle
- * Stomach, Glandular
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- * Thyroid Gland
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Liver
- * Prostate
- * Spinal Cord, Cervical
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Minimal
 - Hypertrophy Mild
 - [Hypertrophy TGLs = 3-7]
- * Adrenal Medulla
 - Hyperplasia Minimal
- * Heart
 - Cardiomyopathy Minimal
- * Islets, Pancreatic
 - Hyperplasia Mild
- * Kidney
 - Nephropathy Chronicprogr, Marked
 - [Nephropathy TGLs = 4,5-13]
- * Lung
 - Alveolus Infiltration Cellular Histiocyte, Mild
 - [Infiltration Cellular TGLs = 7-10]
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Minimal
 - Proliferation Plasma Cell, Minimal
 - Dilation Mild
- * Mammary Gland
 - Duct
 - [Dilation TGLs = 1-9]
- * Nose
 - Olfactory Epi Accumulation, Hyaline Droplet Mild
- * Pancreas
 - Acinus Hyperplasia Mild
 - Artery Inflammation Chronic Active, Mild
 - [Hyperplasia TGLs = 6-6]
- * Peripheral Nerve, Sciatic
 - Degeneration Moderate
- * Peripheral Nerve, Tibial
 - Degeneration Moderate
- * Pituitary Gland
 - Pars Distalis Adenoma
 - [Adenoma TGLs = 8,9-4]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 533

TRT#: 1

SEX: Male

DAY ON TEST: 731

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-533

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland	Duct	Dilation Inflammation	Moderate Chronic Active, Mild
[Dilation TGLs = 2-16]			
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Moderate
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 534

TRT#: 1

SEX: Male

DAY ON TEST: 721

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-534

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Liver
- * Seminal Vesicle
- * Stomach, Glandular
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Thyroid Gland
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea

MISSING

Trigeminal Ganglion

INSUFFICIENT TISSUE

* Mammary Gland

OBSERVATIONS

- * Adrenal Cortex
 - * Adrenal Medulla
 - * Eye
 - * Heart
 - * Intestine Small, Jejunum
 - * Kidney
 - Lacrimal Gland
 - * Lung
 - Thrombus
 - Pheochromocytoma Benign
 - Thrombus
 - Inflammation
 - Neovascularization
 - Cardiomyopathy
 - Dilation
 - Adenocarcinoma
 - Cyst
 - Nephropathy
 - Metaplasia
 - Congestion
 - Marked
 - Marked
 - Acute, Minimal
 - Minimal
 - Minimal
 - Moderate
 - Chronicprogr, Marked
 - Harderian GI, Minimal
 - Mild
- [Dilation TGLs = 6-11]
- [Adenocarcinoma TGLs = 11,12-20,21]
- [Cyst TGLs = 5-13]
- [Nephropathy TGLs = 3,4-13]
- [Congestion TGLs = 1-10]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 534

TRT#: 1

SEX: Male

DAY ON TEST: 721

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-534

ORGAN AND ACCOUNTABLE SITE STATUS

Lymph Node [Hyperplasia TGLs = 13-22]	Pancreatic	Hyperplasia	Lymphocyte, Moderate
* Lymph Node, Mandibular		Hyperplasia Proliferation	Lymphocyte, Mild Plasma Cell, Minimal
* Nerve Trigeminal		Degeneration	Mild
* Nose	Respirat Epith Olfactory Epi	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet	Minimal Mild
Note: Level 2 and 3 are damaged.			
* Pancreas [Adenoma TGLs = 9-6]		Adenoma	Multiple
* Peripheral Nerve, Sciatic		Degeneration	Marked
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland [Adenoma TGLs = 10-4]	Pars Distalis	Adenoma	
* Preputial Gland	Duct	Dilation Inflammation	Moderate Chronic Active, Mild
* Prostate	Epithelium	Hyperplasia Inflammation	Minimal Acute, Mild
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy Hyperplasia	Moderate Epithelial, Mild

PRIMARY CAUSE OF DEATH - Intestine Small, Jejunum Adenocarcinoma

Animal Note: TGLs 2,7,8 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 535

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-535

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- Skeletal Muscle
- * Thyroid Gland
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Prostate
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Seminal Vesicle
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 Minimal
Mild
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity
 Minimal
- * Epididymis
 - Mesothelioma Malignant
- * Heart
 - Cardiomyopathy
 - Ventricl Rgt
 - Cardiomyopathy
 - Adenoma
 Mild
Minimal
- * Islets, Pancreatic
 - [Adenoma TGLs = 5-6]
- * Kidney
 - [Nephropathy TGLs = 6-13]
 Nephropathy

Chronicprogr, Moderate
- * Liver
 - Clear Cell Focus
- * Lung
 - Congestion
 - Alveolus
 - Infiltration Cellular
 Minimal
Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 Lymphocyte, Mild
Plasma Cell, Moderate
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 Minimal
- * Pancreas
 - Acinus
 - Hyperplasia
 - Artery
 - Inflammation
 Mild
Chronic Active, Mild
- * Peripheral Nerve, Sciatic
 - [Hyperplasia TGLs = 5-14]
 Degeneration

Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 535

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-535

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 8-4]			
* Preputial Gland	Duct	Dilation	Marked
		Inflammation	Chronic Active, Moderate
[Dilation TGLs = 1,7-16]			
* Skin	Subcut Tiss	Lipoma	
[Lipoma TGLs = 2-20]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis		Mesothelioma Malignant	
[Mesothelioma Malignant TGLs = 3-16A]			
* Thymus		Cyst	
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 536

TRT#: 1

SEX: Male

DAY ON TEST: 510

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-536

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Preputial Gland
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Thyroid Gland
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Prostate
- * Skin
- * Stomach, Forestomach
- * Trachea
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Pancreas
- * Salivary Glands
- * Spinal Cord, Cervical
- * Stomach, Glandular
- Trigeminal Ganglion
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Peripheral Nerve, Tibial
- * Seminal Vesicle
- * Spinal Cord, Lumbar
- Testis
- * Urinary Bladder

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Vacuolation, Cytoplasmic
- * Aorta
 - Mineral
- * Heart
 - Cardiomyopathy
 - Cardiomyopathy
- * Islets, Pancreatic
 - Hyperplasia
- * Kidney
 - Nephropathy
- * Liver
 - Clear Cell Focus
- * Lung
 - Foreign Body
 - Inflammation
- Note: Multiple large pieces of plant based material.
[Inflammation TGLs = 1-10]
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Foreign Body
 - Inflammation
 - Degeneration
- * Peripheral Nerve, Sciatic
 - Degeneration
- Note: Longitudinal section available for evaluation.
- * Pituitary Gland
 - Pars Distalis
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 536

TRT#: 1

SEX: Male

DAY ON TEST: 510

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-536

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

Extramedullary Hematopoiesis

Minimal

Pigment

Minimal

* Thymus

Atrophy

Mild

PRIMARY CAUSE OF DEATH - Lung Inflammation

CONTRIBUTORY CAUSE OF DEATH - Lung Foreign Body

Animal Note: TGLs 2,3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 538

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-538

ORGAN AND ACCOUNTABLE SITE STATUS

Testis

Germ Cell

Degeneration

Marked

Note: One testis normal.

[Degeneration TGLs = 1-16A]

* Thymus

Atrophy

Moderate

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 539

TRT#: 1

SEX: Male

DAY ON TEST: 610

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-539

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Skin
- * Thyroid Gland
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Spinal Cord, Cervical
- * Trachea
- * Eye
- * Intestine Small, Duodenum
- * Lung
- * Salivary Glands
- * Spinal Cord, Thoracic
- Trigeminal Ganglion

MISSING

- * Pituitary Gland

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule Hypertrophy Mild
 - [Accessory Adrenal Cortical Nodule TGLs = 1-7]
- * Adrenal Medulla
 - Hyperplasia Mild
- * Aorta
 - Mineral Moderate
- * Bone
 - Fibrous Osteodystrophy Minimal
- * Epididymis
 - Exfoliated Germ Cell Mild
- * Heart
 - Cardiomyopathy Moderate
- * Intestine Large, Cecum
 - Artery
 - Mineral Moderate
 - Edema Moderate
 - Erosion Moderate
 - Inflammation Chronic Active, Moderate
 - Regeneration Moderate
 - Epithelium
- * Kidney
 - [Edema TGLs = 5-15]
 - Renal Tubule
 - Cyst
 - Nephropathy Chronicprogr, Marked
 - [Cyst TGLs = 2-13]
 - [Nephropathy TGLs = 8,9-13]
- * Liver
 - Bile Duct
 - Hyperplasia Minimal
 - Lymph Node
 - Renal
 - Erythrophagocytosis Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 539

TRT#: 1

SEX: Male

DAY ON TEST: 610

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-539

ORGAN AND ACCOUNTABLE SITE STATUS

[Erythrophagocytosis TGLs = 10,11-20]

* Lymph Node, Mandibular

Hyperplasia
Proliferation

Lymphocyte, Minimal
Plasma Cell, Minimal

[Hyperplasia TGLs = 3-9]

Mesentery

Artery
Vein

Inflammation
Inflammation
Degeneration

Chronic Active, Mild
Chronic Active, Minimal

* Nerve Trigeminal

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

* Pancreas

Acinus

Hyperplasia

Mild

Artery

Mineral

Mild

* Parathyroid Gland

Hyperplasia

Mild

* Peripheral Nerve, Sciatic

Degeneration

Moderate

* Peripheral Nerve, Tibial

Degeneration

Moderate

Note: Longitudinal section available for evaluation.

* Preputial Gland

Duct

Dilation

Mild

* Seminal Vesicle

Decreased Secretory Fluid

Moderate

* Spinal Cord, Lumbar

Nerve

Degeneration

Mild

* Spleen

Pigment

Minimal

* Stomach, Glandular

Mineral

Moderate

Testis

Germ Cell

Degeneration

Mild

Artery

Inflammation

Chronic Active, Moderate

[Degeneration TGLs = 7-16A]

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 4,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 540

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-540

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Rectum
- * Pituitary Gland
- * Trachea
- * Bone Marrow
- * Intestine Small, Duodenum
- * Prostate
- * Urinary Bladder
- * Esophagus
- * Intestine Small, Ileum
- * Skin
- * Eye
- * Intestine Small, Jejunum
- * Stomach, Forestomach

MISSING

- * Mammary Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Minimal
 - Hypertrophy Minimal
- * Adrenal Medulla
 - Hyperplasia Marked
 - Pheochromocytoma Benign
- [Pheochromocytoma Benign TGLs = 4,5-7]
- * Bone
 - Fibrous Osteodystrophy Minimal
- * Brain
 - Meninges Granular Cell Tumor Benign
- * Epididymis
 - Exfoliated Germ Cell Minimal
- * Harderian Gland
 - Inflammation Chronic Active, Minimal
- * Heart
 - Cardiomyopathy Mild
 - Ventricl Rgt Cardiomyopathy Minimal
 - Artery Inflammation Chronic Active, Mild
- * Intestine Large, Cecum
 - Artery Inflammation Chronic Active, Mild
- * Intestine Large, Colon
 - Hyperplasia Mild
- * Islets, Pancreatic
- * Kidney
 - Renal Tubule Cyst
 - Nephropathy Chronicprogr, Marked
 - Thrombus Moderate
- [Cyst TGLs = 7,8-13]
- [Nephropathy TGLs = 6,9,14-13]
- * Liver
 - Eosinophilic Focus
 - Bile Duct Hyperplasia Mild
 - Infiltration Cellular Mixed Cell, Minimal
- * Lung
 - Artery, Mediastinum Inflammation Chronic Active, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 540

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-540

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Mild
		Proliferation	Plasma Cell, Minimal
* Lymph Node, Mesenteric		Erythrophagocytosis	Minimal
Mesentery	Artery	Inflammation	Chronic Active, Mild
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Mild
	Artery	Inflammation	Chronic Active, Moderate
	[Hyperplasia TGLs = 12-20]		
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Marked
		Inflammation	Chronic Active, Moderate
	[Dilation TGLs = 1,2-16]		
	[Inflammation TGLs = 3-16]		
* Salivary Glands	Parotid GI	Atrophy	Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Minimal
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Mild
		Hyperplasia	Lymphocyte, Mild
	[Hyperplasia TGLs = 10-12]		
* Stomach, Glandular	Artery	Inflammation	Chronic Active, Minimal
Testis	Artery	Inflammation	Chronic Active, Marked
* Thymus		Atrophy	Mild
* Thyroid Gland	Follicle	Hyperplasia	Cystic, Minimal
	C Cell	Hyperplasia	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 540

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-540

ORGAN AND ACCOUNTABLE SITE STATUS

Trigeminal Ganglion

Degeneration

Minimal

Animal Note: TGLs 11,13 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 541

TRT#: 1

SEX: Male

DAY ON TEST: 663

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-541

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Skin
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Rectum
- * Lung
- * Stomach, Forestomach
- * Eye
- * Intestine Small, Duodenum
- * Prostate
- * Thyroid Gland
- * Harderian Gland
- * Intestine Small, Ileum
- * Salivary Glands
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - * Adrenal Medulla
 - * Aorta
 - * Bone
 - * Brain
 - * Epididymis
 - * Heart
 - * Intestine Large, Cecum
 - * Islets, Pancreatic
 - * Kidney
 - * Liver
 - * Lymph Node, Mandibular
 - * Lymph Node, Mesenteric
 - * Mammary Gland
 - Mesentery
- [Cyst TGLs = 1,2-13,20]
- [Nephropathy TGLs = 3,4-13]
- Vacuolation, Cytoplasmic
 - Pheochromocytoma Benign
 - Mineral
 - Fibrous Osteodystrophy
 - Hemorrhage
 - Necrosis
 - Exfoliated Germ Cell
 - Cardiomyopathy
 - Artery
 - Mineral
 - Edema
 - Erosion
 - Artery
 - Inflammation
 - Epithelium
 - Regeneration
 - Hyperplasia
 - Renal Tubule
 - Cyst
 - Nephropathy
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
 - Proliferation
 - Erythrophagocytosis
 - Galactocele
 - Artery
 - Inflammation
- Minimal
 - Mild
 - Minimal
 - Minimal
 - Minimal
 - Moderate
 - Moderate
 - Moderate
 - Mild
 - Mild
 - Chronic Active, Mild
 - Mild
 - Minimal
 - Chronicprogr, Marked
 - Minimal
 - Plasma Cell, Mild
 - Mild
 - Chronic Active, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 541

TRT#: 1

SEX: Male

DAY ON TEST: 663

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-541

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal	Artery	Mineral Degeneration	Mild Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland	Artery	Mineral Hyperplasia	Minimal Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Note: Pars distalis available for evaluation.			
* Preputial Gland	Duct	Dilation	Mild
[Dilation TGLs = 7,8-16]			
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	Artery	Inflammation	Chronic Active, Moderate
[Decreased Secretory Fluid TGLs = 6-16]			
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Minimal
	Red Pulp	Atrophy	Mild
		Pigment	Minimal
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Mild
[Degeneration TGLs = 5-16A]			
* Thymus		Atrophy	Moderate
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 9 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 542

TRT#: 1

SEX: Male

DAY ON TEST: 580

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-542

ORGAN AND ACCOUNTABLE SITE STATUS

* Kidney		Nephropathy	Chronicprogr, Marked
	[Nephropathy TGLs = 7,8,11,12-13]		
* Liver	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
* Lung	Epithlm Alvlus	Hyperplasia	Mild
Mesentery	Artery	Inflammation	Chronic Active, Mild
	Artery	Mineral	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Mild
	[Hyperplasia TGLs = 2-6]		
* Parathyroid Gland		Hyperplasia	Marked
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Mild
* Salivary Glands	Parotid GI	Atrophy	Mild
	Duct, Parotid GI	Dilation	Mild
	Parotid GI	Inflammation	Acute, Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Moderate
		Pigment	Mild
	[Atrophy TGLs = 13-12]		
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Mild
	[Degeneration TGLs = 1-16A]		
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 4,5,10,14 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 542

TRT#: 1

SEX: Male

DAY ON TEST: 580

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-542

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: TGL 6 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 543

TRT#: 1

SEX: Male

DAY ON TEST: 567

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-543

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Seminal Vesicle
- Testis
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- Skeletal Muscle
- * Thyroid Gland
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Stomach, Forestomach
- * Trachea
- * Brain
- * Heart
- * Intestine Small, Ileum
- * Mammary Gland
- * Stomach, Glandular

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Epididymis
- * Kidney
- [Nephropathy TGLs = 6-13]
- * Liver
- [Cyst TGLs = 7-12]
- [Hepatodiaphragmatic Nodule TGLs = 8-20]
- * Lung
- * Nerve Trigeminal
- * Nose
- * Pancreas
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Preputial Gland
- * Prostate
- [Inflammation TGLs = 2-16]
- Bile Duct
- Alveolus
- Olfactory Epi
- Acinus
- Pars Distalis
- Hyperplasia
- Hypercellularity
- Exfoliated Germ Cell
- Nephropathy
- Cyst
- Extramedullary Hematopoiesis
- Hepatodiaphragmatic Nodule
- Infiltration Cellular
- Degeneration
- Accumulation, Hyaline Droplet
- Hyperplasia
- Hyperplasia
- Degeneration
- Degeneration
- Cyst
- Inflammation
- Inflammation
- Mild
- Marked
- Minimal
- Chronicprogr, Moderate
- Minimal
- Histiocyte, Minimal
- Moderate
- Minimal
- Mild
- Minimal
- Minimal
- Mild
- Chronic Active, Minimal
- Acute, Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 543

TRT#: 1

SEX: Male

DAY ON TEST: 567

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-543

ORGAN AND ACCOUNTABLE SITE STATUS

* Salivary Glands	Parotid GI	Atrophy	Minimal
* Skin	Subcut Tiss	Inflammation	Suppurative, Marked
	Subcut Tiss	Sarcoma	
	[Inflammation TGLs = 9-20]		
	[Sarcoma TGLs = 10-21]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
* Thymus		Atrophy	Marked
Trigeminal Ganglion		Degeneration	Minimal
* Urinary Bladder	Urothelium	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 1,3,4,5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 544

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-544

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Preputial Gland | * Prostate | * Seminal Vesicle |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|-----------------------------|--|-------------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Moderate |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Carcinoma | |
| | | Hyperplasia | Minimal |
| | [Carcinoma TGLs = 3-6] | | |
| * Kidney | Renal Tubule | Hyperplasia | Oncocytic, Minimal |
| | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 2-13] | | |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 4-10,20] | | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Moderate |
| | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Minimal |
| | [Ectasia TGLs = 1-9] | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 544

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-544

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Salivary Glands	Parotid GI	Atrophy	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
Testis	Seminif Tub	Dilation	Mild
* Thymus		Atrophy	Mild
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 545

TRT#: 1

SEX: Male

DAY ON TEST: 604

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-545

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Esophagus
- * Intestine Small, Jejunum
- * Prostate
- * Spinal Cord, Thoracic
- Trigeminal Ganglion
- * Aorta
- * Eye
- * Islets, Pancreatic
- * Seminal Vesicle
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Harderian Gland
- * Mammary Gland
- Skeletal Muscle
- * Thyroid Gland
- * Epididymis
- * Intestine Small, Duodenum
- * Pituitary Gland
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Medulla
[Pheochromocytoma Malignant TGLs = 3-7]
Pheochromocytoma Malignant
- * Bone
Fibrous Osteodystrophy
Minimal
- * Bone Marrow
Hypercellularity
Mild
- * Heart
Cardiomyopathy
Mild
- * Intestine Large, Cecum
Artery
Inflammation
Chronic Active, Mild
- * Intestine Large, Colon
Artery
Inflammation
Chronic Active, Mild
- * Intestine Large, Rectum
Artery
Inflammation
Chronic Active, Mild
- * Intestine Small, Ileum
Artery
Inflammation
Chronic Active, Mild
- * Kidney
Nephropathy
Chronicprogr, Marked
- [Nephropathy TGLs = 2-13]
- * Liver
Bile Duct
Hyperplasia
Mixed Cell Focus
Minimal
- * Lung
Congestion
Minimal
- Artery, Mediastinum
Inflammation
Chronic Active, Mild
- [Congestion TGLs = 6-10]
- * Lymph Node, Mandibular
Hyperplasia
Proliferation
Lymphocyte, Mild
- * Lymph Node, Mesenteric
Erythrophagocytosis
Plasma Cell, Moderate
- [Erythrophagocytosis TGLs = 7,8-15]
Mild
- Mesentery
Artery
Inflammation
Chronic Active, Marked
- * Nerve Trigeminal
Degeneration
Minimal
- * Nose
Olfactory Epi
Accumulation, Hyaline Droplet
Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 545

TRT#: 1

SEX: Male

DAY ON TEST: 604

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-545

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Hyperplasia	Minimal
	Artery	Inflammation	Chronic Active, Moderate
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Mild
* Salivary Glands	Artery	Inflammation	Chronic Active, Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
	[Extramedullary Hematopoiesis TGLs = 1-12]		
* Stomach, Glandular	Artery	Inflammation	Chronic Active, Moderate
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild
	Artery	Inflammation	Chronic Active, Minimal

PRIMARY CAUSE OF DEATH - Adrenal Medulla Pheochromocytoma Malignant

Animal Note: TGLs 4,5,9,10,11,12,13 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 546

TRT#: 1

SEX: Male

DAY ON TEST: 704

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-546

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Harderian Gland
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Stomach, Glandular
- * Aorta
- * Epididymis
- * Intestine Small, Duodenum
- * Preputial Gland
- * Skin
- * Trachea
- * Bone
- * Esophagus
- * Intestine Small, Ileum
- * Prostate
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone Marrow
- * Eye
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach

MISSING

- * Intestine Large, Rectum
- * Mammary Gland
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Large, Colon

OBSERVATIONS

- * Adrenal Cortex Hyperplasia Mild
- * Brain
- Note: Olfactory bulbs unavailable for evaluation.
- * Heart Cardiomyopathy Mild
 - Ventricl Rgt Cardiomyopathy Minimal
 - Atrium Dilation Mild
 - [Dilation TGLs = 6-11]
- * Islets, Pancreatic Carcinoma
 - [Carcinoma TGLs = 3-21]
- * Kidney Nephropathy Chronicprogr, Marked
 - [Nephropathy TGLs = 1,2-13]
- * Liver Cholangiofibrosis Mild
 - Periductal
 - Note: Intestinal metaplasia of extrahepatic bile ducts.
- * Lung Congestion Mild
 - Alveolus Infiltration Cellular Histocyte, Minimal
 - Inflammation Chronic Active, Minimal
 - [Infiltration Cellular TGLs = 9-11,20]
- Lymph Node Erythrophagocytosis Moderate
 - Pancreatic

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 546

TRT#: 1

SEX: Male

DAY ON TEST: 704

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-546

ORGAN AND ACCOUNTABLE SITE STATUS

[Erythrophagocytosis TGLs = 5-20]

* Lymph Node, Mandibular		Hyperplasia Proliferation	Lymphocyte, Moderate Plasma Cell, Mild
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet Inflammation	Minimal Suppurative, Minimal
* Pancreas	Acinus Acinus	Atrophy Hyperplasia	Minimal Mild
* Parathyroid Gland		Hyperplasia	Minimal
	[Hyperplasia TGLs = 8-8]		
* Peripheral Nerve, Sciatic		Degeneration	Marked
* Peripheral Nerve, Tibial		Degeneration	Marked
* Pituitary Gland	Pars Distalis	Adenoma	
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration Degeneration	Mild Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 4,7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 547

TRT#: 1

SEX: Male

DAY ON TEST: 732

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-547

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Brain
- * Epididymis
- * Esophagus
- * Harderian Gland
- * Heart
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Preputial Gland
- * Prostate
- * Salivary Glands
- * Seminal Vesicle
- * Skeletal Muscle
- * Skin
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- * Trigeminal Ganglion
- * Urinary Bladder

OBSERVATIONS

- * Eye Retina Atrophy Minimal
- * Intestine Large, Rectum Hyperplasia Lymphocyte, Marked
- * Kidney Nephropathy Chronicprogr, Mild
[Nephropathy TGLs = 2-13]
- * Liver Bile Duct Hyperplasia Minimal
Mixed Cell Focus
- * Lung Alveolus Infiltration Cellular Histiocyte, Mild
[Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Mild
Proliferation Plasma Cell, Mild
Degeneration Mild
- * Nerve Trigeminal
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Minimal
- * Pancreas Acinus Hyperplasia Moderate
[Hyperplasia TGLs = 3-6]
- * Parathyroid Gland Hyperplasia Minimal
- * Peripheral Nerve, Sciatic Degeneration Moderate
- * Peripheral Nerve, Tibial Degeneration Moderate
- * Pituitary Gland Pars Distalis Hyperplasia Minimal
- * Spinal Cord, Cervical Degeneration Minimal
- * Spinal Cord, Lumbar Degeneration Minimal
Nerve Degeneration Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 547

TRT#: 1

SEX: Male

DAY ON TEST: 732

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-547

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Moderate
		Ectopic Parathyroid Gland	
Tissue NOS	Fat	Necrosis	Moderate
[Necrosis TGLs = 1-20]			

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 548

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-548

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Mammary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Eye | Retina | Atrophy | Minimal |
| | Cornea, Epithelium | Hyperplasia | Minimal |
| | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 3-13] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 5-10] | | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Moderate |
| | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Inflammation | Suppurative, Minimal |
| | Olfactory Epi | Metaplasia | Respiratory, Minimal |
| * Pancreas | Acinus | Hyperplasia | Moderate |
| | Artery | Inflammation | Chronic Active, Mild |
| | [Hyperplasia TGLs = 2-6] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 548

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-548

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland		Hyperplasia	Mild
		Inflammation	Chronic Active, Mild
* Skin	Epidermis	Hyperplasia	Mild
		Inflammation	Chronic Active, Mild
	[Inflammation TGLs = 1-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Marked

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 549

TRT#: 1

SEX: Male

DAY ON TEST: 731

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-549

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Rectum
- * Lung
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Stomach, Glandular
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Skeletal Muscle
- * Thyroid Gland
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Vacuolation, Cytoplasmic
 Mild
- * Epididymis
 - Hypospermia
 Minimal
- * Eye
 - [Hypospermia TGLs = 3-16A]
 - Retina
 - Atrophy
 Minimal
- * Harderian Gland
 - Degeneration
 Cystic, Minimal
- * Heart
 - Cardiomyopathy
 - Ventricl Rgt
 - Cardiomyopathy
 - Carcinoma
 Minimal
- * Islets, Pancreatic
 - [Carcinoma TGLs = 4-6]
- * Kidney
 - Nephropathy
 Chronicprogr, Moderate
- * Liver
 - Clear Cell Focus
- * Lymph Node, Mandibular
 - Lymph Sinus
 - Ectasia
 - Hyperplasia
 - Proliferation
 Mild
- * Nerve Trigeminal
 - Degeneration
 Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 Minimal
- * Pancreas
 - Acinus
 - Hyperplasia
 Mild
- * Parathyroid Gland
 - Hyperplasia
 Minimal
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Infiltration Cellular
 Moderate
- * Peripheral Nerve, Tibial
 - Degeneration
 Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 549

TRT#: 1

SEX: Male

DAY ON TEST: 731

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-549

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Minimal
	[Dilation TGLs = 1-16]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Marked
	Artery	Inflammation	Chronic Active, Moderate
	[Degeneration TGLs = 2-16A]		
* Thymus		Atrophy	Moderate
		Cyst	
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 550

TRT#: 1

SEX: Male

DAY ON TEST: 732

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-550

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | Skeletal Muscle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | | |

INSUFFICIENT TISSUE

- * Adrenal Medulla

OBSERVATIONS

- | | | | |
|---|--------------------|---|--------------------------|
| * Adrenal Cortex | | Hypertrophy
Vacuolation, Cytoplasmic | Minimal
Mild |
| [Vacuolation, Cytoplasmic TGLs = 3-7] | | | |
| * Epididymis | | Hypospermia | Marked |
| Note: One epididymis is normal. | | | |
| [Hypospermia TGLs = 2-16A] | | | |
| * Islets, Pancreatic | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| [Nephropathy TGLs = 4-13] | | | |
| * Liver | | Mixed Cell Focus | |
| * Lung | Epithlm Alvlus | Hyperplasia | Marked |
| [Hyperplasia TGLs = 7-10] | | | |
| Lymph Node | Iliac, Lymph Sinus | Ectasia | Mild |
| | Iliac | Hyperplasia | Lymphocyte, Mild |
| | Iliac | Proliferation | Plasma Cell, Mild |
| [Ectasia TGLs = 5-20] | | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| Mesentery | Artery | Inflammation | Chronic Active, Moderate |
| * Nerve Trigeminal | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 550

TRT#: 1

SEX: Male

DAY ON TEST: 732

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-550

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Hyperplasia	Moderate
[Hyperplasia TGLs = 6-6]			
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
Testis		Cyst	
	Germ Cell	Degeneration	Marked
Note: One testis normal.			
[Degeneration TGLs = 1-16A]			
* Thymus		Atrophy	Mild

Animal Note: TGL 8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 551

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-551

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland	* Salivary Glands
* Seminal Vesicle	Skeletal Muscle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	Testis	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Mild
		Vacuolation, Cytoplasmic	Mild
* Heart		Cardiomyopathy	Minimal
	Ventricl Rgt	Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Moderate
* Liver		Clear Cell Focus	
	[Clear Cell Focus TGLs = 3-12]		
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Mild
		Proliferation	Plasma Cell, Moderate
Mesentery		Necrosis	Moderate
	[Necrosis TGLs = 1-20]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Respirat Epith	Hyperplasia	Minimal
* Pancreas		Adenoma	
	Acinus	Hyperplasia	Marked
	[Adenoma TGLs = 2-6]		
	[Hyperplasia TGLs = 2-6]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland		Inflammation	Chronic Active, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 551

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-551

ORGAN AND ACCOUNTABLE SITE STATUS

* Prostate		Inflammation	Chronic Active, Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 552

TRT#: 1

SEX: Male

DAY ON TEST: 662

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-552

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Urinary Bladder
- * Bone Marrow
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Skin
- * Esophagus
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Spinal Cord, Cervical
- * Harderian Gland
- * Intestine Small, Jejunum
- * Mammary Gland
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Minimal
 - Hypertrophy Mild
 - Vacuolation, Cytoplasmic Mild
- * Aorta
 - Mineral Marked
 - [Mineral TGLs = 9-11,10-11]
- * Bone
 - Fibrous Osteodystrophy Mild
- * Brain
 - Compression Minimal
- * Epididymis
 - Exfoliated Germ Cell Moderate
 - Hypospermia Moderate
 - [Hypospermia TGLs = 3-16A]
- * Eye
 - Cornea, Epithelium Hyperplasia Marked
 - Cornea Inflammation Acute, Marked
 - [Hyperplasia TGLs = 12-5]
 - [Inflammation TGLs = 11-5]
- * Heart
 - Ventricl Rgt Cardiomyopathy Moderate
 - Myocardium Cardiomyopathy Mild
 - Artery Mineral Mild
- * Intestine Large, Cecum
 - Artery Mineral Moderate
 - Artery Inflammation Chronic Active, Mild
 - Artery Mineral Mild
- * Intestine Large, Colon
 - Artery Inflammation Chronic Active, Minimal
 - Artery Mineral Mild
 - Epithelium Regeneration Mild
- * Kidney
 - Nephropathy Chronicprogr, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 552

TRT#: 1

SEX: Male

DAY ON TEST: 662

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-552

ORGAN AND ACCOUNTABLE SITE STATUS

[Nephropathy TGLs = 6,7-13]

* Liver	Artery	Mineral	Minimal
* Lung	Epithlm Alvlus	Hyperplasia	Mild
	Artery	Mineral	Mild
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Pancreas	Acinus	Hyperplasia	Mild
	Artery	Inflammation	Chronic Active, Mild
	Artery	Mineral	Moderate
* Parathyroid Gland		Hyperplasia	Marked
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Intermed	Angiectasis	Marked

[Adenoma TGLs = 13-4]

* Preputial Gland		Inflammation	Chronic Active, Mild
* Salivary Glands	Duct, Parotid GI	Dilation	Mild
	Artery	Inflammation	Chronic Active, Mild
	Duct, Parotid GI	Inflammation	Acute, Mild
	Artery	Mineral	Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 4-16]		
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Moderate
		Pigment	Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Atypical, Mild
		Mineral	Moderate
* Stomach, Glandular		Mineral	Moderate
Testis	Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 552

TRT#: 1

SEX: Male

DAY ON TEST: 662

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-552

ORGAN AND ACCOUNTABLE SITE STATUS

Germ Cell

Degeneration

Moderate

Artery

Inflammation

Chronic Active, Minimal

[Degeneration TGLs = 2-16A]

* Thymus

Atrophy

Marked

* Thyroid Gland

C Cell

Hyperplasia

Marked

* Trachea

Artery

Mineral

Moderate

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 5,8 = NCL (No Corresponding Lesion)

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 554

TRT#: 1

SEX: Male

DAY ON TEST: 731

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-554

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Prostate
- * Stomach, Glandular
- * Brain
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Salivary Glands
- * Trachea
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Spinal Cord, Cervical
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hyperplasia
 - Hypertrophy
- * Adrenal Medulla
 - Hyperplasia
- * Bone
 - Fibrous Osteodystrophy
- * Epididymis
 - Hypospermia
- [Hypospermia TGLs = 5-16A]
- * Harderian Gland
 - Degeneration
 - Inflammation
- * Heart
 - Cardiomyopathy
 - Ventricl Rgt
 - Cardiomyopathy
 - Atrium
 - Dilation
- [Dilation TGLs = 14-11]
- * Intestine Large, Rectum
 - Inflammation
- * Kidney
 - Cyst
 - Renal Tubule
 - Nephropathy
- [Cyst TGLs = 10,11-20,13]
- [Nephropathy TGLs = 8,9-13]
- * Liver
 - Eosinophilic Focus
- * Lung
 - Inflammation
- Lymph Node
 - Erythrophagocytosis
 - Mediastinal
 - Erythrophagocytosis
- [Erythrophagocytosis TGLs = 18,19-23]
- [Erythrophagocytosis TGLs = 16,17-24]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 554

TRT#: 1

SEX: Male

DAY ON TEST: 731

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-554

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
* Mammary Gland		Fibroadenoma	
	[Fibroadenoma TGLs = 20-22]		
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Hyperplasia	Mild
	Artery	Inflammation	Chronic Active, Mild
	[Hyperplasia TGLs = 13-6]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation	Marked
	[Dilation TGLs = 3-16]		
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
	[Decreased Secretory Fluid TGLs = 6-16]		
Skeletal Muscle		Degeneration	Minimal
* Skin		Basal Cell Adenoma	
	Subcut Tiss	Fibroma	
	[Basal Cell Adenoma TGLs = 1-20]		
	[Fibroma TGLs = 2-21]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	Red Pulp	Atrophy	Minimal
		Pigment	Mild
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Marked
	[Degeneration TGLs = 4-16A]		
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 554

TRT#: 1

SEX: Male

DAY ON TEST: 731

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-554

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: TGLs 7,15 = NCL (No Corresponding Lesion)

Animal Note: TGL 12 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 555

TRT#: 1

SEX: Male

DAY ON TEST: 662

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-555

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Small, Ileum
- * Prostate
- * Spinal Cord, Thoracic
- Trigeminal Ganglion
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Intestine Large, Rectum
- * Pituitary Gland
- * Skin
- * Thyroid Gland
- * Esophagus
- * Intestine Small, Duodenum
- * Preputial Gland
- * Spinal Cord, Cervical
- * Trachea

MISSING

- * Lymph Node, Mandibular
- * Mammary Gland
- * Nerve Trigeminal

OBSERVATIONS

- * Adrenal Cortex
 - Necrosis Mild
 - Vacuolation, Cytoplasmic Moderate
- * Adrenal Medulla
 - Hyperplasia Minimal
 - Pheochromocytoma Benign
- * Bone
 - Fibrous Osteodystrophy Mild
- * Epididymis
 - Granuloma Sperm Moderate
 - Hypospermia Marked
- [Hypospermia TGLs = 6-16A]
- * Eye
 - Note: One retina available for evaluation.
- * Heart
 - Cardiomyopathy Moderate
- Ventricl Rgt
 - Cardiomyopathy Minimal
- * Intestine Large, Cecum
 - Edema Mild
 - Erosion Moderate
 - Inflammation Acute, Moderate
- * Intestine Large, Colon
 - Artery Inflammation Chronic Active, Minimal
 - Epithelium Regeneration Mild
- * Islets, Pancreatic
 - Hyperplasia Minimal
- * Kidney
 - Renal Tubule Cyst
 - Nephropathy Chronicprogr, Marked
- [Cyst TGLs = 4-20]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 555

TRT#: 1

SEX: Male

DAY ON TEST: 662

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-555

ORGAN AND ACCOUNTABLE SITE STATUS

[Nephropathy TGLs = 1,3-13]

* Liver	Bile Duct	Hyperplasia	Mild
	Artery	Inflammation	Chronic Active, Moderate
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	[Infiltration Cellular TGLs = 2-10]		
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
Mesentery	Artery	Inflammation	Chronic Active, Marked
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Pancreas	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland		Hyperplasia	Marked
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 8-16]		
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen	White Pulp	Atrophy	Minimal
		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Stomach, Glandular		Mineral	Minimal
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Marked
	[Degeneration TGLs = 5-16A]		
* Thymus		Atrophy	Marked
		Cyst	

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 7,9 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 557

TRT#: 1

SEX: Male

DAY ON TEST: 731

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-557

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Stomach, Glandular
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Skeletal Muscle
- * Thyroid Gland
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nose
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hyperplasia
 - Hypertrophy
 - [Hypertrophy TGLs = 1-7]
- * Adrenal Medulla
 - Hyperplasia
- * Brain
 - Note: Vacuolization affecting the anterior hypothalamic nuclei.
- * Eye
 - Retina
 - Retrobulbar
 - Atrophy
 - Schwannoma Malignant
 - Schwannoma Malignant
- * Harderian Gland
 - Schwannoma Malignant
- * Heart
 - Cardiomyopathy
- * Kidney
 - Nephropathy
 - [Nephropathy TGLs = 2-13]
- * Liver
 - Bile Duct
 - Clear Cell Focus
 - Hyperplasia
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- Mesentery
 - Artery
 - Inflammation
- * Nerve Trigeminal
 - Degeneration
- * Pancreas
 - Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 557

TRT#: 1

SEX: Male

DAY ON TEST: 731

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-557

ORGAN AND ACCOUNTABLE SITE STATUS

	Artery	Carcinoma Inflammation	Chronic Active, Mild
[Adenoma TGLs = 3-6]			
[Carcinoma TGLs = 3-6]			
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Marked
* Preputial Gland		Inflammation	Chronic Active, Moderate
* Prostate	Epithelium	Hyperplasia	Minimal
* Salivary Glands	Artery	Inflammation	Chronic Active, Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Marked
* Thymus		Atrophy	Moderate
		Cyst	
		Ectopic Parathyroid Gland	
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 558

TRT#: 1

SEX: Male

DAY ON TEST: 685

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-558

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Lymph Node, Mesenteric
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone Marrow
- * Intestine Small, Duodenum
- * Mammary Gland
- * Spinal Cord, Thoracic
- * Brain
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Stomach, Forestomach
- * Esophagus
- * Islets, Pancreatic
- * Skin
- * Trachea

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
		Hypertrophy	Minimal
* Adrenal Medulla		Hyperplasia	Mild
* Bone		Fibrous Osteodystrophy	Mild
* Epididymis		Exfoliated Germ Cell	Minimal
		Hypospermia	Marked
* Eye	Cornea	Inflammation	Acute, Moderate
	Antr Chamber	Inflammation	Acute, Moderate
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Cecum		Erosion	Mild
	Artery	Inflammation	Chronic Active, Mild
		Inflammation	Acute, Moderate
	Epithelium	Regeneration	Moderate
* Intestine Large, Colon	Artery	Inflammation	Chronic Active, Mild
* Intestine Large, Rectum		Inflammation	Acute, Minimal
* Kidney		Nephropathy	Chronicprogr, Marked
	[Nephropathy TGLs = 3,4-13]		
* Liver		Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular	Lymph Sinus	Ectasia	Minimal
		Proliferation	Plasma Cell, Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 558

TRT#: 1

SEX: Male

DAY ON TEST: 685

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-558

ORGAN AND ACCOUNTABLE SITE STATUS

Note: Approximately one-third of level 3 available for evaluation.

* Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Mild
	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Mild
	[Dilation TGLs = 5-16]		
* Prostate		Decreased Secretory Fluid	Mild
	[Decreased Secretory Fluid TGLs = 6-16]		
* Salivary Glands	Parotid GI	Atrophy	Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
	[Decreased Secretory Fluid TGLs = 2-16]		
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Moderate
		Pigment	Mild
* Stomach, Glandular		Mineral	Minimal
Testis	Germ Cell	Degeneration	Marked
	Artery	Inflammation	Chronic Active, Mild
	[Degeneration TGLs = 1-16A]		
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 559

TRT#: 1

SEX: Male

DAY ON TEST: 582

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-559

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Brain | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Liver | * Lung |
| * Mammary Gland | * Pituitary Gland | * Prostate | * Salivary Glands |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Spinal Cord, Thoracic |
| * Stomach, Forestomach | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|--------------------------------|------------------------|--------------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Aorta | | Mineral | Mild |
| * Bone | | Fibrous Osteodystrophy | Minimal |
| * Bone Marrow | | Hypercellularity | Mild |
| * Epididymis | | Exfoliated Germ Cell | Mild |
| | | Hypospermia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Intestine Large, Cecum | Artery | Inflammation | Chronic Active, Moderate |
| | Epithelium | Regeneration | Moderate |
| | | Ulcer | Mild |
| * Islets, Pancreatic | | Hyperplasia | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 7,10-13] | | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Minimal |
| | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| | [Hyperplasia TGLs = 1-9] | | |
| * Lymph Node, Mesenteric | | Erythrophagocytosis | Minimal |
| Mesentery | Vein | Degeneration | Minimal |
| | Artery | Inflammation | Chronic Active, Mild |
| * Nerve Trigeminal | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 559

TRT#: 1

SEX: Male

DAY ON TEST: 582

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-559

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Mild
	Artery	Inflammation	Chronic Active, Moderate
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Mild
	[Decreased Secretory Fluid TGLs = 2-16]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Moderate
	Red Pulp	Atrophy	Mild
	[Atrophy TGLs = 6-12]		
* Stomach, Glandular		Mineral	Mild
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Mild
	[Degeneration TGLs = 3-16A]		
* Thymus		Atrophy	Marked
Tissue NOS	Abdominal, Fat	Hemorrhage	Moderate
	Fat	Necrosis	Moderate
	[Hemorrhage TGLs = 9-20]		
	[Necrosis TGLs = 8-21]		

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 4,5= NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 560

TRT#: 1

SEX: Male

DAY ON TEST: 595

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-560

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Bone Marrow
- * Brain
- * Esophagus
- * Harderian Gland
- * Islets, Pancreatic
- * Lung
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Nerve Trigeminal
- * Pituitary Gland
- * Preputial Gland
- * Prostate
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- * Stomach, Forestomach
- * Thyroid Gland
- * Trachea
- * Trigeminal Ganglion
- * Urinary Bladder

MISSING

- * Parathyroid Gland

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Stomach, Glandular

OBSERVATIONS

- * Aorta
- Mineral
- Minimal
- * Bone
- Fibrous Osteodystrophy
- Minimal
- * Brain
- Note: Olfactory bulbs unavailable for evaluation.
- * Epididymis
- Exfoliated Germ Cell
- Moderate
- * Eye
- Cornea
- Inflammation
- Acute, Mild
- * Heart
- Cardiomyopathy
- Mild
- * Kidney
- Ventricle Rgt
- Cardiomyopathy
- Minimal
- Artery
- Mineral
- Mild
- Nephropathy
- Chronicprogr, Marked
- [Nephropathy TGLs = 1-13]
- * Liver
- Eosinophilic Focus
- * Mammary Gland
- Atrophy
- Marked
- Mesentery
- Artery
- Inflammation
- Chronic Active, Mild
- Artery
- Mineral
- Mild
- * Nose
- Olfactory Epi
- Accumulation, Hyaline Droplet
- Moderate
- * Pancreas
- Acinus
- Hyperplasia
- Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 560

TRT#: 1

SEX: Male

DAY ON TEST: 595

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-560

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Salivary Glands	Parotid Gland	Atrophy	Minimal
	Artery	Inflammation	Chronic Active, Minimal
	Artery	Mineral	Mild
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
* Spleen	White Pulp	Atrophy	Mild
		Pigment	Mild
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 561

TRT#: 1

SEX: Male

DAY ON TEST: 662

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-561

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Bone Marrow
- * Brain
- * Esophagus
- * Harderian Gland
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Pituitary Gland
- * Preputial Gland
- * Prostate
- * Salivary Glands
- * Skin
- * Spinal Cord, Cervical
- * Stomach, Forestomach
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Aorta
 - [Mineral TGLs = 10-11]
 - * Bone
 - [Hypospermia TGLs = 4-16A]
 - * Epididymis
 - * Eye
 - * Heart
 - [Cyst TGLs = 1,2-13]
 - [Nephropathy TGLs = 6,7-13]
 - * Intestine Large, Cecum
 - * Kidney
 - [Infiltration Cellular TGLs = 5-10]
 - * Liver
 - * Lung
 - [Infiltration Cellular TGLs = 5-10]
 - Mesentery
 - * Nerve Trigeminal
- | | | |
|--|------------------------|----------------------|
| | Mineral | Mild |
| | Fibrous Osteodystrophy | Mild |
| | Exfoliated Germ Cell | Mild |
| | Hypospermia | Mild |
| | Inflammation | Acute, Minimal |
| | Cornea | |
| | Cardiomyopathy | Mild |
| | Ventricl Rgt | |
| | Cardiomyopathy | Minimal |
| | Artery | |
| | Mineral | Mild |
| | Regeneration | Moderate |
| | Epithelium | |
| | Cyst | |
| | Renal Tubule | |
| | Nephropathy | Chronicprogr, Marked |
| | Hyperplasia | Minimal |
| | Infiltration Cellular | Histiocyte, Minimal |
| | Inflammation | Chronic Active, Mild |
| | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 561

TRT#: 1

SEX: Male

DAY ON TEST: 662

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-561

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Pancreas	Acinus	Hyperplasia	Mild
	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 11-16]		
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	White Pulp	Atrophy	Moderate
	Red Pulp	Atrophy	Moderate
		Pigment	Moderate
	[Atrophy TGLs = 8-12]		
* Stomach, Glandular		Mineral	Minimal
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Marked
	[Degeneration TGLs = 3-16A]		
* Thymus		Atrophy	Marked
	Artery	Inflammation	Chronic Active, Moderate

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 12 = NCL (No Corresponding Lesion)

Animal Note: TGL 9 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 562

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-562

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland
* Pituitary Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
Skeletal Muscle	* Skin	* Spinal Cord, Cervical	* Stomach, Forestomach
* Thymus	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
[Hyperplasia TGLs = 4-7]			
* Kidney		Nephropathy	Chronicprogr, Marked
[Nephropathy TGLs = 2,3-13]			
* Liver	Bile Duct	Hyperplasia	Minimal
[Mixed Cell Focus TGLs = 5-12]		Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
[Infiltration Cellular TGLs = 7-10]			
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Mild
		Proliferation	Plasma Cell, Moderate
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Adenoma	
[Adenoma TGLs = 6-6]		Hyperplasia	Mild
[Hyperplasia TGLs = 6-14]			
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 562

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-562

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Stomach, Glandular		Inflammation	Acute, Minimal
Testis	Artery	Inflammation	Chronic Active, Minimal
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal

Animal Note: TGLs 1,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 563

TRT#: 1

SEX: Male

DAY ON TEST: 663

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-563

ORGAN AND ACCOUNTABLE SITE STATUS

	Artery	Inflammation	Chronic Active, Mild
[Hyperplasia TGLs = 5-6]			
* Parathyroid Gland		Adenoma	
		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Mild
* Salivary Glands	Artery	Inflammation	Chronic Active, Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
* Stomach, Forestomach		Edema	Mild
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Moderate
[Degeneration TGLs = 1-16A]			
* Thymus		Atrophy	Mild
		Cyst	
		Ectopic Parathyroid Gland	
	Artery	Inflammation	Chronic Active, Moderate
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 564

TRT#: 1

SEX: Male

DAY ON TEST: 732

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-564

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Salivary Glands
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Nerve Trigeminal
- * Seminal Vesicle
- * Stomach, Forestomach
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Nose
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Skin
- Testis

MISSING

- * Adrenal Medulla
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Brain
- [Compression TGLs = 4-2]
- * Heart
- * Kidney
- [Nephropathy TGLs = 2-13]
- * Liver
- * Lung
- Mesentery
- * Pancreas
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- [Adenoma TGLs = 3-4]
- * Preputial Gland
- [Dilation TGLs = 1-16.1]
- * Prostate
- Pineal Gland
- Alveolus
- Artery
- Acinus
- Pars Distalis
- Duct
- Artery
- Accessory Adrenal Cortical Nodule
- Compression
- Mineral
- Cardiomyopathy
- Nephropathy
- Mixed Cell Focus
- Infiltration Cellular
- Inflammation
- Hyperplasia
- Degeneration
- Degeneration
- Adenoma
- Dilation
- Inflammation
- Inflammation
- Minimal
- Minimal
- Minimal
- Chronicprogr, Moderate
- Histiocyte, Minimal
- Chronic Active, Marked
- Mild
- Mild
- Mild
- Moderate
- Chronic Active, Mild
- Chronic Active, Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 564

TRT#: 1

SEX: Male

DAY ON TEST: 732

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-564

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
* Thymus		Atrophy	Mild
		Cyst	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 565

TRT#: 1

SEX: Male

DAY ON TEST: 715

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-565

ORGAN AND ACCOUNTABLE SITE STATUS

	Urothelium	Hyperplasia Nephropathy Oncocytoma Benign	Mild Chronicprogr, Marked
	[Cyst TGLs = 2-20] [Nephropathy TGLs = 1,4,5-13] [Oncocytoma Benign TGLs = 3-13,21]		
* Liver	Bile Duct	Hyperplasia	Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	[Infiltration Cellular TGLs = 12-10]		
Lymph Node	Iliac, Lymph Sinus	Ectasia	Mild
	Renal	Erythrophagocytosis	Moderate
	Iliac	Proliferation	Plasma Cell, Mild
	[Erythrophagocytosis TGLs = 17,18-20] [Proliferation TGLs = 19-21]		
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Mild
Mesentery	Artery	Mineral	Mild
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Pancreas		Adenoma	Multiple
	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Minimal
	[Adenoma TGLs = 16-6,14]		
* Parathyroid Gland		Hyperplasia	Marked
	[Hyperplasia TGLs = 14-8]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Intermed	Cyst	
* Preputial Gland	Duct	Dilation	Minimal
* Prostate		Inflammation	Acute, Marked
	[Inflammation TGLs = 9,21-16]		
* Seminal Vesicle		Inflammation	Acute, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 565

TRT#: 1

SEX: Male

DAY ON TEST: 715

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-565

ORGAN AND ACCOUNTABLE SITE STATUS

[Inflammation TGLs = 8-16]

Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Moderate
	Red Pulp	Atrophy	Moderate
[Atrophy TGLs = 13-12]			
* Stomach, Glandular		Mineral	Marked
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Marked

[Atrophy TGLs = 10-6]

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 6,7 = NCL (No Corresponding Lesion)

Animal Note: TGL 20 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 566

TRT#: 1

SEX: Male

DAY ON TEST: 641

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-566

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Islets, Pancreatic
- * Mammary Gland
- * Skin
- * Thyroid Gland
- * Esophagus
- * Lung
- * Nerve Trigeminal
- * Spinal Cord, Cervical
- * Trachea
- * Harderian Gland
- * Lymph Node, Mandibular
- * Pituitary Gland
- * Spinal Cord, Thoracic
- Trigeminal Ganglion
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Ileum

OBSERVATIONS

- * Adrenal Medulla Hyperplasia Minimal
- * Aorta Mineral Moderate
 - [Mineral TGLs = 2-11]
- * Bone Fibrous Osteodystrophy Mild
- * Bone Marrow Hypercellularity Mild
- * Brain Infiltration Cellular Mononuclear CI, Minimal
- * Epididymis Exfoliated Germ Cell Moderate
- * Eye Hypospermia Moderate
 - Cornea Inflammation Acute, Mild
 - Cornea Ulcer Moderate
- * Heart Cardiomyopathy Mild
 - Ventricl Rgt Cardiomyopathy Minimal
 - Myocardium Mineral Minimal
 - Artery Mineral Mild
- * Kidney Nephropathy Chronicprogr, Marked
 - [Nephropathy TGLs = 4,5-13]
- * Liver Eosinophilic Focus
 - Bile Duct Hyperplasia Minimal
 - Mixed Cell Focus
- Mesentery Inflammation Chronic Active, Mild
 - Artery
 - Artery Mineral Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 566

TRT#: 1

SEX: Male

DAY ON TEST: 641

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-566

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Minimal
* Salivary Glands	Artery	Inflammation	Chronic Active, Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Marked
[Decreased Secretory Fluid	TGLs = 3-16]		
Skeletal Muscle		Degeneration	Minimal
		Mineral	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Mild
		Pigment	Mild
* Stomach, Glandular		Mineral	Mild
Testis	Germ Cell	Degeneration	Moderate
[Degeneration	TGLs = 1-16A]		
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 567

TRT#: 1

SEX: Male

DAY ON TEST: 722

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-567

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Harderian Gland
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Trachea
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pituitary Gland
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Skin
- * Esophagus
- * Intestine Small, Duodenum
- * Mammary Gland
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Aorta
 - Mineral
- * Bone
 - Fibrous Osteodystrophy
- * Epididymis
 - Exfoliated Germ Cell
- * Eye
 - Cornea, Epithelium
 - Cornea
 - Cornea
- * Heart
 - Cardiomyopathy
 - Ventricl Rgt
 - Cardiomyopathy
 - Valve
 - Inflammation
 - Myocardium
 - Mineral
 - Myocardium
 - Necrosis
 - Thrombus
- * Intestine Large, Cecum
 - Erosion
 - Inflammation
- * Islets, Pancreatic
 - Adenoma
- * Kidney
 - [Adenoma TGLs = 12-6]
 - Pelvis
 - Dilation
 - Nephropathy
- * Liver
 - [Dilation TGLs = 17-13]
 - [Nephropathy TGLs = 13,14,15-13]
 - Periductal
 - Cholangiofibrosis

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 567

TRT#: 1

SEX: Male

DAY ON TEST: 722

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-567

ORGAN AND ACCOUNTABLE SITE STATUS

Eosinophilic Focus

Bile Duct

Hyperplasia

Mild

Note: Intestinal metaplasia of bile ducts within region of fibrosis.

[Cholangiofibrosis TGLs = 16-12]

* Lung

Alveolus

Infiltration Cellular

Histiocyte, Minimal

[Infiltration Cellular TGLs = 9-10]

Lymph Node

Lumbar

Erythrophagocytosis

Minimal

[Erythrophagocytosis TGLs = 18-21]

* Lymph Node, Mandibular

Lymph Sinus

Ectasia

Mild

[Ectasia TGLs = 8-9]

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

* Pancreas

Artery

Adenoma

Inflammation

Chronic Active, Mild

[Adenoma TGLs = 12-6]

* Parathyroid Gland

Hyperplasia

Mild

[Hyperplasia TGLs = 11-8]

* Peripheral Nerve, Sciatic

Degeneration

Marked

* Peripheral Nerve, Tibial

Degeneration

Marked

* Preputial Gland

Duct

Dilation

Minimal

* Prostate

Hemorrhage

Mild

Inflammation

Acute, Mild

* Salivary Glands

Parotid GI

Vacuolation, Cytoplasmic

Mild

* Seminal Vesicle

Epithelium

Hemorrhage

Mild

Hyperplasia

Minimal

Inflammation

Acute, Minimal

[Hemorrhage TGLs = 4,5-16]

Skeletal Muscle

Degeneration

Mild

* Spinal Cord, Cervical

Degeneration

Minimal

* Spinal Cord, Lumbar

Nerve

Degeneration

Mild

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

White Pulp

Atrophy

Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 567

TRT#: 1

SEX: Male

DAY ON TEST: 722

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-567

ORGAN AND ACCOUNTABLE SITE STATUS

		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
* Stomach, Glandular		Mineral	Mild
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Marked
* Urinary Bladder		Hemorrhage	Marked
		Inflammation	Acute, Moderate

[Hemorrhage TGLs = 6,7-13]

PRIMARY CAUSE OF DEATH - Urinary Bladder Hemorrhage

CONTRIBUTORY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 1,10 = NCL (No Corresponding Lesion)

Animal Note: TGLs 2,3 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 569

TRT#: 1

SEX: Male

DAY ON TEST: 659

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-569

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Moderate
	Artery	Mineral	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Hyperplasia	Mild
[Adenoma TGLs = 10-4]			
* Salivary Glands	Duct, Parotid GI	Dilation	Moderate
	Parotid GI	Inflammation	Acute, Moderate
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Mild
		Pigment	Minimal
[Atrophy TGLs = 6-12]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Inflammation	Chronic Active, Minimal
		Squamous Cell Papilloma	
* Stomach, Glandular		Inflammation	Chronic Active, Minimal
		Mineral	Moderate
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Mild
[Degeneration TGLs = 1-16A]			
* Thymus		Atrophy	Marked
		Ectopic Parathyroid Gland	

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 3,7,9 = NCL (No Corresponding Lesion)

Animal Note: TGL 8 = NST (No Section Taken)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 570

TRT#: 1

SEX: Male

DAY ON TEST: 666

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-570

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Brain
- * Intestine Large, Rectum
- * Lung
- * Skin
- * Thyroid Gland
- * Esophagus
- * Intestine Small, Duodenum
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Harderian Gland
- * Intestine Small, Ileum
- * Preputial Gland
- * Spinal Cord, Thoracic
- * Urinary Bladder

MISSING

- * Mammary Gland
- * Thymus

INSUFFICIENT TISSUE

- * Nerve Trigeminal

OBSERVATIONS

- | | | | |
|---|--|--|---|
| <ul style="list-style-type: none"> * Adrenal Cortex
 * Adrenal Medulla * Aorta * Bone * Epididymis
 <li style="padding-left: 20px;">[Hypospermia TGLs = 9-16A] * Eye * Heart * Intestine Large, Cecum
 * Islets, Pancreatic * Kidney
 <li style="padding-left: 20px;">[Cyst TGLs = 1,2,3-13,20] | <ul style="list-style-type: none"> Cornea
 Artery Epithelium
 Renal Tubule | <ul style="list-style-type: none"> Hypertrophy Thrombus Vacuolation, Cytoplasmic Hyperplasia Mineral Fibrous Osteodystrophy Exfoliated Germ Cell Hypospermia
 Inflammation Cardiomyopathy Edema Erosion Inflammation Regeneration Carcinoma Cyst Nephropathy | <ul style="list-style-type: none"> Minimal Mild Minimal Mild Minimal Moderate Moderate Marked
 Acute, Mild Mild Minimal Moderate Chronic Active, Mild Mild
 Chronicprogr, Marked |
|---|--|--|---|

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 570

TRT#: 1

SEX: Male

DAY ON TEST: 666

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-570

ORGAN AND ACCOUNTABLE SITE STATUS

	[Nephropathy TGLs = 4,5-13]		
* Liver	Bile Duct	Hyperplasia	Minimal
* Lymph Node, Mandibular		Hyperplasia Proliferation	Lymphocyte, Moderate Plasma Cell, Mild
	[Hyperplasia TGLs = 6-9]		
* Lymph Node, Mesenteric		Erythrophagocytosis	Moderate
	[Erythrophagocytosis TGLs = 7-15]		
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland		Hyperplasia	Marked
	[Hyperplasia TGLs = 17-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Prostate		Decreased Secretory Fluid	Mild
	[Decreased Secretory Fluid TGLs = 11-16]		
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
	[Decreased Secretory Fluid TGLs = 8-16]		
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen	White Pulp	Atrophy	Marked
	Red Pulp	Atrophy	Moderate
		Pigment	Moderate
	[Atrophy TGLs = 12-12]		
* Stomach, Glandular		Mineral	Mild
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Moderate
	[Degeneration TGLs = 10-16A]		
Tissue NOS	Mediastinum	Schwannoma Malignant	
	[Schwannoma Malignant TGLs = 13-6]		
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Tissue NOS Mediastinum Schwannoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 570

TRT#: 1

SEX: Male

DAY ON TEST: 666

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-570

ORGAN AND ACCOUNTABLE SITE STATUS

CONTRIBUTORY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 16 = NCL (No Corresponding Lesion)

Animal Note: TGLs 14,15 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 571

TRT#: 1

SEX: Male

DAY ON TEST: 604

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-571

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Brain | * Esophagus | * Harderian Gland |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nerve Trigeminal | * Parathyroid Gland | * Prostate |
| Skeletal Muscle | * Spinal Cord, Cervical | * Stomach, Forestomach | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | | |

MISSING

- * Preputial Gland

OBSERVATIONS

- | | | | |
|--------------------------|----------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Bone | | Fibrous Osteodystrophy | Minimal |
| * Bone Marrow | | Hypercellularity | Moderate |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| * Eye | Antr Chamber | Inflammation | Acute, Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| | Myocardium | Mineral | Minimal |
| | Artery | Mineral | Moderate |
| * Intestine Large, Cecum | | Erosion | Mild |
| | Epithelium | Regeneration | Mild |
| * Kidney | | Mineral | Moderate |
| | | Nephropathy | Chronicprogr, Moderate |
| | | [Mineral TGLs = 4-13] | |
| | | [Nephropathy TGLs = 5-13] | |
| * Liver | Hepatocyte | Degeneration | Moderate |
| | | Extramedullary Hematopoiesis | Minimal |
| | | [Degeneration TGLs = 7-12] | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Minimal |
| * Nose | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 571

TRT#: 1

SEX: Male

DAY ON TEST: 604

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-571

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Hyperplasia	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Intermed	Cyst	
* Salivary Glands	Parotid Gl	Atrophy	Mild
* Seminal Vesicle		Decreased Secretory Fluid	Mild
	[Decreased Secretory Fluid TGLs = 2-16]		
* Skin	Subcut Tiss	Fibrosarcoma	
		Keratoacanthoma	
	[Fibrosarcoma TGLs = 1-20]		
	[Keratoacanthoma TGLs = 9-21]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
		Extramedullary Hematopoiesis	Marked
	[Extramedullary Hematopoiesis TGLs = 3-12]		
* Stomach, Glandular		Mineral	Mild
Testis	Germ Cell	Degeneration	Minimal
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibrosarcoma

Animal Note: TGLs 6,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 572

TRT#: 1

SEX: Male

DAY ON TEST: 691

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-572

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Intestine Small, Ileum
- * Mammary Gland
- * Spinal Cord, Thoracic
- * Trachea
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pituitary Gland
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Spinal Cord, Cervical
- * Thyroid Gland

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum

OBSERVATIONS

- | | | | |
|--|---|--|---|
| <ul style="list-style-type: none"> * Adrenal Cortex * Adrenal Medulla * Bone * Epididymis <li style="padding-left: 20px;">[Hypospermia TGLs = 9-16A] * Eye * Heart * Kidney <li style="padding-left: 20px;">[Nephropathy TGLs = 4,5-13] * Liver <li style="padding-left: 20px;">[Vacuolation, Cytoplasmic TGLs = 7-12] * Lung * Lymph Node, Mesenteric * Nerve Trigeminal * Nose * Pancreas <li style="padding-left: 20px;">[Adenoma TGLs = 2-6] * Parathyroid Gland | <ul style="list-style-type: none"> Cornea Hepatocyte Hepatocyte Alveolus Olfactory Epi Artery | <ul style="list-style-type: none"> Degeneration Vacuolation, Cytoplasmic Hyperplasia Fibrous Osteodystrophy Hypospermia Inflammation Cardiomyopathy Nephropathy Necrosis Vacuolation, Cytoplasmic Infiltration Cellular Erythrophagocytosis Degeneration Accumulation, Hyaline Droplet Adenoma Inflammation Hyperplasia | <ul style="list-style-type: none"> Minimal Mild Minimal Moderate Marked Acute, Minimal Moderate Chronic progr, Marked Minimal Moderate Histiocyte, Minimal Mild Moderate Minimal Chronic Active, Minimal Marked |
|--|---|--|---|

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 573

TRT#: 1

SEX: Male

DAY ON TEST: 212

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-573

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|---------------------------|--------------------------|-------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Harderian Gland | * Intestine Large, Rectum | * Islets, Pancreatic | * Kidney |
| * Liver | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nerve Trigeminal | * Nose | * Pancreas | * Parathyroid Gland |
| * Peripheral Nerve, Sciatic | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Spinal Cord, Lumbar | * Spinal Cord, Thoracic | * Spleen | * Stomach, Forestomach |
| Testis | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

MISSING

- * Peripheral Nerve, Tibial

AUTO PRECLUDES DIAG.

- | | | | |
|--------------------------|----------------------------|--------------------------|-----------------------------|
| * Eye | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Stomach, Glandular | * Thyroid Gland |

OBSERVATIONS

- * Brain
 - Note: Olfactory bulbs unavailable for evaluation
 - * Heart
 - * Lung
 - * Preputial Gland
 - * Thymus
- [Lymphoma Malignant TGLs = 3-6]

Lymphoma Malignant
 Lymphoma Malignant
 Inflammation
 Lymphoma Malignant

Chronic Active, Mild

PRIMARY CAUSE OF DEATH - Thymus Lymphoma Malignant

Animal Note: TGLs 1,2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 574

TRT#: 1

SEX: Male

DAY ON TEST: 624

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-574

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Epididymis
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Testis
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Spinal Cord, Thoracic
- * Thyroid Gland
- * Bone
- * Harderian Gland
- * Nose
- Skeletal Muscle
- * Stomach, Forestomach
- * Trachea
- * Bone Marrow
- * Intestine Large, Colon
- * Pancreas
- * Skin
- * Stomach, Glandular
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Small, Jejunum
- * Intestine Large, Cecum
- * Intestine Large, Rectum
- * Intestine Small, Duodenum

OBSERVATIONS

- * Adrenal Medulla
 - * Brain
 - Note: Olfactory bulbs not available for evaluation.
 - * Heart
 - * Islets, Pancreatic
 - * Kidney
 - [Nephropathy TGLs = 7-13]
 - * Liver
 - * Lung
 - [Congestion TGLs = 3-10]
 - * Lymph Node, Mandibular
 - * Mammary Gland
 - * Nerve Trigeminal
 - * Peripheral Nerve, Sciatic
 - * Peripheral Nerve, Tibial
 - * Pituitary Gland
 - [Adenoma TGLs = 4-4]
 - * Preputial Gland
- | | | | |
|--|---------------|----------------|----------------------|
| | Bile Duct | Hyperplasia | Minimal |
| | | Compression | Mild |
| | | Cardiomyopathy | Minimal |
| | | Adenoma | |
| | | Nephropathy | Chronicprogr, Marked |
| | | Hyperplasia | Minimal |
| | | Congestion | Mild |
| | | Proliferation | Plasma Cell, Mild |
| | | Dilation | Mild |
| | | Degeneration | Minimal |
| | | Degeneration | Mild |
| | | Degeneration | Mild |
| | Pars Distalis | Adenoma | |
| | | Dilation | Mild |
| | | Inflammation | Chronic Active, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 574

TRT#: 1

SEX: Male

DAY ON TEST: 624

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-574

ORGAN AND ACCOUNTABLE SITE STATUS

[Inflammation TGLs = 1-16]

* Prostate		Inflammation	Acute, Minimal
* Salivary Glands	Parotid GI	Atrophy	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen	White Pulp	Atrophy	Minimal
	Red Pulp	Atrophy	Mild
		Pigment	Moderate

[Atrophy TGLs = 2-12]

* Thymus		Atrophy	Minimal
		Cyst	

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGLs 5,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 575

TRT#: 1

SEX: Male

DAY ON TEST: 732

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-575

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland	Artery	Inflammation	Chronic Active, Moderate
* Peripheral Nerve, Sciatic		Hyperplasia	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland		Degeneration	Moderate
* Preputial Gland	Pars Distalis	Cyst	
* Seminal Vesicle	Pars Distalis	Hyperplasia	Marked
* Skin	Duct	Dilation	Mild
[Fibroma TGLs = 3-20]		Decreased Secretory Fluid	Minimal
* Spinal Cord, Lumbar	Subcut Tiss	Fibroma	
* Spinal Cord, Thoracic	Nerve	Degeneration	Mild
* Spleen		Degeneration	Minimal
[Hyperplasia TGLs = 4-12]		Extramedullary Hematopoiesis	Mild
* Stomach, Forestomach		Hyperplasia	Lymphocyte, Minimal
Testis	Epithelium	Hyperplasia	Marked
* Thymus		Inflammation	Chronic Active, Minimal
* Thyroid Gland	Germ Cell	Degeneration	Minimal
		Inflammation	Chronic Active, Marked
		Atrophy	Minimal
	C Cell	Hyperplasia	Mild

Animal Note: TGLs 1,11 = NCL (No Corresponding Lesion)

Animal Note: TGL 2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 576

TRT#: 1

SEX: Male

DAY ON TEST: 630

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-576

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Harderian Gland
- * Lung
- * Pituitary Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Salivary Glands
- * Thyroid Gland
- * Esophagus
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea
- * Eye
- * Liver
- * Mammary Gland
- * Spinal Cord, Thoracic
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Intestine Large, Colon
- * Intestine Small, Duodenum
- * Intestine Small, Ileum

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Epididymis
- * Heart
- * Kidney
- [Nephropathy TGLs = 4-13]
- Mesentery
- * Nerve Trigeminal
- * Nose
- * Pancreas
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Preputial Gland
- * Prostate
- Ventricle Rgt
- Artery
- Artery
- Olfactory Epi
- Acinus
- Artery
- Hyperplasia
- Hyperplasia
- Mineral
- Fibrous Osteodystrophy
- Exfoliated Germ Cell
- Cardiomyopathy
- Cardiomyopathy
- Mineral
- Nephropathy
- Mineral
- Degeneration
- Accumulation, Hyaline Droplet
- Hyperplasia
- Inflammation
- Hyperplasia
- Degeneration
- Degeneration
- Inflammation
- Inflammation
- Mild
- Minimal
- Mild
- Minimal
- Minimal
- Minimal
- Minimal
- Minimal
- Minimal
- Minimal
- Mild
- Moderate
- Minimal
- Moderate
- Chronic Active, Marked
- Minimal
- Mild
- Mild
- Chronic Active, Moderate
- Acute, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 576

TRT#: 1

SEX: Male

DAY ON TEST: 630

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-576

ORGAN AND ACCOUNTABLE SITE STATUS

	[Inflammation TGLs = 1-16.1]		
* Seminal Vesicle		Decreased Secretory Fluid Inflammation	Marked Acute, Marked
	[Decreased Secretory Fluid TGLs = 3-16.1]		
	[Inflammation TGLs = 2-16.1]		
* Skin		Cyst Epithelial Inclusion	
	[Cyst Epithelial Inclusion TGLs = 5-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen	White Pulp	Atrophy	Minimal
		Pigment	Mild
* Stomach, Glandular		Mineral	Mild
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 6,7,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 577

TRT#: 1

SEX: Male

DAY ON TEST: 671

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-577

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Small, Duodenum
- * Prostate
- * Skin
- * Trachea
- * Bone
- * Esophagus
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone Marrow
- * Eye
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Brain
- * Harderian Gland
- * Pituitary Gland
- Skeletal Muscle
- * Thyroid Gland

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Ileum

INSUFFICIENT TISSUE

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 Mild
Minimal
- * Adrenal Medulla
 - Hyperplasia
 Mild
- * Heart
 - Cardiomyopathy
 Minimal
- * Kidney
 - Nephropathy
 Chronicprogr, Marked
- Note: Multifocal pyogranuloma formation.
[Nephropathy TGLs = 3-13]
- Lacrimal Gland
 - Metaplasia
 Harderian GI, Moderate
- Note: Consistent with Harderian gland alteration.
[Metaplasia TGLs = 5-20]
- * Liver
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
 Minimal
- * Lung
 - Inflammation
 Subacute, Mild
- * Lymph Node, Mandibular
 - Ectasia
 - Hyperplasia
 - Proliferation
 Mild
Lymphocyte, Mild
Plasma Cell, Minimal
- * Lymph Node, Mesenteric
 - Hyperplasia
 Lymphocyte, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 577

TRT#: 1

SEX: Male

DAY ON TEST: 671

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-577

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Pancreas	Acinus	Hyperplasia	Marked
	[Hyperplasia TGLs = 2-6]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 1,4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 578

TRT#: 1

SEX: Male

DAY ON TEST: 577

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-578

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Intestine Large, Colon
- * Liver
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Brain
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Prostate
- * Spinal Cord, Thoracic
- Trigeminal Ganglion
- * Esophagus
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Forestomach
- * Urinary Bladder
- * Harderian Gland
- * Islets, Pancreatic
- * Mammary Gland
- * Skin
- * Thyroid Gland

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Duodenum
- * Intestine Small, Jejunum
- * Nose

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Necrosis
- * Aorta
 - Mineral
- * Bone
 - Fibrous Osteodystrophy
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Epididymis
 - Exfoliated Germ Cell
 - Hypospermia
- * Eye
 - Cornea, Epithelium
 - Hyperplasia
 - Cornea
 - Inflammation
 - Cornea
 - Neovascularization
 - Note: Retina cannot be evaluated due to autolysis.
- * Heart
 - Cardiomyopathy
 - Ventricl Rgt
 - Cardiomyopathy
 - Myocardium
 - Mineral
 - Artery
 - Mineral
- * Kidney
 - Nephropathy
 - Chronicprogr, Marked
 - [Nephropathy TGLs = 2-13]
- * Lung
 - Congestion
 - Hemorrhage

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 578

TRT#: 1

SEX: Male

DAY ON TEST: 577

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-578

ORGAN AND ACCOUNTABLE SITE STATUS

	Alveolus	Infiltration Cellular	Histiocyte, Mild
	[Congestion TGLs = 6-10]		
	[Hemorrhage TGLs = 7-10]		
Lymph Node	Mediastinal	Erythrophagocytosis	Moderate
	[Erythrophagocytosis TGLs = 3-20]		
Mesentery	Artery	Mineral	Marked
* Nerve Trigeminal		Degeneration	Moderate
* Pancreas	Acinus	Hyperplasia	Mild
	Artery	Mineral	Mild
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland	Duct	Dilation	Mild
* Salivary Glands	Parotid GI	Atrophy	Mild
* Seminal Vesicle		Decreased Secretory Fluid	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen	Red Pulp	Atrophy	Moderate
	White Pulp	Atrophy	Mild
		Pigment	Moderate
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Mild
	[Degeneration TGLs = 1-16A]		
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 5,9 = NCL (No Corresponding Lesion)

Animal Note: TGLs 4,8 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 580

TRT#: 1

SEX: Male

DAY ON TEST: 624

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-580

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Salivary Glands
- * Thyroid Gland
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Spinal Cord, Lumbar
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex Accessory Adrenal Cortical Nodule
- * Adrenal Medulla Hypertrophy Mild
- * Aorta Hyperplasia Mild
- * Bone Pheochromocytoma Benign
- * Epididymis Mineral Moderate
- * Eye Fibrous Osteodystrophy Minimal
- * Heart Exfoliated Germ Cell Mild
- * Kidney Hyperplasia Moderate
- * Liver Inflammation Acute, Mild
- * Lung Cardiomyopathy Marked
- * Lymph Node, Mandibular Cardiomyopathy Minimal
- [Nephropathy TGLs = 2,3,4,5-13] Mineral Minimal
- Alveolus Mineral Moderate
- Lymph Sinus Nephropathy Chronicprogr, Marked
- Bile Duct Hyperplasia Minimal
- Alveolus Infiltration Cellular Mixed Cell, Minimal
- Lymph Sinus Infiltration Cellular Histiocyte, Minimal
- Ectasia Ectasia Minimal
- Hyperplasia Hyperplasia Lymphocyte, Mild
- Proliferation Proliferation Plasma Cell, Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 580

TRT#: 1

SEX: Male

DAY ON TEST: 624

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-580

ORGAN AND ACCOUNTABLE SITE STATUS

Mesentery	Artery	Mineral	Moderate
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Atrophy	Mild
	Artery	Inflammation	Chronic Active, Minimal
	Artery	Mineral	Minimal
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Acute, Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 6-16]		
* Skin		Keratoacanthoma	
	[Keratoacanthoma TGLs = 1-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
* Stomach, Glandular		Erosion	Minimal
		Mineral	Moderate
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Minimal
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 581

TRT#: 1

SEX: Male

DAY ON TEST: 657

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-581

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Rectum
- * Thyroid Gland
- * Bone
- * Intestine Small, Duodenum
- * Trachea
- * Esophagus
- * Intestine Small, Ileum
- Trigeminal Ganglion
- * Intestine Large, Cecum
- * Parathyroid Gland

MISSING

- * Nerve Trigeminal

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - * Adrenal Medulla
 - * Bone Marrow
 - * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
 - Note: Hemorrhage secondary to lymphoma
 [Hemorrhage TGLs = 1-2]
 - * Epididymis
 - * Eye
 - * Harderian Gland
 - * Heart
 - * Intestine Large, Colon
 - * Islets, Pancreatic
 - [Adenoma TGLs = 16-6]
 - [Hyperplasia TGLs = 16-6]
 - * Kidney
- Vacuolation, Cytoplasmic
 Pheochromocytoma Benign
 Pheochromocytoma Complex
 Lymphoma Malignant
 Hemorrhage
 Lymphoma Malignant
 Exfoliated Germ Cell
 Hypospermia
 Lymphoma Malignant
 Neovascularization
 Inflammation
 Lymphoma Malignant
 Lymphoma Malignant
 Adenoma
 Hyperplasia
 Lymphoma Malignant
- Minimal
 Multiple
 Mild
 Mild
 Mild
 Acute, Marked
 Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 581

TRT#: 1

SEX: Male

DAY ON TEST: 657

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-581

ORGAN AND ACCOUNTABLE SITE STATUS

			Nephropathy	Chronicprogr, Marked
	[Nephropathy TGLs = 4-13]			
* Liver		Bile Duct	Hyperplasia	Minimal
			Lymphoma Malignant	
* Lung		Mediastinal	Lymphoma Malignant	
		Bronchial	Lymphoma Malignant	
		Iliac	Lymphoma Malignant	
		Lumbar	Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 15-6]			
	[Lymphoma Malignant TGLs = 6-21]			
	[Lymphoma Malignant TGLs = 7-22]			
* Lymph Node, Mandibular			Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 5,13-9]			
* Lymph Node, Mesenteric			Lymphoma Malignant	
* Mammary Gland			Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 8-9]			
* Nose		Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas			Lymphoma Malignant	
* Peripheral Nerve, Sciatic			Degeneration	Mild
* Peripheral Nerve, Tibial			Degeneration	Mild
* Pituitary Gland			Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 9-4]			
* Preputial Gland			Lymphoma Malignant	
* Prostate			Lymphoma Malignant	
* Salivary Glands			Lymphoma Malignant	
* Seminal Vesicle			Decreased Secretory Fluid	Marked
			Lymphoma Malignant	
	[Decreased Secretory Fluid TGLs = 10-16]			
Skeletal Muscle			Degeneration	Moderate
			Lymphoma Malignant	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 581

TRT#: 1

SEX: Male

DAY ON TEST: 657

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-581

ORGAN AND ACCOUNTABLE SITE STATUS

* Skin	Subcut Tiss	Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 11-20]		
* Spinal Cord, Cervical		Lymphoma Malignant	
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
		Lymphoma Malignant	
* Spinal Cord, Thoracic		Hemorrhage	Focal, Minimal
		Lymphoma Malignant	
	Note: Hemorrhage secondary to lymphoma		
* Spleen		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 12-12]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Lymphoma Malignant	
* Stomach, Glandular		Lymphoma Malignant	
Testis	Germ Cell	Degeneration	Minimal
	[Degeneration TGLs = 14-16A]		
* Thymus		Lymphoma Malignant	
* Urinary Bladder		Lymphoma Malignant	

PRIMARY CAUSE OF DEATH - Thymus Lymphoma Malignant

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Animal Note: TGL 2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 583

TRT#: 1

SEX: Male

DAY ON TEST: 562

DOSE: 0.0W/kg(GSM)chr

DISP: Accidentally Killed

HISTO: 12-5224-583

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- Trigeminal Ganglion
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- Skeletal Muscle
- Testis
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Pituitary Gland
- * Skin
- * Thyroid Gland

MISSING

- * Preputial Gland

OBSERVATIONS

- * Adrenal Cortex
 - * Epididymis
 - * Heart
 - * Kidney
 - * Liver
 - * Lung
 - * Nerve Trigeminal
 - * Nose
 - * Pancreas
 - * Peripheral Nerve, Sciatic
 - * Peripheral Nerve, Tibial
 - * Prostate
 - * Spinal Cord, Cervical
 - * Spinal Cord, Lumbar
 - * Spinal Cord, Thoracic
- [Nephropathy TGLs = 1-13]
- Note: Plant based material in large airways however no inflammatory reaction present.
- Ventricl Rgt
 - Bile Duct
 - Olfactory Epi
 - Acinus
 - Epithelium
 - Nerve
- Hyperplasia
 - Exfoliated Germ Cell
 - Cardiomyopathy
 - Cardiomyopathy
 - Nephropathy
 - Hyperplasia
 - Mixed Cell Focus
 - Foreign Body
 - Degeneration
 - Accumulation, Hyaline Droplet
 - Hyperplasia
 - Degeneration
 - Degeneration
 - Hyperplasia
 - Degeneration
 - Degeneration
 - Degeneration
- Mild
 - Minimal
 - Minimal
 - Minimal
 - Chronicprogr, Moderate
 - Minimal
 - Minimal
 - Mild
 - Mild
 - Mild
 - Mild
 - Mild
 - Minimal
 - Minimal
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 583

TRT#: 1

SEX: Male

DAY ON TEST: 562

DOSE: 0.0W/kg(GSM)chr

DISP: Accidentally Killed

HISTO: 12-5224-583

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

Extramedullary Hematopoiesis

Mild

* Thymus

Atrophy

Moderate

PRIMARY CAUSE OF DEATH

- UNCERTAIN

Animal Note: TGLs 2,3,4,5,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 584

TRT#: 1

SEX: Male

DAY ON TEST: 687

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-584

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|---------------------------|-----------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric | * Parathyroid Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

AUTO PRECLUDES DIAG.

- * Intestine Small, Ileum

OBSERVATIONS

- | | | | |
|--------------------------|-----------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hyperplasia | Moderate |
| | | Hypertrophy | Moderate |
| * Brain | | Compression | Mild |
| * Epididymis | | Exfoliated Germ Cell | Mild |
| | | Hypospermia | Mild |
| | [Hyospermia TGLs = 2-16A] | | |
| * Heart | Ventricle Rgt | Cardiomyopathy | Minimal |
| | | Cardiomyopathy | Moderate |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 3-13] | | |
| * Liver | | Angiectasis | Mild |
| | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Moderate |
| * Mammary Gland | Duct | Dilation | Mild |
| | [Dilation TGLs = 6-20] | | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Hyperplasia | Mild |
| | [Hyperplasia TGLs = 4-6] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 584

TRT#: 1

SEX: Male

DAY ON TEST: 687

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-584

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 5-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Mild
Testis	Interstitial Cell	Adenoma	
	Germ Cell	Degeneration	Mild
		Inflammation	Chronic Active, Moderate
[Degeneration TGLs = 1-16A]			
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 585

TRT#: 1

SEX: Male

DAY ON TEST: 711

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-585

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Small, Jejunum
- * Mammary Gland
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Islets, Pancreatic
- * Skin
- * Trachea
- * Brain
- * Intestine Small, Duodenum
- * Lung
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Esophagus
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex Hyperplasia Mild
- * Aorta Mineral Minimal
- Blood Vessel
- Note: Intimal proliferation of pancreatic artery.
- * Bone Fibrous Osteodystrophy Mild
- * Epididymis Hypospermia Marked
- [Hypospermia TGLs = 8-16A]
- * Heart Cardiomyopathy Mild
- Ventricl Rgt Cardiomyopathy Minimal
- Artery Mineral Minimal
- * Intestine Large, Cecum Edema Moderate
- Erosion Marked
- Inflammation Acute, Marked
- * Intestine Large, Colon Erosion Minimal
- Epithelium Regeneration Marked
- * Intestine Large, Rectum Epithelium Regeneration Moderate
- * Kidney Renal Tubule Cyst
- Nephropathy Chronicprogr, Marked
- [Cyst TGLs = 9,10-13,20]
- [Nephropathy TGLs = 3,4-13]
- * Liver Eosinophilic Focus
- * Lymph Node, Mesenteric Lymphocyte Depletion Mild
- Mesentery Artery Inflammation Chronic Active, Mild
- * Nerve Trigeminal Degeneration Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 585

TRT#: 1

SEX: Male

DAY ON TEST: 711

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-585

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Hyperplasia	Mild
* Parathyroid Gland		Hyperplasia	Moderate
	[Hyperplasia TGLs = 11-8]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Intermed	Cyst	
	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland		Inflammation	Chronic Active, Mild
* Prostate		Decreased Secretory Fluid	Mild
	[Decreased Secretory Fluid TGLs = 6-16]		
* Salivary Glands	Duct, Parotid GI	Dilation	Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 2-16]		
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Stomach, Glandular		Mineral	Minimal
Testis	Germ Cell	Degeneration	Marked
	Artery	Inflammation	Chronic Active, Marked
	[Degeneration TGLs = 1-16A]		
* Thymus		Atrophy	Marked
		Ectopic Parathyroid Gland	
		Ectopic Thyroid	

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 5,7 = NCL (No Corresponding Lesion)

Animal Note: TGL 12 = NST (No Section Taken)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 586

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-586

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | Skeletal Muscle | * Stomach, Forestomach | * Stomach, Glandular |
| Testis | * Thyroid Gland | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|--------------------------|-------------------------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Lipoma | |
| | | Nephropathy | Chronicprogr, Moderate |
| | [Lipoma TGLs = 4-20] | | |
| | [Nephropathy TGLs = 5-13] | | |
| * Liver | | Mixed Cell Focus | |
| * Lung | | Inflammation | Subacute, Minimal |
| Lymph Node | Iliac | Hyperplasia | Lymphocyte, Mild |
| | Iliac | Proliferation | Plasma Cell, Mild |
| | [Hyperplasia TGLs = 6-20] | | |
| | [Proliferation TGLs = 6-20] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | Respirat Epith | Mineral | Mild |
| * Pancreas | | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 586

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-586

ORGAN AND ACCOUNTABLE SITE STATUS

	Acinus	Hyperplasia	Moderate
	[Adenoma TGLs = 7-6]		
	[Hyperplasia TGLs = 7-6,14]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Mild
	[Dilation TGLs = 2-16]		
* Skin		Ulcer	Marked
	[Ulcer TGLs = 1-21]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Developmental Malformation	
		Extramedullary Hematopoiesis	Mild
	[Developmental Malformation TGLs = 3-12]		
* Thymus		Atrophy	Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 587

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-587

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Pituitary Gland |
| * Prostate | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|---|--|------------------------|----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Bone | | Fibrous Osteodystrophy | Minimal |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Epididymis | | Hypospermia | Marked |
| | [Hypospermia TGLs = 2-16A] | | |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricle Rgt | Cardiomyopathy | Minimal |
| * Intestine Large, Rectum | Artery | Inflammation | Chronic Active, Mild |
| * Islets, Pancreatic | | Carcinoma | |
| | [Carcinoma TGLs = 4-6] | | |
| * Kidney | Renal Tubule | Cyst | |
| | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 3-13] | | |
| * Liver | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | Artery | Inflammation | Chronic Active, Mild |
| | [Infiltration Cellular TGLs = 8-10,20] | | |
| Lymph Node | Iliac, Lymph Sinus | Ectasia | Mild |
| | Renal | Erythrophagocytosis | Mild |
| | Iliac | Infiltration Cellular | Histiocyte, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 587

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-587

ORGAN AND ACCOUNTABLE SITE STATUS

	Renal	Proliferation	Plasma Cell, Mild
	[Ectasia TGLs = 5-20]		
	[Erythrophagocytosis TGLs = 7-21]		
	[Infiltration Cellular TGLs = 5-20]		
	[Proliferation TGLs = 6-21]		
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Moderate
		Proliferation	Plasma Cell, Moderate
Mesentery	Artery	Inflammation	Chronic Active, Marked
* Nerve Trigeminal		Degeneration	Minimal
* Pancreas		Adenoma	
	Acinus	Hyperplasia	Marked
	Artery	Inflammation	Chronic Active, Marked
	[Adenoma TGLs = 4-14]		
	[Hyperplasia TGLs = 4-6]		
	[Inflammation TGLs = 4-14]		
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Minimal
* Salivary Glands	Artery	Inflammation	Chronic Active, Mild
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Hyperplasia	Lymphocyte, Minimal
Testis	Germ Cell	Degeneration	Marked
	Artery	Inflammation	Chronic Active, Marked
	[Degeneration TGLs = 1-16A]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 587

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-587

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Minimal

Cyst

* Thyroid Gland

C Cell

Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 588

TRT#: 1

SEX: Male

DAY ON TEST: 584

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-588

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | * Aorta | * Bone Marrow | * Esophagus |
| * Harderian Gland | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric |
| * Mammary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Skin | * Spinal Cord, Thoracic | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|-------------------------------|-------------------------------|--------------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Mild |
| * Bone | | Fibrous Osteodystrophy | Minimal |
| * Brain | | Necrosis | Moderate |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| * Eye | Cornea, Epithelium | Hyperplasia | Moderate |
| | Cornea | Inflammation | Acute, Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricle Rgt | Cardiomyopathy | Minimal |
| * Intestine Large, Cecum | Artery | Inflammation | Chronic Active, Mild |
| * Intestine Large, Colon | Artery | Inflammation | Chronic Active, Mild |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 3,4-13] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Mild |
| | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| Mesentery | Artery | Inflammation | Chronic Active, Moderate |
| * Nerve Trigeminal | | Degeneration | Marked |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Atrophy | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 588

TRT#: 1

SEX: Male

DAY ON TEST: 584

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-588

ORGAN AND ACCOUNTABLE SITE STATUS

	Acinus	Hyperplasia	Minimal
	Artery	Inflammation	Chronic Active, Marked
		Thrombus	Marked
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Minimal
* Spinal Cord, Cervical	Artery	Inflammation	Chronic Active, Moderate
* Spinal Cord, Lumbar		Degeneration	Minimal
* Spleen	Nerve	Degeneration	Moderate
		Hemangiosarcoma	
	[Hemangiosarcoma TGLs = 1,2-12,20]		
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Moderate
	Artery	Inflammation	Chronic Active, Moderate

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 589

TRT#: 1

SEX: Male

DAY ON TEST: 248

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-589

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|-----------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Bone Marrow | * Epididymis | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Liver | * Lymph Node, Mesenteric | * Mammary Gland | * Nerve Trigeminal |
| * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Sciatic | * Peripheral Nerve, Tibial |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Spinal Cord, Thoracic | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| Testis | * Thyroid Gland | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|--|--------------|--------------------------|--------------------------|
| * Brain | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| [Nephropathy TGLs = 1-13] | | | |
| * Lung | | Foreign Body | |
| | | Inflammation | Suppurative, Moderate |
| Note: Inflammation centered on foreign material within larger airways. | | | |
| [Inflammation TGLs = 3-10] | | | |
| * Lymph Node, Mandibular | | Infiltration Cellular | Polymorphnuclr, Moderate |
| * Nose | | Foreign Body | |
| | | Inflammation | Suppurative, Moderate |
| * Preputial GI | | | |
| Note: One of pair available for evaluation. | | | |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Minimal |
| * Thymus | | Atrophy | Moderate |
| [Atrophy TGLs = 2-6] | | | |

PRIMARY CAUSE OF DEATH - Lung Inflammation
 CONTRIBUTORY CAUSE OF DEATH - Nose Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 591

TRT#: 1

SEX: Male

DAY ON TEST: 658

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-591

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Stomach, Glandular
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- Testis
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- * Trachea
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Bone
- * Brain
- * Heart
- * Kidney
- [Nephropathy TGLs = 3,4-13]
- * Liver
- * Lung
- [Congestion TGLs = 5-10]
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Nose
- * Pancreas
- [Adenoma TGLs = 6-6.1]
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Preputial Gland
- Pineal Gland
- Ventricle Rgt
- Bile Duct
- Olfactory Epi
- Acinus
- Acinus
- Pars Distalis
- Duct
- Hyperplasia
- Hyperplasia
- Fibrous Osteodystrophy
- Vacuolation, Cytoplasmic
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Hyperplasia
- Congestion
- Proliferation
- Degeneration
- Accumulation, Hyaline Droplet
- Adenoma
- Atrophy
- Hyperplasia
- Degeneration
- Degeneration
- Hyperplasia
- Dilation
- Moderate
- Marked
- Minimal
- Minimal
- Minimal
- Minimal
- Chronicprogr, Marked
- Minimal
- Mild
- Plasma Cell, Minimal
- Minimal
- Moderate
- Minimal
- Mild
- Moderate
- Moderate
- Minimal
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 591

TRT#: 1

SEX: Male

DAY ON TEST: 658

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-591

ORGAN AND ACCOUNTABLE SITE STATUS

Inflammation Chronic Active, Mild

[Inflammation TGLs = 2-16]

Skeletal Muscle

Degeneration Mild

* Spinal Cord, Cervical

Degeneration Minimal

* Spinal Cord, Lumbar

Nerve Degeneration Mild

* Spinal Cord, Thoracic

Degeneration Minimal

* Spleen

White Pulp Atrophy Minimal

Red Pulp Atrophy Minimal

Pigment Moderate

[Atrophy TGLs = 1-12.1]

* Stomach, Forestomach

Epithelium Hyperplasia Moderate

Inflammation Chronic Active, Mild

Ulcer Moderate

* Thymus

Atrophy Moderate

* Thyroid Gland

C Cell Adenoma

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 7,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 592

TRT#: 1

SEX: Male

DAY ON TEST: 569

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-592

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Lymph Node, Mesenteric
- * Prostate
- * Skin
- * Trachea
- * Aorta
- * Harderian Gland
- * Mammary Gland
- * Salivary Glands
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone Marrow
- * Islets, Pancreatic
- * Pituitary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- * Brain
- * Liver
- * Preputial Gland
- Skeletal Muscle
- * Thyroid Gland

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Small, Duodenum
- * Urinary Bladder
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Intestine Large, Rectum
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
- * Bone
- * Epididymis
- * Heart
- * Kidney
 - [Nephropathy TGLs = 6-13]
- * Lung
 - [Congestion TGLs = 4-10]
 - [Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular
 - [Hyperplasia TGLs = 1-9]
- * Nerve Trigeminal
- * Nose
- * Pancreas
- * Parathyroid Gland
- Ventricl Rgt
 - Hyperplasia
 - Fibrous Osteodystrophy
 - Exfoliated Germ Cell
 - Cardiomyopathy
 - Cardiomyopathy
 - Nephropathy
- Alveolus
 - Congestion
 - Infiltration Cellular
- Hyperplasia Proliferation
- Degeneration
- Accumulation, Hyaline Droplet
- Hyperplasia
- Inflammation
- Hyperplasia
- Mild
- Minimal
- Minimal
- Mild
- Mild
- Chronicprogr, Marked
- Moderate
- Histiocyte, Minimal
- Lymphocyte, Mild
- Plasma Cell, Mild
- Mild
- Mild
- Marked
- Chronic Active, Mild
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 592

TRT#: 1

SEX: Male

DAY ON TEST: 569

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-592

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Mild
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 2,3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 593

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-593

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Seminal Vesicle
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Thymus
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Spinal Cord, Cervical
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Minimal
 - Hypertrophy Mild
 - Vacuolation, Cytoplasmic Minimal
 - Hypercellularity Mild
- * Bone Marrow
- * Brain
 - Note: Olfactory bulb unavailable for evaluation.
- * Eye
 - Retina Atrophy Minimal
 - Cornea Neovascularization Minimal
- * Heart
 - Cardiomyopathy Mild
- * Kidney
 - Ventricl Rgt Cardiomyopathy Minimal
 - Renal Tubule Cyst
 - Nephropathy Chronicprogr, Marked
 - [Cyst TGLs = 8-21,13]
 - [Nephropathy TGLs = 7,9-13]
- * Liver
 - Eosinophilic Focus
 - Mixed Cell Focus
- * Lung
 - Alveolar/Bronchiolar Adenoma
- Lymph Node
 - Alveolus Infiltration Cellular Histiocyte, Minimal
 - Iliac Erythrophagocytosis Moderate
 - [Erythrophagocytosis TGLs = 11-21]
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Mild
 - Proliferation Plasma Cell, Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 593

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-593

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Adenoma	Moderate
	Artery	Hyperplasia	Moderate
		Inflammation	Chronic Active, Minimal
	[Adenoma TGLs = 6-6]		
	[Hyperplasia TGLs = 6-6,14]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Minimal
	[Dilation TGLs = 3-16]		
* Prostate		Inflammation	Chronic Active, Minimal
* Salivary Glands	Artery	Inflammation	Chronic Active, Mild
* Skin	Subcut Tiss	Lipoma	
	[Lipoma TGLs = 2-20]		
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thyroid Gland	C Cell	Adenoma	
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGLs 4,5,10 = NCL (No Corresponding Lesion)

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59
 Test Type: CHRONIC
 Route: Whole Body Exposure
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Cell Phone Radiation: GSM
 CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
 Time Report Requested: 11:58:55
 First Dose M/F: 09/16/12 / 09/16/12
 Lab: IIT

ANIMAL ID: 594

TRT#: 1

SEX: Male

DAY ON TEST: 510

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-594

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Aorta	* Bone Marrow	* Brain
* Esophagus	* Eye	* Harderian Gland	* Intestine Small, Duodenum
* Islets, Pancreatic	* Liver	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Nerve Trigeminal	* Pituitary Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	Skeletal Muscle	* Skin	* Spinal Cord, Cervical
* Spinal Cord, Lumbar	* Spinal Cord, Thoracic	* Thyroid Gland	* Trachea
Trigeminal Ganglion	* Urinary Bladder		

MISSING

* Mammary Gland

AUTO PRECLUDES DIAG.

* Intestine Small, Jejunum

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Bone		Fibrous Osteodystrophy	Minimal
* Epididymis		Exfoliated Germ Cell	Moderate
* Heart		Cardiomyopathy	Mild
	Ventricl Rgt	Cardiomyopathy	Minimal
* Intestine Large, Cecum		Erosion	Minimal
	Artery	Inflammation	Chronic Active, Mild
		Inflammation	Acute, Mild
	Epithelium	Regeneration	Minimal
	[Inflammation TGLs = 5-15]		
* Intestine Large, Colon	Epithelium	Regeneration	Mild
* Intestine Large, Rectum	Epithelium	Regeneration	Mild
* Intestine Small, Ileum	Epithelium	Regeneration	Mild
* Kidney		Nephropathy	Chronicprogr, Marked
	[Nephropathy TGLs = 1,2,7,8-13]		
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	[Infiltration Cellular TGLs = 6-20]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 594

TRT#: 1

SEX: Male

DAY ON TEST: 510

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-594

ORGAN AND ACCOUNTABLE SITE STATUS

Mesentery	Artery	Inflammation	Chronic Active, Mild
		Inflammation	Chronic, Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
Note: Level 3 largely absent.			
* Pancreas	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland		Hyperplasia	Marked
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland		Inflammation	Chronic Active, Mild
* Spleen		Pigment	Mild
* Stomach, Forestomach		Ulcer	Minimal
* Stomach, Glandular		Mineral	Mild
Testis	Germ Cell	Degeneration	Mild
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 3,4 = NCL (No Corresponding Lesion)

Animal Note: TGL 9 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 595

TRT#: 1

SEX: Male

DAY ON TEST: 616

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-595

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Thyroid Gland
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Mammary Gland
- * Seminal Vesicle
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Jejunum
- * Pituitary Gland
- * Skin
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Cecum
- * Islets, Pancreatic
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Small, Ileum

OBSERVATIONS

- | | | | |
|-----------------------------|-----------------------------|-------------------------------|--------------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricle Rgt | Cardiomyopathy | Minimal |
| * Intestine Small, Duodenum | | Erosion | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 1-13] | | |
| * Liver | Bile Duct | Hyperplasia | Mild |
| * Lung | | Congestion | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Congestion TGLs = 3-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| Mesentery | Artery | Inflammation | Chronic Active, Moderate |
| | Artery | Mineral | Minimal |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Atrophy | Mild |
| | Acinus | Hyperplasia | Minimal |
| | Artery | Inflammation | Chronic Active, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 595

TRT#: 1

SEX: Male

DAY ON TEST: 616

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-595

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Moderate
Skeletal Muscle		Degeneration	Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	Red Pulp	Atrophy	Mild
		Pigment	Mild
[Atrophy TGLs = 2-12]			
* Stomach, Glandular		Erosion	Minimal
Testis	Germ Cell	Degeneration	Minimal
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 596

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-596

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone Marrow
- * Brain
- * Esophagus
- * Harderian Gland
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Lung
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Nerve Trigeminal
- * Parathyroid Gland
- * Prostate
- * Salivary Glands
- * Skeletal Muscle
- * Stomach, Forestomach
- * Stomach, Glandular
- * Trachea
- * Trigeminal Ganglion
- * Urinary Bladder

OBSERVATIONS

- * Bone Fibrous Osteodystrophy Minimal
- * Epididymis Exfoliated Germ Cell Minimal
- * Eye Cornea Fibrosis Minimal
- Cornea, Epithelium Hyperplasia Minimal
- Cornea Inflammation Acute, Minimal
- Cornea Neovascularization Mild
- * Heart Cardiomyopathy Minimal
- * Kidney Nephropathy Chronicprogr, Marked
- [Nephropathy TGLs = 2-13]
- * Liver Eosinophilic Focus
- Mixed Cell Focus
- * Lymph Node, Mandibular Lymph Sinus Ectasia Minimal
- Hyperplasia Lymphocyte, Minimal
- Proliferation Plasma Cell, Minimal
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Mild
- * Pancreas Adenoma
- Acinus Atrophy Minimal
- Acinus Hyperplasia Marked
- Artery Inflammation Chronic Active, Mild
- [Adenoma TGLs = 3-6]
- [Hyperplasia TGLs = 3-6]
- * Peripheral Nerve, Sciatic Degeneration Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 596

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-596

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Preputial Gland	Duct	Dilation	Mild
* Seminal Vesicle		Decreased Secretory Fluid	Minimal
* Skin		Cyst Epithelial Inclusion	
	[Cyst Epithelial Inclusion TGLs = 1-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Hyperplasia	Lymphocyte, Minimal
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 597

TRT#: 1

SEX: Male

DAY ON TEST: 688

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-597

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Mammary Gland
- * Spinal Cord, Cervical
- * Bone Marrow
- * Intestine Small, Duodenum
- * Lung
- * Preputial Gland
- * Thyroid Gland
- * Esophagus
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Prostate
- * Trachea
- * Harderian Gland
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Skin
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Medulla
- * Aorta
- * Bone
- * Brain
- * Epididymis
- [Exfoliated Germ Cell TGLs = 4-16A]
- * Eye
- * Heart
- Ventricl Rgt
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Kidney
- [Nephropathy TGLs = 1,2-13]
- * Liver
- Bile Duct
- Artery
- Hepatocyte
- Mesentery
- Artery
- [Inflammation TGLs = 13-21]
- [Necrosis TGLs = 11,14-20,22]
- * Nerve Trigeminal
- * Nose
- * Pancreas
- Hyperplasia
- Mineral
- Fibrous Osteodystrophy
- Vacuolation, Cytoplasmic
- Exfoliated Germ Cell
- Inflammation
- Cardiomyopathy
- Cardiomyopathy
- Ulcer
- Inflammation
- Nephropathy
- Eosinophilic Focus
- Hyperplasia
- Inflammation
- Necrosis
- Inflammation
- Necrosis
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Minimal
- Mild
- Marked
- Mild
- Moderate
- Moderate
- Moderate
- Acute, Minimal
- Moderate
- Minimal
- Mild
- Chronic Active, Minimal
- Chronicprogr, Marked
- Minimal
- Chronic Active, Marked
- Moderate
- Chronic Active, Marked
- Moderate
- Minimal
- Mild
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 597

TRT#: 1

SEX: Male

DAY ON TEST: 688

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-597

ORGAN AND ACCOUNTABLE SITE STATUS

	Acinus	Hyperplasia	Mild
	Artery	Inflammation	Chronic Active, Moderate
	Artery	Mineral	Mild
	[Hyperplasia TGLs = 10-6]		
* Parathyroid Gland		Hyperplasia	Moderate
	[Hyperplasia TGLs = 9-8]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Marked
* Pituitary Gland	Pars Intermed	Cyst	
	Pars Distalis	Hyperplasia	Minimal
* Salivary Glands	Duct, Parotid GI	Dilation	Mild
	Artery	Inflammation	Chronic Active, Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Minimal
	[Decreased Secretory Fluid TGLs = 5-16]		
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Moderate
		Pigment	Mild
* Stomach, Forestomach		Edema	Mild
		Inflammation	Acute, Minimal
		Ulcer	Minimal
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Moderate
	[Degeneration TGLs = 3-16A]		
* Thymus		Atrophy	Marked
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 6,8 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 597

TRT#: 1

SEX: Male

DAY ON TEST: 688

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-597

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: TGL 12 = NST (No Section Taken)

Animal Note: TGL 7 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 598

TRT#: 1

SEX: Male

DAY ON TEST: 648

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-598

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Skin
- * Thyroid Gland
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Prostate
- * Spinal Cord, Cervical
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hyperplasia Minimal
 - Hypertrophy Mild
- * Adrenal Medulla
 - Hyperplasia Mild
- * Aorta
 - Mineral Minimal
- * Bone
 - Fibrous Osteodystrophy Mild
- * Brain
 - Necrosis Minimal
- * Epididymis
 - Exfoliated Germ Cell Minimal
- * Heart
 - Cardiomyopathy Minimal
- * Kidney
 - Nephropathy Chronicprogr, Marked
 - [Nephropathy TGLs = 5,7-13]
- * Liver
 - Bile Duct
 - Hyperplasia Minimal
 - Proliferation Plasma Cell, Mild
 - Degeneration Minimal
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet Mild
 - Cyst
- * Pancreas
 - Acinus
 - Hyperplasia Mild
 - Artery
 - Inflammation Chronic Active, Mild
 - [Hyperplasia TGLs = 8-6]
- * Parathyroid Gland
 - Hyperplasia Minimal
- * Peripheral Nerve, Sciatic
 - Degeneration Moderate
- * Peripheral Nerve, Tibial
 - Degeneration Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 598

TRT#: 1

SEX: Male

DAY ON TEST: 648

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-598

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Mild
[Inflammation TGLs = 2-16]			
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
Testis	Artery	Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 1,3,4,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 599

TRT#: 1

SEX: Male

DAY ON TEST: 555

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-599

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lung
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Thyroid Gland
- * Brain
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Mammary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Esophagus
- * Intestine Small, Duodenum
- * Liver
- * Nerve Trigeminal
- * Spinal Cord, Lumbar
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Medulla
- * Aorta
- * Bone
- * Epididymis
- [Hypospermia TGLs = 7-16A]
- * Eye
- Cornea
- Antr Chamber
- Retrobulbar
- Cornea
- * Harderian Gland
- * Heart
- Ventricl Rgt
- * Kidney
- [Nephropathy TGLs = 2,3-13]
- * Lymph Node, Mandibular
- Mesentery
- Artery
- Artery
- * Nose
- * Pancreas
- * Parathyroid Gland
- Hyperplasia
- Mineral
- Fibrous Osteodystrophy
- Exfoliated Germ Cell
- Hypospermia
- Inflammation
- Inflammation
- Schwannoma Malignant
- Ulcer
- Schwannoma Malignant
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Proliferation
- Inflammation
- Mineral
- Neovascularization
- Schwannoma Malignant
- Hyperplasia
- Hyperplasia
- Marked
- Mild
- Mild
- Mild
- Marked
- Acute, Moderate
- Acute, Mild
- Metastatic (Uncertain Primary Site)
- Moderate
- Metastatic (Uncertain Primary Site)
- Moderate
- Minimal
- Chronicprogr, Marked
- Plasma Cell, Minimal
- Chronic Active, Minimal
- Mild
- Moderate
- Metastatic (Uncertain Primary Site)
- Mild
- Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 599

TRT#: 1

SEX: Male

DAY ON TEST: 555

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-599

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Marked
	[Dilation TGLs = 1-16]		
* Salivary Glands	Parotid GI	Atrophy	Moderate
	Sublingual GI	Schwannoma Malignant	Metastatic (Uncertain Primary Site)
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
* Skin		Ulcer	Marked
	[Ulcer TGLs = 11-20]		
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Moderate
	Red Pulp	Atrophy	Marked
		Pigment	Moderate
* Stomach, Glandular		Mineral	Mild
Testis	Germ Cell	Degeneration	Marked
	[Degeneration TGLs = 6-16A]		
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 4,5,8,9 = NCL (No Corresponding Lesion)

Animal Note: TGL 10 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 600

TRT#: 1

SEX: Male

DAY ON TEST: 645

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-600

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| Trigeminal Ganglion | * Urinary Bladder | | |

MISSING

- * Mammary Gland

INSUFFICIENT TISSUE

- * Nerve Trigeminal

OBSERVATIONS

- | | | | |
|------------------|---|--------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Minimal |
| | | Vacuolation, Cytoplasmic | Minimal |
| * Brain | Chor Plexus | Mineral | Minimal |
| | Pineal Gland | Vacuolation, Cytoplasmic | Mild |
| * Epididymis | | Exfoliated Germ Cell | Mild |
| | | Mesothelioma Malignant | |
| | [Mesothelioma Malignant TGLs = 4-16A] | | |
| * Esophagus | | Dilation | Marked |
| | | Hyperplasia | Mild |
| | [Dilation TGLs = 2-20] | | |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 5-13] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | | Foreign Body | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 600

TRT#: 1

SEX: Male

DAY ON TEST: 645

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-600

ORGAN AND ACCOUNTABLE SITE STATUS

Inflammation Suppurative, Mild

Note: Plant-based material present in airways consistent with aspiration pneumonia.

[Inflammation TGLs = 1-10]

* Lymph Node, Mandibular

Hyperplasia Lymphocyte, Mild
Proliferation Plasma Cell, Mild

* Lymph Node, Mesenteric

Erythrophagocytosis Mild

* Nose

Olfactory Epi Accumulation, Hyaline Droplet Moderate

Nasopharyn Dct, Respirat Epith Hyperplasia Moderate

Inflammation Suppurative, Mild

Note: Hair shafts present.

* Pancreas

Acinus Adenoma Multiple
Hyperplasia Mild

[Adenoma TGLs = 14-6,14]

[Hyperplasia TGLs = 14-6]

* Parathyroid Gland

Hyperplasia Mild

* Peripheral Nerve, Sciatic

Degeneration Mild

* Peripheral Nerve, Tibial

Degeneration Mild

* Pituitary Gland

Pars Distalis Hyperplasia Mild

* Preputial Gland

Duct Dilation Marked

Inflammation Chronic Active, Moderate

[Dilation TGLs = 11-16]

[Inflammation TGLs = 12-16]

* Skin

Squamous Cell Papilloma

[Squamous Cell Papilloma TGLs = 13-20.1]

* Spinal Cord, Cervical

Degeneration Minimal

* Spinal Cord, Lumbar

Nerve Degeneration Mild

* Spinal Cord, Thoracic

Degeneration Minimal

* Spleen

Red Pulp Atrophy Minimal

Pigment Mild

[Atrophy TGLs = 9-12]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 600

TRT#: 1

SEX: Male

DAY ON TEST: 645

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-600

ORGAN AND ACCOUNTABLE SITE STATUS

Testis

[Mesothelioma Malignant TGLs = 3-16A]

Mesothelioma Malignant

* Thymus

Atrophy

Mild

* Trachea

Epithelium

Hyperplasia

Moderate

PRIMARY CAUSE OF DEATH - Esophagus Dilation

CONTRIBUTORY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 6,7,8,10 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 601

TRT#: 1

SEX: Male

DAY ON TEST: 496

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-601

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Bone Marrow | * Brain | Bulbourethral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lung | * Lymph Node, Mandibular | * Mammary Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Spinal Cord, Thoracic | * Spleen | * Stomach, Forestomach |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|------------------------|-------------------------|
| * Adrenal Cortex | | Degeneration | Minimal |
| | | Hyperplasia | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Aorta | | Mineral | Mild |
| * Bone | | Fibrous Osteodystrophy | Minimal |
| * Epididymis | | Exfoliated Germ Cell | Mild |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Intestine Large, Cecum | | Edema | Moderate |
| | Artery | Inflammation | Chronic Active, Mild |
| | | Inflammation | Acute, Moderate |
| | Epithelium | Regeneration | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 1,2-13] | | |
| * Liver | Bile Duct | Hyperplasia | Mild |
| Lymph Node | Renal | Erythrophagocytosis | Moderate |
| | [Erythrophagocytosis TGLs = 8,9-20] | | |
| * Lymph Node, Mesenteric | | Erythrophagocytosis | Mild |
| | [Erythrophagocytosis TGLs = 5-15] | | |
| Mesentery | Artery | Inflammation | Chronic Active, Minimal |
| | Artery | Mineral | Mild |
| * Nerve Trigeminal | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 601

TRT#: 1

SEX: Male

DAY ON TEST: 496

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-601

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland			
Note: Pars distalis available for evaluation.			
* Salivary Glands	Parotid Gland	Atrophy	Mild
* Seminal Vesicle		Inflammation	Chronic Active, Minimal
	[Inflammation TGLs = 3-16]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 4,6,7,10,11 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 602

TRT#: 1

SEX: Male

DAY ON TEST: 600

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-602

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Epididymis | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung |
| * Lymph Node, Mesenteric | * Mammary Gland | * Prostate | * Seminal Vesicle |
| * Skin | * Spinal Cord, Cervical | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|-----------------------------|---|-------------------------------|----------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Brain | | Necrosis | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | Ventricle Rgt | Cardiomyopathy | Minimal |
| | [Nephropathy TGLs = 4-13] | Nephropathy | Chronicprogr, Marked |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Hyperplasia | Mild |
| | Artery | Inflammation | Chronic Active, Mild |
| * Parathyroid Gland | | Hyperplasia | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| | Note: Pars distalis available for evaluation. | | |
| * Preputial Gland | | Inflammation | Chronic Active, Mild |
| * Salivary Glands | Parotid GI | Atrophy | Mild |
| Skeletal Muscle | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 602

TRT#: 1

SEX: Male

DAY ON TEST: 600

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-602

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	Red Pulp	Atrophy	Mild
[Atrophy TGLs = 6-12]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		Inflammation	Chronic Active, Mild
		Ulcer	Moderate
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 1,2,3,5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 604

TRT#: 1

SEX: Male

DAY ON TEST: 705

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-604

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Intestine Small, Ileum
- * Mammary Gland
- * Spinal Cord, Thoracic
- * Esophagus
- * Intestine Small, Jejunum
- * Prostate
- * Thyroid Gland
- * Harderian Gland
- * Islets, Pancreatic
- * Skin
- * Trachea
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Spinal Cord, Cervical
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - * Adrenal Medulla
 - * Aorta
 - * Bone
 - * Brain
 - * Epididymis
 - * Eye
 - * Heart
 - * Intestine Large, Cecum
 - * Intestine Large, Colon
 - * Intestine Large, Rectum
 - * Kidney
- [Hypospermia TGLs = 2-16A]
- [Cyst TGLs = 11-20]
- [Nephropathy TGLs = 8,9-13]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 604

TRT#: 1

SEX: Male

DAY ON TEST: 705

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-604

ORGAN AND ACCOUNTABLE SITE STATUS

* Liver	Hepatocyte	Necrosis	Minimal
	Hepatocyte	Vacuolation, Cytoplasmic	Mild
	[Vacuolation, Cytoplasmic TGLs = 10-12]		
* Lung	Perivascular	Inflammation	Chronic Active, Mild
Lymph Node	Renal	Erythrophagocytosis	Mild
	[Erythrophagocytosis TGLs = 12,13-20]		
* Lymph Node, Mesenteric	Lymphocyte	Depletion	Moderate
Mesentery	Artery	Mineral	Moderate
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Minimal
	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland		Hyperplasia	Marked
	[Hyperplasia TGLs = 6-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Mild
	[Dilation TGLs = 16,17-16]		
* Salivary Glands	Parotid GI	Atrophy	Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 4-16]		
Skeletal Muscle		Degeneration	Mild
		Mineral	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Moderate
		Extramedullary Hematopoiesis	Moderate
	[Atrophy TGLs = 18-12]		
* Stomach, Forestomach		Edema	Mild
	Epithelium	Hyperplasia	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 604

TRT#: 1

SEX: Male

DAY ON TEST: 705

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-604

ORGAN AND ACCOUNTABLE SITE STATUS

* Stomach, Glandular		Mineral	Minimal
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Marked
	[Degeneration TGLs = 1-16A]		
* Thymus		Atrophy	Marked
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 3,5,7,14 = NCL (No Corresponding Lesion)

Animal Note: TGL 15 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 605

TRT#: 1

SEX: Male

DAY ON TEST: 629

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-605

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Seminal Vesicle
- * Stomach, Forestomach
- * Brain
- * Intestine Small, Duodenum
- * Mammary Gland
- Skeletal Muscle
- * Thyroid Gland
- * Esophagus
- * Intestine Small, Ileum
- * Prostate
- * Skin
- * Trachea
- * Harderian Gland
- * Intestine Small, Jejunum
- * Salivary Glands
- * Spinal Cord, Cervical
- * Urinary Bladder

MISSING

- * Parathyroid Gland
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
- * Aorta
 - Mineral
- * Bone
 - Fibrous Osteodystrophy
- * Epididymis
 - Exfoliated Germ Cell
- * Eye
 - Cornea, Epithelium
 - Hyperplasia
 - Cornea
 - Inflammation
 - Cornea
 - Ulcer
- [Inflammation TGLs = 13-5]
- * Heart
 - Cardiomyopathy
 - Ventricl Rgt
 - Cardiomyopathy
 - Artery
 - Mineral
- * Intestine Large, Cecum
 - Edema
 - Artery
 - Inflammation
- * Intestine Large, Colon
 - Artery
 - Inflammation
- * Kidney
 - Renal Tubule
 - Cyst
 - Nephropathy
- [Cyst TGLs = 1,2,11-13,20,21]
- [Nephropathy TGLs = 9,10-13]
- * Liver
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 605

TRT#: 1

SEX: Male

DAY ON TEST: 629

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-605

ORGAN AND ACCOUNTABLE SITE STATUS

* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Artery	Inflammation	Chronic Active, Moderate
Lymph Node	Renal	Erythrophagocytosis	Moderate
	[Erythrophagocytosis TGLs = 7,8-20]		
* Lymph Node, Mandibular	Lymph Sinus	Ectasia	Mild
		Proliferation	Plasma Cell, Mild
	[Ectasia TGLs = 3-9]		
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
Mesentery	Artery	Inflammation	Chronic Active, Mild
	Artery	Mineral	Minimal
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
	Note: Approximately one-half of Level 3 available for evaluation.		
* Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Mild
	Artery	Inflammation	Chronic Active, Marked
	[Hyperplasia TGLs = 6-6]		
	[Inflammation TGLs = 6-6]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	Red Pulp	Atrophy	Mild
		Pigment	Mild
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 605

TRT#: 1

SEX: Male

DAY ON TEST: 629

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-605

ORGAN AND ACCOUNTABLE SITE STATUS

Cyst

Ectopic Parathyroid Gland

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 4,5 = NCL (No Corresponding Lesion)

Animal Note: TGL 12=NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 712

TRT#: 3

SEX: Male

DAY ON TEST: 683

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-712

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Islets, Pancreatic
- * Salivary Glands
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Lymph Node, Mandibular
- * Skin
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Colon
- * Pituitary Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Rectum
- * Prostate
- * Thyroid Gland

MISSING

- * Mammary Gland
- * Nerve Trigeminal

AUTO PRECLUDES DIAG.

- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Adrenal Medulla
 - Hyperplasia
- * Bone
 - Fibrous Osteodystrophy
- * Epididymis
 - Exfoliated Germ Cell
- * Heart
 - Cardiomyopathy
- * Intestine Large, Cecum
 - Ventricl Rgt
 - Cardiomyopathy
 - Artery
 - Edema
 - Inflammation
 - Inflammation
 - Nephropathy
- * Kidney
 - [Nephropathy TGLs = 1,2-13]
- * Liver
 - Bile Duct
 - Hyperplasia
 - Hepatocyte
 - Necrosis
- * Lung
 - [Inflammation TGLs = 3-10]
- * Lymph Node, Mesenteric
 - Erythrophagocytosis
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet

Note: Approximately two-thirds of level 3 available for evaluation.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 712

TRT#: 3

SEX: Male

DAY ON TEST: 683

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-712

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Marked
	Artery	Inflammation	Chronic Active, Mild
[Hyperplasia TGLs = 6,7-6]			
* Parathyroid Gland		Hyperplasia	Moderate
[Hyperplasia TGLs = 8-8]			
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
		Extramedullary Hematopoiesis	Moderate
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

CONTRIBUTORY CAUSE OF DEATH - Liver Hepatocyte Necrosis

Animal Note: TGLs 4,5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 713

TRT#: 3

SEX: Male

DAY ON TEST: 614

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-713

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Brain | * Epididymis |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nerve Trigeminal | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Spinal Cord, Cervical | * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

MISSING

- * Thymus

OBSERVATIONS

- | | | | |
|--------------------------|--|-------------------------------|-------------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 5-7] | | |
| * Bone Marrow | | Hypercellularity | Moderate |
| * Heart | Ventricl Rgt Artery | Cardiomyopathy | Minimal |
| | | Inflammation | Chronic Active, Mild |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 2-13] | | |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | | Infiltration Cellular | Mixed Cell, Mild |
| | Artery | Inflammation | Chronic Active, Mild |
| * Lung | | Inflammation | Chronic Active, Mild |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Moderate |
| | | Proliferation | Plasma Cell, Moderate |
| Mesentery | Artery | Inflammation | Chronic Active, Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Pancreas | | Adenoma | Multiple |
| | Artery | Inflammation | Chronic Active, Minimal |
| | [Adenoma TGLs = 3-20] | | |
| * Parathyroid Gland | | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 713

TRT#: 3

SEX: Male

DAY ON TEST: 614

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-713

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Salivary Glands	Artery	Inflammation	Chronic Active, Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Mild
Skeletal Muscle		Degeneration	Minimal
* Skin	Subcut Tiss	Fibrosarcoma	
[Fibrosarcoma TGLs = 1-20]			
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
[Extramedullary Hematopoiesis TGLs = 4-12]			
Testis	Artery	Inflammation	Chronic Active, Mild

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibrosarcoma

Animal Note: TGLs 6,7,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 714

TRT#: 3

SEX: Male

DAY ON TEST: 291

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-714

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Epididymis
- * Esophagus
- * Eye
- * Harderian Gland
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Nerve Trigeminal
- * Pancreas
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Preputial Gland
- * Prostate
- * Seminal Vesicle
- * Spinal Cord, Cervical
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- * Stomach, Glandular
- * Testis
- * Thyroid Gland
- * Trachea
- * Trigeminal Ganglion
- * Urinary Bladder

OBSERVATIONS

- * Bone Marrow Hypercellularity Moderate
- * Brain Pineal Gland Mineral Minimal
- Pineal Gland Vacuolation, Cytoplasmic Minimal
- * Heart Cardiomyopathy Minimal
- * Kidney Nephropathy Chronicprogr, Mild
- [Nephropathy TGLs = 3,5-13]
- * Liver Centrilobular, Hepatocyte Hypertrophy Minimal
- Hepatocyte Necrosis Minimal
- [Hypertrophy TGLs = 4-12]
- * Lung Alveolus Infiltration Cellular Histiocyte, Minimal
- Lymph Node Renal Hemorrhage Moderate
- Lumbar Hemorrhage Mild
- [Hemorrhage TGLs = 7 - 20]
- [Hemorrhage TGLs = 6 - 21]
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Mild
- * Salivary Glands Parotid GI Atrophy Moderate
- Skeletal Muscle Degeneration Minimal
- * Skin Subcut Tiss Sarcoma
- [Sarcoma TGLs = 2-20,22RT]
- * Spleen White Pulp Atrophy Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 714

TRT#: 3

SEX: Male

DAY ON TEST: 291

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-714

ORGAN AND ACCOUNTABLE SITE STATUS

Extramedullary Hematopoiesis

Marked

Pigment

Minimal

[Atrophy TGLs = 8-12]

* Stomach, Forestomach

Edema

Mild

Epithelium

Hyperplasia

Moderate

Inflammation

Chronic Active, Minimal

Ulcer

Mild

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Sarcoma

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 715

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-715

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Urinary Bladder
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Prostate
- * Stomach, Forestomach
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Trachea

MISSING

- * Thymus

OBSERVATIONS

- * Adrenal Cortex Hypertrophy Mild
Vacuolation, Cytoplasmic Minimal
- * Bone Marrow Hypercellularity Mild
- * Brain Compression Minimal
- [Compression TGLs = 5-2]
- * Eye Retina Atrophy Minimal
Cornea Inflammation Acute, Minimal
Cornea Neovascularization Minimal
- * Heart Cardiomyopathy Minimal
- * Islets, Pancreatic Hyperplasia Moderate
- * Kidney Nephropathy Chronicprogr, Moderate
- [Nephropathy TGLs = 3-13]
- * Liver Bile Duct Hyperplasia Minimal
Mixed Cell Focus
- * Lung Alveolus Infiltration Cellular Histiocyte, Mild
- [Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular Lymph Sinus Ectasia Minimal
Hyperplasia Lymphocyte, Minimal
Proliferation Plasma Cell, Minimal
- * Mammary Gland Duct Dilation Mild
- Mesentery Artery Inflammation Chronic Active, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 715

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-715

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Suppurative, Minimal
* Pancreas	Olfactory Epi	Metaplasia	Respiratory, Minimal
	Acinus	Adenoma	
		Hyperplasia	Minimal
	[Adenoma TGLs = 2-6]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 6-4]		
* Preputial Gland	Duct	Dilation	Mild
Skeletal Muscle		Degeneration	Mild
* Skin		Cyst Epithelial Inclusion	
	[Cyst Epithelial Inclusion TGLs = 1-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Stomach, Glandular		Inflammation	Chronic Active, Minimal
Testis	Artery	Inflammation	Chronic Active, Mild
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 716

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-716

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Harderian Gland
- * Intestine Small, Ileum
- * Mammary Gland
- * Skin
- * Urinary Bladder
- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Preputial Gland
- * Stomach, Glandular
- * Bone
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Prostate
- * Trachea
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex Hypertrophy Minimal
- * Bone Marrow Hypercellularity Minimal
- * Brain Pineal Gland Mineral Minimal
Pineal Gland Vacuolation, Cytoplasmic Mild
- * Epididymis Exfoliated Germ Cell Minimal
Hypospermia Mild
- * Eye Cornea Fibrosis Minimal
Cornea, Epithelium Hyperplasia Mild
Cornea Inflammation Acute, Minimal
Cornea Neovascularization Mild
- [Fibrosis TGLs = 1-5]
- * Heart Cardiomyopathy Minimal
Ventricle Rgt Cardiomyopathy Minimal
- * Intestine Large, Rectum Artery Inflammation Chronic Active, Moderate
- * Kidney Renal Tubule Cyst
Nephropathy Chronicprogr, Marked
- [Cyst TGLs = 3-13]
- [Nephropathy TGLs = 4,5-13]
- * Liver Mixed Cell Focus
- * Lung Alveolus Infiltration Cellular Histiocyte, Minimal
- [Infiltration Cellular TGLs = 10-10]
- Lymph Node Lymph Sinus, Renal Ectasia Mild
Renal Erythrophagocytosis Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 716

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-716

ORGAN AND ACCOUNTABLE SITE STATUS

	[Ectasia TGLs = 6-20]		
	[Erythrophagocytosis TGLs = 7-20]		
* Lymph Node, Mandibular		Hyperplasia Proliferation	Lymphocyte, Minimal Plasma Cell, Minimal
Mesentery	Artery	Inflammation Necrosis	Chronic Active, Moderate Mild
	[Necrosis TGLs = 2-20]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet Inflammation	Mild Suppurative, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Mild
* Pancreas	Artery	Adenoma Inflammation	Chronic Active, Moderate
	[Adenoma TGLs = 9-6]		
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
* Salivary Glands	Artery	Inflammation	Chronic Active, Moderate
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis Pigment	Mild Minimal
* Stomach, Forestomach	Artery	Inflammation	Chronic Active, Mild
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Marked
* Thymus		Atrophy Cyst Ectopic Thyroid	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 716

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-716

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 717

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-717

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Liver
- * Prostate
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Thyroid Gland

INSUFFICIENT TISSUE

- * Peripheral Nerve, Tibial

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
- * Brain
 - Glioma Malignant
- * Heart
 - Cardiomyopathy
- * Islets, Pancreatic
 - Hyperplasia
- * Kidney
 - Renal Tubule
 - Cyst
 - Nephropathy
- [Cyst TGLs = 7-13]
- [Nephropathy TGLs = 6-13]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- [Hyperplasia TGLs = 4-9]
- * Nerve Tibial
 - Note: Sagittal section only available for evaluation.
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Olfactory Epi
 - Acinus
 - Atrophy
- * Parathyroid Gland
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 717

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-717

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 9-4]			
* Preputial Gland	Duct	Dilation	Moderate
[Dilation TGLs = 2,3-16]		Inflammation	Chronic Active, Minimal
Skeletal Muscle		Degeneration	Minimal
* Skin		Basal Cell Adenoma	
[Basal Cell Adenoma TGLs = 1-20]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
Testis	Artery	Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Mild

Animal Note: TGLs 5,8,10,11 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 718

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-718

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Seminal Vesicle
- * Thyroid Gland
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Trachea
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Skin
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hyperplasia Moderate
 - Hypertrophy Minimal

Note: One of pair available for evaluation.
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity Moderate
- * Brain
 - Chor Plexus
 - Mineral Minimal
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy Minimal
 - Cardiomyopathy Mild
- * Kidney
 - [Nephropathy TGLs = 3-13]
 - Nephropathy Chronicprogr, Moderate
- * Liver
 - Bile Duct
 - Clear Cell Focus
 - Hyperplasia Minimal
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Lymph Sinus
 - Ectasia Mild

[Ectasia TGLs = 1-9.1]
- * Nerve Trigeminal
 - Degeneration Minimal
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet Mild
 - Foreign Body
 - Respirat Epith
 - Hyperplasia Mild
 - Inflammation Suppurative, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 718

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-718

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Hyperplasia	Moderate
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Marked
	[Dilation TGLs = 2-16]		
* Prostate	Epithelium	Hyperplasia	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Stomach, Glandular		Inflammation	Chronic Active, Minimal
Testis	Germ Cell	Degeneration	Minimal
* Thymus		Atrophy	Minimal
Trigeminal Ganglion		Degeneration	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 719

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-719

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Skin
- * Trachea
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- Skeletal Muscle
- * Stomach, Glandular

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Bone
 - Fibrous Osteodystrophy
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Cyst
- * Heart
 - Cardiomyopathy
- * Kidney
 - Ventricle Rgt
 - Cardiomyopathy
 - Nephropathy
- [Nephropathy TGLs = 2-13]
- * Liver
 - Hepatocellular Adenoma
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
- [Hepatocellular Adenoma TGLs = 4-20]
- * Lung
 - Alveolus
- Lymph Node
 - Lumbar, Lymph Sinus
 - Lumbar
- [Ectasia TGLs = 5-20]
- [Erythrophagocytosis TGLs = 6-20]
- * Lymph Node, Mandibular
 - Proliferation

Mild
 Minimal
 Minimal
 Minimal
 Minimal
 Mild
 Mild
 Chronicprogr, Marked
 Minimal
 Histiocyte, Minimal
 Mild
 Minimal
 Plasma Cell, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 719

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-719

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Hyperplasia	Marked
	[Hyperplasia TGLs = 3-6,14]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Nervosa	Cyst	
	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation	Moderate
	[Dilation TGLs = 1-16]	Inflammation	Chronic Active, Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Moderate

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 721

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-721

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Aorta | * Bone | * Brain | * Epididymis |
| * Esophagus | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | * Prostate | * Seminal Vesicle | Skeletal Muscle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Thymus | * Trachea | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|-----------------------------|--------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Eye | Cornea, Epithelium | Hyperplasia | Minimal |
| | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Moderate |
| | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Distalis | Cyst | |
| | Pars Distalis | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 721

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-721

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland		Inflammation	Chronic Active, Mild
* Salivary Glands	Parotid GI	Atrophy	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Marked
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 722

TRT#: 3

SEX: Male

DAY ON TEST: 657

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-722

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- * Preputial Gland
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Small, Duodenum
- * Mammary Gland
- * Salivary Glands
- Testis
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Ileum
- * Pancreas
- * Seminal Vesicle
- * Thyroid Gland
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Eye
- * Heart
- * Intestine Large, Rectum
- * Islets, Pancreatic
- [Carcinoma TGLs = 5-6]
- * Kidney
- * Liver
- * Lung
- [Congestion TGLs = 2-10]
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Nose
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Prostate
- Skeletal Muscle
- Vacuolation, Cytoplasmic
- Hyperplasia
- Inflammation
- Antr Chamber
- Inflammation
- Cardiomyopathy
- Ventricl Rgt
- Cardiomyopathy
- Hyperplasia
- Carcinoma
- Nephropathy
- Mixed Cell Focus
- Congestion
- Hyperplasia
- Proliferation
- Degeneration
- Olfactory Epi
- Accumulation, Hyaline Droplet
- Degeneration
- Degeneration
- Pars Distalis
- Hyperplasia
- Adenoma
- Degeneration
- Minimal
- Minimal
- Acute, Minimal
- Acute, Minimal
- Mild
- Minimal
- Lymphocyte, Moderate
- Chronicprogr, Moderate
- Minimal
- Lymphocyte, Mild
- Plasma Cell, Mild
- Mild
- Moderate
- Marked
- Marked
- Mild
- Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 722

TRT#: 3

SEX: Male

DAY ON TEST: 657

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-722

ORGAN AND ACCOUNTABLE SITE STATUS

[Degeneration TGLs = 4-11]

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	White Pulp	Atrophy	Mild
		Pigment	Mild
[Atrophy TGLs = 3-12]			
* Stomach, Forestomach		Edema	Moderate
	Epithelium	Hyperplasia	Marked
		Inflammation	Chronic Active, Mild
		Ulcer	Mild
* Thymus		Atrophy	Marked
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - UNCERTAIN

Animal Note: TGLs 1,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 724

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-724

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- Skeletal Muscle
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Liver
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hyperplasia
 - Vacuolation, Cytoplasmic
- * Brain
 - Mineral
- * Eye
 - Cataract
- * Heart
 - Cardiomyopathy
- * Kidney
 - Ventricl Rgt
 - Cardiomyopathy
 - Nephropathy
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Inflammation
- [Infiltration Cellular TGLs = 3-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Duct
 - Dilation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Respirat Epith
 - Accumulation, Hyaline Droplet
 - Hyperplasia
 - Inflammation
- * Pancreas
 - Olfactory Epi
 - Acinus
 - Acinus
 - Metaplasia
 - Atrophy
 - Hyperplasia
- * Peripheral Nerve, Sciatic
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 724

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-724

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 4,5-4]			
* Preputial Gland	Duct	Dilation	Mild
[Dilation TGLs = 2-16]		Inflammation	Chronic Active, Minimal
* Skin		Keratoacanthoma	
[Keratoacanthoma TGLs = 1-20]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
Testis	Artery	Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Marked

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 725

TRT#: 3

SEX: Male

DAY ON TEST: 639

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-725

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Ileum
- * Prostate
- * Skin
- * Trachea
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Seminal Vesicle
- * Spinal Cord, Thoracic
- * Urinary Bladder

MISSING

- * Mammary Gland

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Vacuolation, Cytoplasmic
 - Minimal
- * Adrenal Medulla
 - Pheochromocytoma Benign
- * Bone
 - Fibrous Osteodystrophy
 - Minimal
- * Epididymis
 - Exfoliated Germ Cell
 - Minimal
- * Heart
 - Cardiomyopathy
 - Mild
 - Ventricl Rgt
 - Cardiomyopathy
 - Mild
- * Intestine Large, Cecum
 - Artery
 - Inflammation
 - Chronic Active, Moderate
- * Kidney
 - Renal Tubule
 - Cyst
 - Nephropathy
 - Chronicprogr, Marked
 - [Cyst TGLs = 1,2-13,20]
 - [Nephropathy TGLs = 4,5-13]
- * Liver
 - Artery
 - Inflammation
 - Chronic Active, Mild
- * Lung
 - Alveolus
 - Hemorrhage
 - Mild
 - Artery
 - Infiltration Cellular
 - Inflammation
 - Histiocyte, Mild
 - Chronic Active, Marked
 - [Hemorrhage TGLs = 6-10]
 - [Infiltration Cellular TGLs = 6-10]
- Lymph Node
 - Mediastinal
 - Erythrophagocytosis
 - Moderate
 - [Erythrophagocytosis TGLs = 7-6]
- * Lymph Node, Mandibular
 - Lymph Sinus
 - Ectasia
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 725

TRT#: 3

SEX: Male

DAY ON TEST: 639

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-725

ORGAN AND ACCOUNTABLE SITE STATUS

Mesentery	Artery	Hyperplasia	Lymphocyte, Mild
* Nerve Trigeminal		Proliferation	Plasma Cell, Mild
* Nose	Olfactory Epi	Inflammation	Chronic Active, Minimal
* Pancreas	Acinus	Degeneration	Minimal
	Acinus	Accumulation, Hyaline Droplet	Mild
	Artery	Atrophy	Minimal
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Inflammation	Chronic Active, Mild
* Peripheral Nerve, Tibial		Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Degeneration	Mild
[Hyperplasia TGLs = 8-4]		Degeneration	Mild
* Preputial Gland	Duct	Hyperplasia	Marked
* Spinal Cord, Lumbar		Dilation	Mild
	Nerve	Degeneration	Minimal
* Spleen		Degeneration	Minimal
		Extramedullary Hematopoiesis	Moderate
* Stomach, Forestomach		Pigment	Mild
		Edema	Mild
Testis	Artery	Inflammation	Chronic Active, Minimal
* Thymus		Inflammation	Chronic Active, Mild
* Thyroid Gland	C Cell	Atrophy	Moderate
		Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 3,9,10,11 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 726

TRT#: 3

SEX: Male

DAY ON TEST: 713

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-726

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- * Spinal Cord, Cervical
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Lung
- * Salivary Glands
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Trachea
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pituitary Gland
- * Skin
- * Urinary Bladder

INSUFFICIENT TISSUE

- * Mammary Gland

OBSERVATIONS

- * Adrenal Medulla
- * Brain
- * Epididymis
- * Heart
- * Islets, Pancreatic
- * Kidney
- * Liver
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Nose
- * Pancreas
- * Parathyroid Gland
- Pineal Gland
- Ventricl Rgt
- Renal Tubule
- Periductal Bile Duct
- Olfactory Epi Artery
- Pheochromocytoma Benign
- Vacuolation, Cytoplasmic
- Exfoliated Germ Cell
- Cardiomyopathy
- Cardiomyopathy
- Carcinoma
- Cyst
- Nephropathy
- Cholangiofibrosis
- Hyperplasia
- Hyperplasia
- Proliferation
- Degeneration
- Accumulation, Hyaline Droplet
- Inflammation
- Hyperplasia
- Minimal
- Minimal
- Mild
- Minimal
- Multiple
- Chronicprogr, Moderate
- Moderate
- Minimal
- Lymphocyte, Mild
- Plasma Cell, Minimal
- Mild
- Moderate
- Chronic Active, Minimal
- Mild

Note: Intestinal metaplasia of bile ducts within region of fibrosis.

[Cholangiofibrosis TGLs = 5-21]

[Carcinoma TGLs = 7,9-20,21]

[Cyst TGLs = 3-20]

[Nephropathy TGLs = 4-13]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 726

TRT#: 3

SEX: Male

DAY ON TEST: 713

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-726

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Marked
* Peripheral Nerve, Tibial		Degeneration	Marked
* Preputial Gland	Duct	Dilation Inflammation	Marked Chronic Active, Marked
[Dilation TGLs = 1,2-16]			
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Mild
* Stomach, Forestomach	Epithelium	Edema Hyperplasia Inflammation Ulcer	Minimal Moderate Chronic Active, Mild Marked
Testis	Germ Cell Artery	Degeneration Inflammation	Minimal Chronic Active, Mild
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Carcinoma	
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Stomach, Forestomach Ulcer

Animal Note: TGLs 6,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 727

TRT#: 3

SEX: Male

DAY ON TEST: 694

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-727

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * Brain | * Esophagus | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|----------------------|---|-------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | Bilateral | Pheochromocytoma Benign | |
| * Aorta | | Chemodectoma Malignant | |
| | | Dilation | Moderate |
| | | Mineral | Moderate |
| | [Chemodectoma Malignant TGLs = 24-20] | | |
| | [Dilation TGLs = 22-11,20] | | |
| * Bone | | Fibrous Osteodystrophy | Minimal |
| * Bone Marrow | | Hypercellularity | Mild |
| * Epididymis | | Exfoliated Germ Cell | Moderate |
| | | Hypospermia | Moderate |
| | [Hypospermia TGLs = 9-16A] | | |
| * Eye | Cornea, Epithelium | Hyperplasia | Mild |
| | Cornea | Inflammation | Acute, Marked |
| | Cornea | Neovascularization | Minimal |
| * Heart | | Cardiomyopathy | Moderate |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| | Note: Tumor within mediastinum adjacent to heart. | | |
| * Islets, Pancreatic | | Adenoma | |
| | [Adenoma TGLs = 12-6] | | |
| * Kidney | Renal Tubule | Adenoma | |
| | Renal Tubule | Cyst | |
| | | Nephropathy | Chronicprogr, Marked |
| | [Cyst TGLs = 3,4-13] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 727

TRT#: 3

SEX: Male

DAY ON TEST: 694

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-727

ORGAN AND ACCOUNTABLE SITE STATUS

[Nephropathy TGLs = 15,16-13]

* Liver	Hepatocyte	Necrosis	Minimal
* Lung		Fibrosis	Minimal
		Hemorrhage	Moderate
	Alveolus	Infiltration Cellular	Histiocyte, Marked
	Artery	Inflammation	Chronic Active, Mild

[Hemorrhage TGLs = 13-10]

[Infiltration Cellular TGLs = 13-10]

* Lymph Node, Mandibular		Atrophy	Lymphoid, Moderate
	Lymph Sinus	Ectasia	Mild
* Lymph Node, Mesenteric		Atrophy	Moderate
* Mammary Gland	Duct	Dilation	Mild

[Dilation TGLs = 5-9]

Mesentery	Artery	Mineral	Moderate
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
	Respirat Epith	Hyperplasia	Minimal
* Pancreas	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Mild
	Artery	Mineral	Minimal

[Hyperplasia TGLs = 12-14]

* Parathyroid Gland		Hyperplasia	Moderate
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[Hyperplasia TGLs = 14-8]

* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	

[Adenoma TGLs = 18,19-4]

* Preputial Gland	Duct	Dilation	Moderate
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[Dilation TGLs = 1,2-16]

* Prostate		Decreased Secretory Fluid	Mild
		Inflammation	Chronic Active, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 727

TRT#: 3

SEX: Male

DAY ON TEST: 694

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-727

ORGAN AND ACCOUNTABLE SITE STATUS

	[Decreased Secretory Fluid TGLs = 8-16]		
* Salivary Glands	Duct, Parotid GI	Dilation	Mild
	Parotid GI	Inflammation	Acute, Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
	[Decreased Secretory Fluid TGLs = 7-16]		
Skeletal Muscle		Degeneration	Moderate
* Skin	Subcut Tiss	Inflammation	Chronic Active, Moderate
		Keratoacanthoma	
Note: Chronic active inflamamtion possible ruptured epithelial inclusion cyst.			
	[Inflammation TGLs = 23-20]		
	[Keratoacanthoma TGLs = 20-21]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Moderate
	Red Pulp	Atrophy	Moderate
		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Marked
	[Degeneration TGLs = 6-16A]		
* Thymus		Atrophy	Marked
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 10,11,17 = NCL (No Corresponding Lesion)

Animal Note: TGL 21 = NST (No Section Taken)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 728

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-728

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Aorta
- * Harderian Gland
- * Intestine Small, Ileum
- * Mammary Gland
- * Stomach, Forestomach
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Seminal Vesicle
- * Stomach, Glandular
- * Brain
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Mild
 - Vacuolation, Cytoplasmic Mild
- * Bone
 - Fibrous Osteodystrophy Minimal
- * Epididymis
 - Exfoliated Germ Cell Mild
- * Eye
 - Cornea, Epithelium Hyperplasia Mild
 - Cornea Inflammation Acute, Minimal
 - Cornea Neovascularization Minimal
- * Heart
 - [Hyperplasia TGLs = 1-5]
 - Ventricl Rgt
 - Cardiomyopathy Mild
 - Cardiomyopathy Moderate
- * Intestine Large, Colon
 - Artery Inflammation Chronic Active, Mild
- * Kidney
 - Renal Tubule Cyst
 - Nephropathy Chronicprogr, Marked
 - [Cyst TGLs = 4-13]
 - [Nephropathy TGLs = 5,6-13]
- * Liver
 - Mixed Cell Focus
- * Lung
 - Cyst
- Lymph Node
 - Renal Erythrophagocytosis Moderate
 - [Erythrophagocytosis TGLs = 7,8-20]
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Mild
 - Proliferation Plasma Cell, Moderate
- * Nerve Trigeminal
 - Degeneration Mild
- * Nose
 - Olfactory Epi Accumulation, Hyaline Droplet Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 728

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-728

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas		Adenoma	
	Artery	Inflammation	Chronic Active, Minimal
[Adenoma TGLs = 11-20]			
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Mild
[Dilation TGLs = 3-16]			
* Prostate		Inflammation	Chronic Active, Minimal
* Salivary Glands	Artery	Inflammation	Chronic Active, Minimal
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Pigment	Mild
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Marked
* Thymus		Atrophy	Mild
		Cyst	
[Atrophy TGLs = 9-6]			
* Thyroid Gland	C Cell	Adenoma	
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 10 = NCL (No Corresponding Lesion)

Animal Note: TGL 2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 729

TRT#: 3

SEX: Male

DAY ON TEST: 591

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-729

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Brain
- * Epididymis
- * Esophagus
- * Harderian Gland
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Islets, Pancreatic
- * Kidney
- * Liver
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Nerve Trigeminal
- * Pancreas
- * Parathyroid Gland
- * Preputial Gland
- * Skin
- * Spinal Cord, Cervical
- * Spinal Cord, Thoracic
- * Stomach, Glandular
- * Testis
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

MISSING

Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adren Cortex
 - Note: One of pair available for evaluation.
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Eye

	Lens	Cataract	Minimal
	Cornea	Inflammation	Acute, Minimal
- * Heart

	Ventricl Rgt	Cardiomyopathy	Minimal
		Cardiomyopathy	Minimal
- * Lung

	Alveolus	Congestion	Moderate
		Infiltration Cellular	Histiocyte, Minimal

[Congestion TGLs = 1-10]
- * Lymph Node, Mandibular

		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Minimal
- * Nose

	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
		Foreign Body	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 729

TRT#: 3

SEX: Male

DAY ON TEST: 591

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-729

ORGAN AND ACCOUNTABLE SITE STATUS

	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Suppurative, Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 2-4]			
* Prostate		Adenoma	
* Salivary Glands	Parotid GI	Atrophy	Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Mild
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen	White Pulp	Atrophy	Mild
		Pigment	Moderate
[Atrophy TGLs = 4-12]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Inflammation	Chronic Active, Minimal
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 730

TRT#: 3

SEX: Male

DAY ON TEST: 696

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-730

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Small, Ileum
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea
- * Aorta
- * Harderian Gland
- * Intestine Small, Jejunum
- Skeletal Muscle
- * Stomach, Glandular
- Trigeminal Ganglion
- * Bone
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Skin
- Testis
- * Epididymis
- * Intestine Small, Duodenum
- * Mammary Gland
- * Spinal Cord, Thoracic
- * Thyroid Gland

MISSING

- * Intestine Large, Rectum
- * Thymus

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum

OBSERVATIONS

- * Adrenal Cortex Hyperplasia Mild
 Note: One of pair available for evaluation. Other tissue is accessory spleen.
 - * Adren Medulla Hypercellularity Moderate
 Note: One of pair available for evaluation. Other tissue is accessory spleen.
 - * Bone Marrow Vacuolation, Cytoplasmic Marked
 - * Brain Inflammation Acute, Minimal
 Note: Olfactory bulbs unavailable for evaluation.
 - * Eye Neovascularization Minimal
 Cornea
 - * Heart Cardiomyopathy Minimal
 Ventricle Rgt Cardiomyopathy Mild
 - * Kidney Dilation Mild
 Pelvis Hyperplasia Moderate
 Urothelium Lipoma Chronicprogr, Marked
Nephropathy
- [Dilation TGLs = 7-13]
 [Lipoma TGLs = 6-20]
 [Nephropathy TGLs = 4,5-13]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 730

TRT#: 3

SEX: Male

DAY ON TEST: 696

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-730

ORGAN AND ACCOUNTABLE SITE STATUS

* Liver		Extramedullary Hematopoiesis	Minimal
	Bile Duct	Hyperplasia	Minimal
* Lung		Lymphoma Malignant	
		Carcinoma	Metastatic (Uncertain Primary Site)
Lymph Node	Pancreatic	Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 1-6]		
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Moderate
		Proliferation	Plasma Cell, Moderate
* Lymph Node, Mesenteric		Erythrophagocytosis	Minimal
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Mild
* Parathyroid Gland		Hyperplasia	Mild
	Note: Both diffuse and focal hyperplasia.		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Mild
* Prostate		Inflammation	Chronic Active, Marked
* Seminal Vesicle		Inflammation	Chronic Active, Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Lymphoma Malignant	
	[Extramedullary Hematopoiesis TGLs = 8-12]		
* Urinary Bladder		Inflammation	Chronic Active, Mild

PRIMARY CAUSE OF DEATH - Lung Carcinoma Uncertain Primary Site

Animal Note: TGLs 2,3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 731

TRT#: 3

SEX: Male

DAY ON TEST: 576

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-731

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Epididymis | * Esophagus | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric |
| * Parathyroid Gland | * Preputial Gland | * Prostate | * Seminal Vesicle |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Spinal Cord, Lumbar |
| * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|-----------------------------|-----------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Vacuolation, Cytoplasmic | Minimal |
| * Brain | Pineal Gland | Mineral | Minimal |
| | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| * Eye | Cornea, Epithelium | Hyperplasia | Mild |
| | Cornea | Inflammation | Acute, Moderate |
| | Antr Chamber | Inflammation | Acute, Mild |
| | Cornea, Epithelium | Regeneration | Mild |
| | Cornea | Ulcer | Moderate |
| | [Inflammation TGLs = 4-5] | | |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricle Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Moderate |
| * Mammary Gland | Duct | Dilation | Minimal |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | | Inflammation | Suppurative, Mild |
| * Pancreas | Acinus | Hyperplasia | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 731

TRT#: 3

SEX: Male

DAY ON TEST: 576

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-731

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Hyperplasia	Moderate
[Adenoma TGLs = 3-4]			
* Salivary Glands	Parotid GI	Inflammation	Acute, Minimal
* Spleen	White Pulp	Atrophy	Mild
	Capsule	Fibrosis	Minimal
		Pigment	Mild
[Atrophy TGLs = 1-12]			
[Fibrosis TGLs = 2-12]			
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH - UNCERTAIN

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 732

TRT#: 3

SEX: Male

DAY ON TEST: 709

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-732

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Prostate
- * Stomach, Glandular
- Trigeminal Ganglion
- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Salivary Glands
- Testis
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Skin
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Medulla
- * Eye
- * Heart
- * Kidney
- * Liver
- * Lung
- [Congestion TGLs = 8-10]
- * Lymph Node, Mandibular
- [Proliferation TGLs = 9-9]
- * Mammary Gland
- [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
- * Nose
- Oral Mucosa
- Pheochromocytoma Benign
- Atrophy
- Inflammation
- Inflammation
- Regeneration
- Ulcer
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Hyperplasia
- Congestion
- Hyperplasia
- Proliferation
- Fibroadenoma
- Degeneration
- Inflammation
- Squamous Cell Carcinoma
- Minimal
- Acute, Moderate
- Acute, Minimal
- Moderate
- Mild
- Mild
- Mild
- Chronicprogr, Moderate
- Minimal
- Mild
- Lymphocyte, Moderate
- Plasma Cell, Marked
- Mild
- Suppurative, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 732

TRT#: 3

SEX: Male

DAY ON TEST: 709

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-732

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Intermed	Cyst	
	Pars Distalis	Hyperplasia	Marked
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Minimal
Note: One of pair available for evaluation.			
[Dilation TGLs = 12-16]			
* Seminal Vesicle		Decreased Secretory Fluid	Mild
[Decreased Secretory Fluid TGLs = 2-16]			
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
		Extramedullary Hematopoiesis	Minimal
		Pigment	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thymus		Atrophy	Marked
		Hyperplasia	Epithelial, Minimal

PRIMARY CAUSE OF DEATH - Oral Mucosa Squamous Cell Carcinoma

Animal Note: TGLs 3,4,5,6,7,10,11 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 733

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-733

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Epididymis | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric | * Mammary Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | Skeletal Muscle |
| * Stomach, Forestomach | * Stomach, Glandular | Testis | * Thymus |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|-----------------------------|----------------------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Brain | | Mineral | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Hyperplasia | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Minimal |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Acinus | Hyperplasia | Minimal |
| | [Hyperplasia TGLs = 4-6] | | |
| * Parathyroid Gland | | Hyperplasia | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Preputial Gland | Duct | Dilation | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 733

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-733

ORGAN AND ACCOUNTABLE SITE STATUS

		Inflammation	Chronic Active, Mild
[Dilation TGLs = 1,2-16]			
* Skin	Subcut Tiss	Lipoma	
[Lipoma TGLs = 3-20]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 734

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-734

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Epididymis | * Esophagus | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Nerve Trigeminal |
| * Pituitary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Skin | * Stomach, Glandular | * Thymus |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

MISSING

- | | |
|-----------------|---------------------|
| * Mammary Gland | * Parathyroid Gland |
|-----------------|---------------------|

OBSERVATIONS

- | | | | |
|---|-----------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Brain | Meninges | Granular Cell Tumor Benign | |
| * Eye | Retina | Atrophy | Moderate |
| | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Minimal |
| Note: One of pair available for evaluation. | | | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | Renal Tubule | Cyst | |
| | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 3-13] | | |
| | Lacrimal Gland | Metaplasia | Harderian GI, Mild |
| | [Metaplasia TGLs = 4-20] | | |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Moderate |
| | | Proliferation | Plasma Cell, Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Hyperplasia | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 734

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-734

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation Inflammation	Mild Chronic Active, Mild
	[Dilation TGLs = 1-16]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis Pigment	Minimal Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thyroid Gland	Follicular Cel	Adenoma	
	Follicle	Cyst	
	C Cell	Hyperplasia	Marked

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 735

TRT#: 3

SEX: Male

DAY ON TEST: 715

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-735

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Liver
- * Prostate
- * Thyroid Gland
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Trachea
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- Trigeminal Ganglion
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Mild
- * Brain
 - Hypertrophy
 - Minimal
 - Compression
 - Mild
 - Edema
 - Minimal
 - Glioma Malignant
- * Epididymis
 - [Compression TGLs = 9-2]
 - Exfoliated Germ Cell
 - Mild
 - Hypospermia
 - Mild
- * Eye
 - [Hypospermia TGLs = 3-16A]
 - Cornea
 - Degeneration
 - Minimal
 - Cornea, Epithelium
 - Degeneration
 - Minimal
 - Cornea
 - Inflammation
 - Acute, Minimal
 - Heart
 - Cardiomyopathy
 - Mild
 - Islets, Pancreatic
 - Adenoma
 - Multiple
 - [Adenoma TGLs = 4,12-6,20]
 - * Kidney
 - Hemangioma
 - Nephropathy
 - Chronicprogr, Marked
 - [Nephropathy TGLs = 6,7-13]
 - * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal
 - [Infiltration Cellular TGLs = 5-20]
 - * Lymph Node, Mandibular
 - Hyperplasia
 - Lymphocyte, Marked
 - Proliferation
 - Plasma Cell, Marked
 - [Hyperplasia TGLs = 11-9]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 735

TRT#: 3

SEX: Male

DAY ON TEST: 715

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-735

ORGAN AND ACCOUNTABLE SITE STATUS

	[Proliferation TGLs = 11-9]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Moderate
	[Hyperplasia TGLs = 4-6]		
* Peripheral Nerve, Sciatic		Degeneration	Marked
* Peripheral Nerve, Tibial		Degeneration	Marked
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 8-4]		
* Preputial Gland	Duct	Dilation	Mild
	Duct	Hyperplasia	Mild
		Inflammation	Chronic Active, Moderate
Skeletal Muscle		Degeneration	Moderate
* Skin	Subcut Tiss	Degeneration	Moderate
	[Degeneration TGLs = 1-9]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Minimal
	Red Pulp	Atrophy	Mild
		Pigment	Moderate
	[Atrophy TGLs = 10-12]		
* Stomach, Forestomach		Edema	Mild
	Epithelium	Hyperplasia	Moderate
		Ulcer	Minimal
Testis	Germ Cell	Degeneration	Moderate
	Interstit Cell	Hyperplasia	Marked
	[Degeneration TGLs = 2-16A]		
* Thymus		Atrophy	Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 736

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-736

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Lung | * Lymph Node, Mesenteric | * Prostate |
| * Salivary Glands | * Seminal Vesicle | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- * Mammary Gland

OBSERVATIONS

- | | | | |
|---|---------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Eye | Retina | Atrophy | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Carcinoma | |
| [Carcinoma TGLs = 3-20] | | | |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | | Adenoma | |
| | Acinus | Hyperplasia | Mild |
| [Adenoma TGLs = 4-6] | | | |
| * Parathyroid Gland | | Hyperplasia | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 736

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-736

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 5-4]			
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Minimal
[Dilation TGLs = 1,2-16]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
* Thymus		Atrophy	Mild
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 737

TRT#: 3

SEX: Male

DAY ON TEST: 615

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-737

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- * Spinal Cord, Thoracic
- * Esophagus
- * Intestine Large, Rectum
- * Mammary Gland
- * Trachea
- * Eye
- * Intestine Small, Ileum
- * Prostate
- * Urinary Bladder
- * Harderian Gland
- * Islets, Pancreatic
- * Spinal Cord, Cervical

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

* Adrenal Cortex		Lymphoma Malignant Vacuolation, Cytoplasmic	Minimal
	[Lymphoma Malignant TGLs = 3-7]		
* Adrenal Medulla		Lymphoma Malignant	
* Aorta		Lymphoma Malignant	
* Bone Marrow		Hypercellularity	Marked
		Lymphoma Malignant	
* Brain	Glial Cell	Hyperplasia	Mild
		Lymphoma Malignant	
	Note: Olfactory bulbs not available for evaluation.		
* Epididymis		Exfoliated Germ Cell	Mild
		Hypospermia	Marked
		Inflammation	Acute, Mild
* Heart	Ventricl Rgt	Cardiomyopathy	Minimal
		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 20-11]		
* Intestine Large, Cecum		Lymphoma Malignant	
* Intestine Small, Duodenum		Lymphoma Malignant	
* Kidney		Lymphoma Malignant	
		Nephropathy	Chronicprogr, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 737

TRT#: 3

SEX: Male

DAY ON TEST: 615

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-737

ORGAN AND ACCOUNTABLE SITE STATUS

	[Lymphoma Malignant TGLs = 16,17-13]		
	[Nephropathy TGLs = 1-13]		
* Liver	Hepatocyte	Lymphoma Malignant Vacuolation, Cytoplasmic	Moderate
	[Lymphoma Malignant TGLs = 6,7,15 - 12, 21]		
	[Vacuolation, Cytoplasmic TGLs = 19-12,21]		
* Lung		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 9-10]		
Lymph Node	Mediastinal	Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 21-20]		
* Lymph Node, Mandibular		Hemorrhage Lymphoma Malignant	Mild
	[Hemorrhage TGLs = 12-9]		
* Nerve Trigeminal		Lymphoma Malignant	
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia Lymphoma Malignant	Moderate
	[Lymphoma Malignant TGLs = 14-6]		
* Parathyroid Gland		Lymphoma Malignant	
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 13-4]		
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Salivary Glands	Parotid GI Submandibul GI	Atrophy Atrophy	Moderate Mild
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 5-16]		
Skeletal Muscle		Degeneration	Moderate
* Skin	Subcut Tiss	Fibrosarcoma	
Note: Mass infiltrated by malignant lymphoma.			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 737

TRT#: 3

SEX: Male

DAY ON TEST: 615

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-737

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibrosarcoma TGLs = 18-21]

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spin Cord Cerv			

Note: Affecting adjacent spinal nerves.

* Spleen		Lymphoma Malignant	
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[Lymphoma Malignant TGLs = 2-12]

* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Lymphoma Malignant	

* Stomach, Glandular		Lymphoma Malignant	
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Testis	Germ Cell	Degeneration	Moderate
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[Degeneration TGLs = 4-16A]

* Thymus		Lymphoma Malignant	
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[Lymphoma Malignant TGLs = 8,11-6]

* Thyroid Gland		Lymphoma Malignant	
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PRIMARY CAUSE OF DEATH - Lung Lymphoma Malignant

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 738

TRT#: 3

SEX: Male

DAY ON TEST: 655

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-738

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- * Skin
- * Stomach, Glandular
- * Aorta
- * Esophagus
- * Intestine Small, Duodenum
- * Mammary Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone Marrow
- * Eye
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Thoracic
- * Trachea
- * Brain
- * Harderian Gland
- * Liver
- Skeletal Muscle
- * Stomach, Forestomach
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Large, Rectum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Fibrous Osteodystrophy
- * Bone
 - Moderate
- * Brain
 - Mild
- Note: Olfactory bulbs unavailable for evaluation.
- * Heart
 - Ventricle Rgt
 - Cardiomyopathy
 - Cardiomyopathy
 - Nephropathy
- * Kidney
 - [Nephropathy TGLs = 2-13]
 - Mild
 - Chronic progr, Marked
- * Lung
 - Alveolus
 - Artery
 - [Congestion TGLs = 1-10]
 - Congestion
 - Infiltration Cellular
 - Inflammation
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Inflammation
 - Degeneration
- Mesentery
 - Artery
 - Inflammation
 - Degeneration
- * Nerve Trigeminal
 - Chronic Active, Moderate
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Artery
 - Inflammation
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 738

TRT#: 3

SEX: Male

DAY ON TEST: 655

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-738

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation	Marked
		Inflammation	Chronic Active, Moderate
	[Inflammation TGLs = 3-16]		
* Prostate		Inflammation	Chronic Active, Marked
	[Inflammation TGLs = 4-16]		
* Salivary Glands	Parotid GI	Atrophy	Minimal
* Seminal Vesicle		Inflammation	Chronic Active, Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild
* Urinary Bladder	Artery	Inflammation	Chronic Active, Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 740

TRT#: 3

SEX: Male

DAY ON TEST: 510

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-740

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Brain
- * Epididymis
- * Esophagus
- * Eye
- * Harderian Gland
- * Heart
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Liver
- * Lymph Node, Mesenteric
- * Pancreas
- * Parathyroid Gland
- * Pituitary Gland
- * Seminal Vesicle
- * Skeletal Muscle
- * Spinal Cord, Cervical
- * Spinal Cord, Thoracic
- * Stomach, Forestomach
- * Stomach, Glandular
- * Testis
- * Thyroid Gland
- * Trachea
- * Trigeminal Ganglion
- * Urinary Bladder

MISSING

- * Mammary Gland

OBSERVATIONS

- | | | | |
|---|---|---|---|
| <ul style="list-style-type: none"> * Bone Marrow * Kidney * Lung * Lymph Node, Mandibular Mesentery * Nerve Trigeminal * Nose * Peripheral Nerve, Sciatic * Peripheral Nerve, Tibial * Preputial Gland * Prostate * Salivary Glands * Skin | <ul style="list-style-type: none"> Alveolus
 Olfactory Epi
 Epithelium
 Nerve | <ul style="list-style-type: none"> Hypercellularity Nephropathy Infiltration Cellular Proliferation Inflammation Degeneration Accumulation, Hyaline Droplet Degeneration Degeneration Inflammation Hyperplasia Inflammation Inflammation Ulcer
 Degeneration Extramedullary Hematopoiesis | <ul style="list-style-type: none"> Moderate Chronicprogr, Mild Histiocyte, Minimal Plasma Cell, Moderate Chronic Active, Minimal Minimal Mild Mild Minimal Chronic Active, Mild Minimal Chronic Active, Moderate Chronic Active, Marked Marked
 Minimal Minimal |
|---|---|---|---|

[Inflammation TGLs = 1, 2-20, 21]

[Ulcer TGLs = 1,2-20,21]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 740

TRT#: 3

SEX: Male

DAY ON TEST: 510

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-740

ORGAN AND ACCOUNTABLE SITE STATUS

Pigment

Minimal

Atrophy

Mild

* Thymus

PRIMARY CAUSE OF DEATH - Skin Ulcer

CONTRIBUTORY CAUSE OF DEATH - Skin Inflammation

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 742

TRT#: 3

SEX: Male

DAY ON TEST: 718

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-742

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Preputial Gland
- * Stomach, Glandular
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Thyroid Gland
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Trachea

MISSING

- * Mammary Gland

INSUFFICIENT TISSUE

- Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|-------------------|--------------------------------|--------------------------|------------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Vacuolation, Cytoplasmic | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Aorta | | Mineral | Minimal |
| * Bone | | Fibrous Osteodystrophy | Minimal |
| * Epididymis | | Exfoliated Germ Cell | Mild |
| * Eye | Antr Chamber | Inflammation | Acute, Minimal |
| | Cornea | Inflammation | Acute, Mild |
| * Heart | | Cardiomyopathy | Moderate |
| | Ventricle Rgt | Cardiomyopathy | Moderate |
| | Artery | Mineral | Mild |
| | [Cardiomyopathy TGLs = 7-11] | | |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 2,4-13] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | Artery | Inflammation | Chronic Active, Marked |
| | | Mixed Cell Focus | |
| | Artery | Thrombus | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 742

TRT#: 3

SEX: Male

DAY ON TEST: 718

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-742

ORGAN AND ACCOUNTABLE SITE STATUS

* Lung		Congestion	Minimal
[Congestion TGLs = 5-10]			
* Lymph Node, Mandibular		Proliferation	Plasma Cell, Moderate
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
		Inflammation	Suppurative, Minimal
* Pancreas	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Marked
* Parathyroid Gland		Hyperplasia	Moderate
[Hyperplasia TGLs = 8-8]			
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Salivary Glands	Duct, Parotid GI	Dilation	Minimal
	Parotid GI	Inflammation	Acute, Minimal
Skeletal Muscle		Degeneration	Minimal
* Skin		Cyst Epithelial Inclusion	
[Cyst Epithelial Inclusion TGLs = 1-20]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Inflammation	Chronic Active, Minimal
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Marked
		Cyst	

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Animal Note: TGL 6 = NST (No Section Taken)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 743

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-743

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Liver
- * Salivary Glands
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Seminal Vesicle
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Stomach, Glandular
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Vacuolation, Cytoplasmic
 - Mild
 - Minimal
- [Vacuolation, Cytoplasmic TGLs = 4-7]
- * Adrenal Medulla
 - Hyperplasia
 - Marked
- * Brain
 - Pineal Gland
 - Mineral
 - Minimal
 - Pineal Gland
 - Vacuolation, Cytoplasmic
 - Mild
- * Eye
 - Cornea, Epithelium
 - Hyperplasia
 - Minimal
 - Cornea
 - Inflammation
 - Acute, Minimal
 - Cornea
 - Neovascularization
 - Minimal
- * Heart
 - Cardiomyopathy
 - Mild
- * Islets, Pancreatic
 - Adenoma
 - Multiple
- [Adenoma TGLs = 6-6]
- * Kidney
 - Nephropathy
 - Chronicprogr, Marked
- [Nephropathy TGLs = 5-13]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Lymphocyte, Minimal
 - Plasma Cell, Marked
- * Mammary Gland
 - Duct
 - Dilation
 - Minimal
 - Mesentery
 - Inflammation
 - Chronic Active, Mild
- * Nerve Trigeminal
 - Degeneration
 - Minimal
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate
- * Pancreas
 - Acinus
 - Hyperplasia
 - Minimal
 - Artery
 - Inflammation
 - Chronic Active, Mild
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 743

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-743

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Marked
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 7-4]			
* Preputial Gland	Duct	Dilation	Marked
[Dilation TGLs = 2-16]		Inflammation	Chronic Active, Minimal
* Prostate	Epithelium	Hyperplasia	Moderate
Skeletal Muscle		Degeneration	Mild
* Skin		Cyst Epithelial Inclusion	
[Cyst Epithelial Inclusion TGLs = 1-20]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 744

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-744

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea
- * Aorta
- * Intestine Small, Jejunum
- * Prostate
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone
- * Islets, Pancreatic
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Intestine Large, Colon
- * Mammary Gland
- * Skin
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Pineal Gland
 - Mineral
 - Pineal Gland
 - Vacuolation, Cytoplasmic
- * Epididymis
 - Exfoliated Germ Cell
- * Esophagus
 - Inflammation
- * Eye
 - Retina
 - Gliosis
 - Cornea
 - Inflammation
 - Cornea
 - Neovascularization
- * Harderian Gland
 - Hypertrophy
- * Heart
 - Cardiomyopathy
 - Moderate
 - Ventricl Rgt
 - Cardiomyopathy
 - Mild
 - Artery
 - Inflammation
 - Chronic Active, Mild
- * Intestine Large, Cecum
 - Artery
 - Inflammation
 - Chronic Active, Mild
- * Intestine Large, Rectum
 - Artery
 - Inflammation
 - Chronic Active, Moderate
- * Intestine Small, Ileum
 - Artery
 - Inflammation
 - Chronic Active, Mild
- * Kidney
 - Nephropathy
 - Chronicprogr, Moderate
 - [Nephropathy TGLs = 2-13]
- * Liver
 - Basophilic Focus
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Hyperplasia
 - Lymphocyte, Moderate
 - Proliferation
 - Plasma Cell, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 744

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-744

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric	Lymph Sinus	Ectasia	Minimal
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Artery	Inflammation	Chronic Active, Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Cyst	
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Minimal
[Dilation TGLs = 1-16]			
* Salivary Glands	Artery	Inflammation	Chronic Active, Marked
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Marked
* Thymus		Cyst	
		Ectopic Parathyroid Gland	
		Hyperplasia	Epithelial, Minimal
	Artery	Inflammation	Chronic Active, Moderate

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 747

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-747

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Salivary Glands
- Testis
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Seminal Vesicle
- * Trachea

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex Hyperplasia
Vacuolation, Cytoplasmic
Mild
- * Bone Marrow Hypercellularity
Minimal
- * Brain Mild
- Note: Olfactory bulbs unavailable for evaluation.
- * Heart Cardiomyopathy
Mild
- Ventricle Rgt Cardiomyopathy
Mild
- * Islets, Pancreatic Carcinoma
- [Carcinoma TGLs = 4-6]
- * Kidney Nephropathy
Chronicprogr, Minimal
- * Liver Mixed Cell Focus
- * Lung Infiltration Cellular
Histiocyte, Minimal
- Alveolus
- [Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular Hyperplasia
Proliferation
Lymphocyte, Mild
Plasma Cell, Mild
- * Nerve Trigeminal Degeneration
Mild
- * Nose Accumulation, Hyaline Droplet
Moderate
- Olfactory Epi
- * Pancreas Atrophy
Minimal
- Acinus
- * Peripheral Nerve, Sciatic Degeneration
Mild
- * Peripheral Nerve, Tibial Degeneration
Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 747

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-747

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Minimal
	[Dilation TGLs = 1-16]		
Skeletal Muscle		Degeneration	Minimal
* Skin	Prepuce	Cyst Epithelial Inclusion	
	[Cyst Epithelial Inclusion TGLs = 2-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
* Thymus		Atrophy	Mild
		Ectopic Thyroid	
* Thyroid Gland	C Cell	Adenoma	

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 749

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-749

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 5-4]

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
* Stomach, Forestomach		Cyst	
Testis	Germ Cell	Degeneration	Minimal
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 750

TRT#: 3

SEX: Male

DAY ON TEST: 309

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-750

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Brain
- * Epididymis
- * Esophagus
- * Eye
- * Harderian Gland
- * Heart
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Liver
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Nerve Trigeminal
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Preputial Gland
- * Salivary Glands
- * Seminal Vesicle
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- * Stomach, Forestomach
- * Stomach, Glandular
- * Testis
- * Thymus
- * Thyroid Gland
- * Trachea
- * Urinary Bladder
- * Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Pancreas

OBSERVATIONS

- * Kidney
- Nephropathy
- Chronicprogr, Mild
- * Lung
- Congestion
- Minimal
- Alveolus
- Infiltration Cellular
- Histiocyte, Minimal
- [Congestion TGLs = 3 - 10]
- * Nose
- Olfactory Epi
- Accumulation, Hyaline Droplet
- Minimal
- Note: Level 3 largely missing.
- * Pituitary Gland
- Pars Distalis
- Adenoma
- [Adenoma TGLs = 1 - 4]
- * Prostate
- Inflammation
- Suppurative, Minimal
- * Spleen
- Pigment
- Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 751

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-751

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Cyst	
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Mild
	[Dilation TGLs = 2,3-16]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 752

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-752

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Preputial Gland
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Lung
- * Prostate
- * Thyroid Gland
- * Bone Marrow
- * Eye
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Skin
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex Hyperplasia Mild
- * Adrenal Medulla Bilateral Pheochromocytoma Benign
- * Heart Cardiomyopathy Mild
- * Intestine Large, Cecum Artery Inflammation Chronic Active, Minimal
- * Islets, Pancreatic Adenoma
- [Adenoma TGLs = 9-6]
- * Kidney Nephropathy Chronicprogr, Marked
- [Nephropathy TGLs = 7-13]
- * Liver Bile Duct Hyperplasia Minimal
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Minimal
- Proliferation Plasma Cell, Moderate
- Dilation Mild
- * Mammary Gland Duct
- [Dilation TGLs = 1-9,20]
- * Nerve Trigeminal Degeneration Mild
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Minimal
- * Pancreas Acinus Hyperplasia Moderate
- Artery Inflammation Chronic Active, Minimal
- [Hyperplasia TGLs = 9-6]
- * Peripheral Nerve, Sciatic Degeneration Moderate
- * Peripheral Nerve, Tibial Degeneration Moderate
- * Pituitary Gland Pars Distalis Adenoma
- [Adenoma TGLs = 10-4]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 752

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-752

ORGAN AND ACCOUNTABLE SITE STATUS

* Salivary Glands	Parotid GI	Atrophy	Mild
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	Red Pulp	Atrophy	Minimal
		Pigment	Mild
[Atrophy TGLs = 6-12]			
* Stomach, Forestomach	Epithelium	Edema	Mild
		Hyperplasia	Moderate
		Inflammation	Chronic Active, Moderate
Testis	Artery	Ulcer	Moderate
* Thymus		Inflammation	Chronic Active, Moderate
		Atrophy	Moderate

Animal Note: TGLs 2,3,4,5 = NCL (No Corresponding Lesion)

Animal Note: TGL 8 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 753

TRT#: 3

SEX: Male

DAY ON TEST: 530

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-753

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Harderian Gland
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- Skeletal Muscle
- * Stomach, Forestomach
- * Aorta
- * Epididymis
- * Islets, Pancreatic
- * Mammary Gland
- * Preputial Gland
- * Skin
- * Stomach, Glandular
- * Bone
- * Esophagus
- * Liver
- * Nerve Trigeminal
- * Salivary Glands
- * Spinal Cord, Cervical
- Testis
- * Bone Marrow
- * Eye
- * Lung
- * Pancreas
- * Seminal Vesicle
- * Spinal Cord, Thoracic
- * Trachea

MISSING

Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Intestine Large, Rectum
- * Thyroid Gland
- * Intestine Small, Duodenum
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
- * Heart
- * Kidney
- [Nephropathy TGLs = 2-13]
- * Lymph Node, Mandibular
- * Nose
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- [Adenoma TGLs = 1-4]
- * Prostate
- * Spinal Cord, Lumbar
- * Spleen
- * Thymus
- Ventricle Rgt
- Olfactory Epi
- Pars Distalis
- Epithelium
- Nerve
- Hyperplasia
- Cardiomyopathy
- Nephropathy
- Hyperplasia
- Proliferation
- Accumulation, Hyaline Droplet
- Degeneration
- Degeneration
- Adenoma
- Hyperplasia
- Degeneration
- Extramedullary Hematopoiesis
- Pigment
- Atrophy
- Mild
- Moderate
- Chronicprogr, Marked
- Lymphocyte, Mild
- Plasma Cell, Minimal
- Mild
- Minimal
- Minimal
- Minimal
- Mild
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 753

TRT#: 3

SEX: Male

DAY ON TEST: 530

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-753

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 754

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-754

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Seminal Vesicle
- Testis
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skin
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Stomach, Forestomach
- * Trachea
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Salivary Glands
- * Stomach, Glandular
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Brain
- * Heart
- * Kidney
- * Liver
- * Lung
- [Congestion TGLs = 13-10]
- [Infiltration Cellular TGLs = 12-10]
- Lymph Node
- [Erythrophagocytosis TGLs = 4,5-20]
- [Erythrophagocytosis TGLs = 6,7-21]
- [Erythrophagocytosis TGLs = 14,15-22]
- * Lymph Node, Mandibular
- [Erythrophagocytosis TGLs = 1,2-9]
- * Lymph Node, Mesenteric
- [Erythrophagocytosis TGLs = 9,10-15]
- * Nerve Trigeminal
- Hyperplasia
- Pheochromocytoma Benign
- Mineral
- Cardiomyopathy
- Ventricl Rgt
- Cardiomyopathy
- Nephropathy
- Mixed Cell Focus
- Congestion
- Alveolus
- Infiltration Cellular
- Erythrophagocytosis
- Erythrophagocytosis
- Erythrophagocytosis
- Erythrophagocytosis
- Erythrophagocytosis
- Degeneration
- Minimal
- Minimal
- Minimal
- Minimal
- Minimal
- Chronicprogr, Moderate
- Mild
- Histiocyte, Mild
- Marked
- Moderate
- Mild
- Moderate
- Moderate
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 754

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-754

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Adenoma Hyperplasia	Moderate
	[Adenoma TGLs = 8-6]		
	[Hyperplasia TGLs = 8-6]		
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation Inflammation	Minimal Chronic Active, Minimal
* Prostate	Epithelium	Hyperplasia Inflammation	Moderate Chronic Active, Mild
	[Inflammation TGLs = 3-16]		
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
	[Extramedullary Hematopoiesis TGLs = 11-12]		
* Thymus		Atrophy	Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 755

TRT#: 3

SEX: Male

DAY ON TEST: 562

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-755

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Seminal Vesicle
- * Thyroid Gland
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Skin
- * Trachea
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Preputial Gland
- * Stomach, Glandular
- Trigeminal Ganglion
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- Testis
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Adenoma
 - Hyperplasia
 - Vacuolation, Cytoplasmic
 - Fibrous Osteodystrophy
- * Bone
- * Bone Marrow
- * Brain
 - Lymphoma Malignant TGLs = 13-2]
- * Heart
 - Cardiomyopathy
- * Kidney
 - Pelvis
 - Dilation
 - Nephropathy
- * Liver
 - [Nephropathy TGLs = 11-13]
 - Lymphoma Malignant
 - Mixed Cell Focus
- * Lung
 - [Hemorrhage TGLs = 12-10]
 - Alveolus
 - Hemorrhage
 - Infiltration Cellular
 - Inflammation
 - Lymphoma Malignant
- Lymph Node
 - Bronchial
 - Lymphoma Malignant
- * Lymph Node, Mandibular
 - [Erythrophagocytosis TGLs = 1-9]
 - Erythrophagocytosis
- * Lymph Node, Mesenteric
 - Lymphoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 755

TRT#: 3

SEX: Male

DAY ON TEST: 562

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-755

ORGAN AND ACCOUNTABLE SITE STATUS

Mesentery		Lymphoma Malignant	
[Lymphoma Malignant	TGLs = 6-12]		
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Pancreas		Lymphoma Malignant	
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Salivary Glands	Parotid GI	Atrophy	Moderate
	Parotid GI	Inflammation	Acute, Mild
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Lymphoma Malignant	
[Lymphoma Malignant	TGLs = 14-3]		
* Spinal Cord, Lumbar		Lymphoma Malignant	
[Lymphoma Malignant	TGLs = 15-3]		
* Spinal Cord, Thoracic		Lymphoma Malignant	
* Spleen		Extramedullary Hematopoiesis	Minimal
		Lymphoma Malignant	
[Lymphoma Malignant	TGLs = 5-12]		
* Stomach, Forestomach		Edema	Minimal
* Thymus		Lymphoma Malignant	
Ureter		Dilation	Mild
[Dilation	TGLs = 4-20]		

PRIMARY CAUSE OF DEATH - Spleen Lymphoma Malignant

Animal Note: TGLs 2,3,7,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 756

TRT#: 3

SEX: Male

DAY ON TEST: 703

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-756

ORGAN AND ACCOUNTABLE SITE STATUS

* Salivary Glands	Parotid GI	Atrophy	Mild
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen	Red Pulp	Atrophy	Mild
		Pigment	Marked
[Atrophy TGLs = 3-12]			
* Stomach, Forestomach		Edema	Mild
		Erosion	Mild
	Epithelium	Hyperplasia	Moderate
		Inflammation	Chronic Active, Mild
Testis	Artery	Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 757

TRT#: 3

SEX: Male

DAY ON TEST: 723

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-757

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Adenoma	Moderate
	Artery	Hyperplasia	Chronic Active, Minimal
		Inflammation	
	[Adenoma TGLs = 5-6]		
	[Hyperplasia TGLs = 5-6]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Minimal
* Prostate	Epithelium	Hyperplasia	Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
	Artery	Inflammation	Chronic Active, Mild
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
	Artery	Inflammation	Chronic Active, Moderate
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Marked
* Thymus		Atrophy	Moderate
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 758

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-758

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Prostate
- * Stomach, Glandular
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Trachea
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Skeletal Muscle
- * Urinary Bladder
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Forestomach

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Pheochromocytoma Benign	
* Bone Marrow		Hypercellularity	Minimal
* Brain	Pineal Gland	Vacuolation, Cytoplasmic	Minimal
* Epididymis		Hypospermia	Mild
* Heart		Cardiomyopathy	Minimal
	Ventricl Rgt	Cardiomyopathy	Minimal
	Endocardium	Schwannoma Malignant	
* Kidney	Renal Tubule	Hyperplasia	Minimal
		Nephropathy	Chronicprogr, Marked
	[Nephropathy TGLs = 3-13]		
* Liver	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Preputial Gland	Duct	Dilation	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 758

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-758

ORGAN AND ACCOUNTABLE SITE STATUS

* Salivary Glands	Parotid GI	Atrophy	Minimal
* Skin	Subcut Tiss	Fibrosarcoma	
[Fibrosarcoma TGLs = 1-20]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Moderate
		Edema	Marked
[Edema TGLs = 2-16A]			
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 759

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-759

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- Skeletal Muscle
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Liver
- * Parathyroid Gland
- * Stomach, Glandular
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- Testis

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Heart
- * Islets, Pancreatic
- [Carcinoma TGLs = 10-6]
- * Kidney
- [Nephropathy TGLs = 8-13,20]
- * Lung
- [Infiltration Cellular TGLs = 12-10]
- Lymph Node
- [Proliferation TGLs = 7-20]
- * Lymph Node, Mandibular
- Mesentery
- * Nerve Trigeminal
- * Nose
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- Ventricl Rgt
- Epithlm Alvlus
- Alveolus
- Lumbar
- Lumbar
- Pars Distalis
- Hyperplasia
- Hypercellularity
- Cardiomyopathy
- Cardiomyopathy
- Carcinoma
- Nephropathy
- Hyperplasia
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Hyperplasia
- Proliferation
- Neovascularization
- Degeneration
- Accumulation, Hyaline Droplet
- Degeneration
- Degeneration
- Hyperplasia
- Minimal
- Moderate
- Minimal
- Minimal
- Chronicprogr, Mild
- Minimal
- Histiocyte, Minimal
- Lymphocyte, Minimal
- Plasma Cell, Mild
- Lymphocyte, Minimal
- Plasma Cell, Mild
- Mild
- Mild
- Moderate
- Mild
- Moderate
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 759

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-759

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland		Inflammation	Chronic Active, Moderate
[Inflammation TGLs = 3-16]			
* Prostate		Inflammation	Chronic Active, Moderate
[Inflammation TGLs = 5,6-16]			
* Seminal Vesicle		Inflammation	Chronic Active, Moderate
[Inflammation TGLs = 4-16]			
* Skin		Ulcer	Moderate
[Ulcer TGLs = 2-21]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Adenoma	
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGLs 9,11 = NCL (No Corresponding Lesion)

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 762

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-762

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|--------------------------|-----------------------------|
| * Aorta | * Bone | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Prostate | * Seminal Vesicle | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Spleen | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|---------------------------|--|--------------------------|--------------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 2,3-7] | | |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricle Rgt | Cardiomyopathy | Mild |
| | Artery | Inflammation | Chronic Active, Minimal |
| | [Cardiomyopathy TGLs = 9-11,20] | | |
| * Intestine Large, Colon | Artery | Inflammation | Chronic Active, Moderate |
| * Intestine Large, Rectum | Artery | Inflammation | Chronic Active, Mild |
| * Kidney | Renal Tubule | Cyst | |
| | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 4,5,6-13] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| Lymph Node | Mediastinal | Erythrophagocytosis | Minimal |
| | [Erythrophagocytosis TGLs = 7-20] | | |
| Mesentery | Artery | Inflammation | Chronic Active, Mild |
| * Nerve Trigeminal | | Degeneration | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 762

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-762

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Adenoma	Marked
	Artery	Inflammation	Chronic Active, Moderate
	[Adenoma TGLs = 8-6]		
	[Hyperplasia TGLs = 8-6,14]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation	Mild
	[Dilation TGLs = 1-16]	Inflammation	Chronic Active, Mild
* Salivary Glands	Parotid GI	Atrophy	Mild
	Artery	Inflammation	Chronic Active, Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Stomach, Forestomach	Artery	Inflammation	Chronic Active, Moderate
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild

Animal Note: TGL 10 = NCL (No Corresponding Lesion)

Animal Note: TGL 11 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 763

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-763

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- Skeletal Muscle
- * Thyroid Gland
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Prostate
- * Skin
- * Trachea
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Vacuolation, Cytoplasmic
 Mild
- * Adrenal Medulla
 - Degeneration
 - Hyperplasia
 Cystic, Mild
Mild
- [Degeneration TGLs = 5-7]
- * Bone Marrow
 - Hypercellularity
 Minimal
- * Heart
 - Cardiomyopathy
 - Ventricl Rgt
 - Cardiomyopathy
 - Artery
 - Mineral
 Mild
Mild
Minimal
- * Kidney
 - Nephropathy
 Chronicprogr, Moderate
- * Liver
 - Bile Duct
 - Cyst
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
 Minimal
- [Cyst TGLs = 4-12]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 Lymphocyte, Mild
Plasma Cell, Moderate
- * Nerve Trigeminal
 - Degeneration
 Mild
- * Nose
 - Olfactory Epi
 Mild
- * Pancreas
 - Artery
 - Inflammation
 Chronic Active, Mild
- * Peripheral Nerve, Sciatic
 - Degeneration
 Moderate
- * Peripheral Nerve, Tibial
 - Degeneration
 Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 763

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-763

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Marked
[Hyperplasia TGLs = 8-4]			
* Preputial Gland	Duct	Dilation	Marked
		Inflammation	Chronic Active, Mild
[Dilation TGLs = 1,2-16]			
[Inflammation TGLs = 3-16]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild
		Cyst	

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 764

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-764

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Salivary Glands
- * Stomach, Glandular
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Seminal Vesicle
- * Trachea
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Lung
- * Parathyroid Gland
- Skeletal Muscle
- * Urinary Bladder
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Prostate
- * Stomach, Forestomach

OBSERVATIONS

- * Adrenal Cortex
[Carcinoma TGLs = 5-7]
- * Adrenal Medulla
- * Heart
- * Islets, Pancreatic
[Adenoma TGLs = 4-6]
- * Kidney
[Nephropathy TGLs = 6-13]
- * Liver
- * Lymph Node, Mandibular
- Mesentery
- * Nose
- * Pancreas
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Preputial Gland
[Dilation TGLs = 2,3-16]
- Carcinoma
- Hyperplasia
- Cardiomyopathy
- Ventricl Rgt
- Adenoma
- Nephropathy
- Clear Cell Focus
- Bile Duct
- Hyperplasia
- Mixed Cell Focus
- Hyperplasia
- Proliferation
- Inflammation
- Artery
- Olfactory Epi
- Accumulation, Hyaline Droplet
- Acinus
- Hyperplasia
- Degeneration
- Degeneration
- Pars Distalis
- Duct
- Cyst
- Dilation
- Marked
- Mild
- Mild
- Mild
- Chronicprogr, Mild
- Mild
- Lymphocyte, Mild
- Plasma Cell, Mild
- Chronic Active, Minimal
- Moderate
- Moderate
- Moderate
- Moderate
- Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 764

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-764

ORGAN AND ACCOUNTABLE SITE STATUS

* Skin	Subcut Tiss	Fibroma	
[Fibroma TGLs = 1-20]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
Testis	Artery	Inflammation	Chronic Active, Minimal
* Thymus		Atrophy	Minimal
		Ectopic Thyroid	
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 765

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-765

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- Skeletal Muscle
- Testis
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Prostate
- * Skin
- * Thyroid Gland
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea

OBSERVATIONS

- * Adrenal Cortex Hyperplasia Mild
- * Brain Hypertrophy Minimal
- * Eye Infiltration Cellular Mononuclear CI, Minimal
- * Heart Inflammation Acute, Minimal
- * Kidney Neovascularization Minimal
- * Liver Cardiomyopathy Minimal
- [Mixed Cell Focus TGLs = 4-12] Cardiomyopathy Mild
- Lymph Node Nephropathy Chronicprogr, Mild
- [Ectasia TGLs = 3-20] Mixed Cell Focus
- [Proliferation TGLs = 3-20] Ectasia Mild
- * Lymph Node, Mandibular Proliferation Plasma Cell, Mild
- * Nerve Trigeminal Degeneration Minimal
- * Nose Accumulation, Hyaline Droplet Moderate
- * Pancreas Hyperplasia Minimal
- * Peripheral Nerve, Sciatic Degeneration Moderate
- * Peripheral Nerve, Tibial Degeneration Moderate
- * Pituitary Gland Pars Distalis Hyperplasia Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 765

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-765

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland	Duct	Dilation Inflammation	Marked Chronic Active, Mild
[Dilation TGLs = 1,2-16]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis Pigment	Mild Mild
* Thymus		Atrophy	Minimal
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59
Test Type: CHRONIC
Route: Whole Body Exposure
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
Time Report Requested: 11:58:55
First Dose M/F: 09/16/12 / 09/16/12
Lab: IIT

ANIMAL ID: 766

TRT#: 3

SEX: Male

DAY ON TEST: 320

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-766

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Epididymis | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Nerve Trigeminal | * Pancreas | * Parathyroid Gland |
| * Peripheral Nerve, Tibial | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Spinal Cord, Lumbar | * Spinal Cord, Thoracic | * Stomach, Forestomach |
| * Stomach, Glandular | Testis | * Thymus | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|-----------------------------|------------------------------|-------------------------------|-----------------------|
| * Bone Marrow | | Hypercellularity | Mild |
| * Brain | Pineal Gland | Mineral | Minimal |
| | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Infiltration Cellular | Mixed Cell, Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Spleen | | Extramedullary Hematopoiesis | Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 767

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-767

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Prostate
- * Spleen
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Pituitary Gland
- * Seminal Vesicle
- Testis
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Preputial Gland
- * Spinal Cord, Cervical
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Bone Marrow
- * Heart
- * Kidney
- * Liver
- * Lymph Node, Mandibular
- * Mammary Gland
- * Nerve Trigeminal
- * Nose
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- Skeletal Muscle
- * Skin
- [Ulcer TGLs = 1-20]
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- Ventricl Rgt
- Olfactory Epi
- Epidermis
- Subcut Tiss
- Nerve
- Hyperplasia
- Hyperplasia
- Hypercellularity
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Mixed Cell Focus
- Hyperplasia
- Proliferation
- Inflammation
- Degeneration
- Accumulation, Hyaline Droplet
- Degeneration
- Degeneration
- Degeneration
- Hyperplasia
- Inflammation
- Ulcer
- Degeneration
- Degeneration
- Mild
- Marked
- Minimal
- Minimal
- Minimal
- Chronicprogr, Moderate
- Lymphocyte, Minimal
- Plasma Cell, Mild
- Granulomatous, Minimal
- Minimal
- Mild
- Marked
- Marked
- Minimal
- Mild
- Acute, Moderate
- Marked
- Moderate
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 767

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-767

ORGAN AND ACCOUNTABLE SITE STATUS

* Stomach, Forestomach

Epithelium

Hyperplasia

Minimal

* Thymus

Atrophy

Mild

Trigeminal Ganglion

Degeneration

Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 768

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-768

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Lung
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Mammary Gland
- * Stomach, Glandular
- * Urinary Bladder
- * Epididymis
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Seminal Vesicle
- * Thymus

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Minimal
 - Hypertrophy Minimal
 - Vacuolation, Cytoplasmic Minimal
- * Adrenal Medulla
 - Pheochromocytoma Benign
- * Bone Marrow
 - Hypercellularity Minimal
- * Eye
 - Cornea Inflammation Acute, Minimal
 - Cornea Neovascularization Mild
- * Heart
 - Cardiomyopathy Mild
- * Intestine Small, Duodenum
 - Adenocarcinoma TGLs = 6-20]
 - Adenocarcinoma
- * Kidney
 - Nephropathy TGLs = 4,5-13]
 - Nephropathy Chronicprogr, Marked
- * Liver
 - Bile Duct Hyperplasia Minimal
- * Lymph Node, Mandibular
 - Lymph Sinus Ectasia Minimal
 - Hyperplasia Lymphocyte, Mild
 - Proliferation Plasma Cell, Mild
 - Degeneration Mild
- * Nerve Trigeminal
 - Accumulation, Hyaline Droplet Minimal
- * Nose
 - Olfactory Epi
- * Pancreas
 - Acinus Hyperplasia Mild
 - Artery Inflammation Chronic Active, Minimal
 - [Hyperplasia TGLs = 7-6]
- * Parathyroid Gland
 - Hyperplasia Minimal
- * Peripheral Nerve, Sciatic
 - Degeneration Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 768

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-768

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland		Inflammation	Chronic Active, Mild
* Prostate	Epithelium	Hyperplasia	Mild
		Inflammation	Chronic Active, Mild
* Salivary Glands	Artery	Inflammation	Chronic Active, Minimal
Skeletal Muscle		Degeneration	Mild
* Skin	Subcut Tiss	Fibroma	
	[Fibroma TGLs = 2-21]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 769

TRT#: 3

SEX: Male

DAY ON TEST: 649

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-769

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Small, Duodenum
- * Mammary Gland
- Skeletal Muscle
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- Testis
- * Bone Marrow
- * Eye
- * Islets, Pancreatic
- * Salivary Glands
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Brain
- * Harderian Gland
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Spinal Cord, Thoracic
- * Trachea

MISSING

Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Ileum
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 Mild
- * Adrenal Medulla
 - Hyperplasia
 Minimal
- * Heart
 - Cardiomyopathy
 - Ventricl Rgt
 - Cardiomyopathy
 - Chemodectoma Malignant
 Mild
- Note: Tumor in connective tissue at heart base.
 - [Chemodectoma Malignant TGLs = 1,5-6]
- * Kidney
 - Nephropathy
 Chronicprogr, Mild
- * Liver
 - Hepatocyte
 - Necrosis
 Minimal
- * Lung
 - Congestion
 Mild
- [Congestion TGLs = 2-10]
- * Lymph Node, Mandibular
 - Proliferation
 Plasma Cell, Minimal
- [Proliferation TGLs = 3-9]
- * Nerve Trigeminal
 - Degeneration
 Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 769

TRT#: 3

SEX: Male

DAY ON TEST: 649

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-769

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Mild
* Prostate		Inflammation	Chronic Active, Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen	White Pulp	Atrophy	Minimal
		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Minimal

PRIMARY CAUSE OF DEATH - Heart Chemodectoma Malignant

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 770

TRT#: 3

SEX: Male

DAY ON TEST: 638

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-770

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Colon
- * Mammary Gland
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Intestine Small, Duodenum
- * Pancreas
- * Salivary Glands
- * Stomach, Glandular
- * Brain
- * Islets, Pancreatic
- * Pituitary Gland
- * Seminal Vesicle
- * Thymus
- * Harderian Gland
- * Lymph Node, Mesenteric
- * Preputial Gland
- * Spinal Cord, Cervical
- * Trachea

AUTO PRECLUDES DIAG.

- * Esophagus
- * Intestine Small, Jejunum
- * Intestine Large, Cecum
- * Intestine Large, Rectum
- * Intestine Small, Ileum

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
- * Bone Marrow
 - Hypercellularity
- * Epididymis
 - Hypospermia
- * Eye
 - Cornea, Epithelium
 - Cornea
 - Hyperplasia
 - Inflammation
- * Heart
 - Cardiomyopathy
- * Kidney
 - Nephropathy
- [Nephropathy TGLs = 7-13]
- * Liver
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
- * Lung
 - Congestion
- [Congestion TGLs = 5-10]
- Lymph Node
 - Iliac
 - Erythrophagocytosis
- [Erythrophagocytosis TGLs = 10-20]
- * Lymph Node, Mandibular
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 770

TRT#: 3

SEX: Male

DAY ON TEST: 638

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-770

ORGAN AND ACCOUNTABLE SITE STATUS

		Respirat Epith	Fungus Hyperplasia Inflammation	Mild Chronic Active, Moderate
* Parathyroid Gland			Hyperplasia	Minimal
* Peripheral Nerve, Sciatic			Degeneration	Mild
* Peripheral Nerve, Tibial			Degeneration	Mild
Skeletal Muscle			Degeneration	Minimal
* Skin		Subcut Tiss	Inflammation	Chronic Active, Moderate
	[Inflammation TGLs = 9-20]			
* Spinal Cord, Lumbar		Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic			Degeneration	Minimal
* Spleen			Extramedullary Hematopoiesis	Minimal
Testis		Germ Cell	Degeneration	Marked
		Germinal Epith	Mineral	Minimal
* Thyroid Gland		Follicular Cel	Hyperplasia	Minimal
Tissue NOS			Inflammation	Chronic Active, Marked
	[Inflammation TGLs = 1,2-9.1]			
Trigeminal Ganglion			Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Nose Fungus

Animal Note: TGLs 3,4,6,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 771

TRT#: 3

SEX: Male

DAY ON TEST: 687

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-771

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Stomach, Forestomach
- * Bone Marrow
- * Intestine Small, Ileum
- * Prostate
- * Thyroid Gland
- * Esophagus
- * Intestine Small, Jejunum
- * Seminal Vesicle
- Trigeminal Ganglion
- * Harderian Gland
- * Islets, Pancreatic
- * Skin
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Thrombus
- * Adrenal Medulla
 - Hyperplasia
- * Bone
 - Fibrous Osteodystrophy
- * Brain
 - Necrosis
- * Epididymis
 - Exfoliated Germ Cell
 - Hypospermia
- * Eye
 - [Hypospermia TGLs = 10-16A]
 - Cornea, Epithelium
 - Hyperplasia
 - Cornea
 - Inflammation
 - Cornea
 - Neovascularization
- * Heart
 - Cardiomyopathy
- * Intestine Large, Cecum
 - Artery
 - Inflammation
- * Intestine Large, Colon
 - Artery
 - Inflammation
- * Intestine Large, Rectum
 - Artery
 - Inflammation
- * Kidney
 - Renal Tubule
 - Cyst
 - Nephropathy
- * Liver
 - [Cyst TGLs = 1,2-20,21]
 - [Nephropathy TGLs = 3,4-13]
 - Eosinophilic Focus
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
- Lymph Node
 - [Infiltration Cellular TGLs = 6-10]
 - Lymph Sinus, Renal
 - Ectasia
 - Renal
 - Erythrophagocytosis

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 771

TRT#: 3

SEX: Male

DAY ON TEST: 687

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-771

ORGAN AND ACCOUNTABLE SITE STATUS

[Ectasia TGLs = 12-21]

[Erythrophagocytosis TGLs = 11-21]

* Lymph Node, Mandibular		Proliferation	Plasma Cell, Mild
* Mammary Gland	Artery	Inflammation	Chronic Active, Moderate
Mesentery	Artery	Inflammation	Chronic Active, Marked
		Necrosis	Moderate
[Necrosis TGLs = 9-20]			
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Pancreas		Adenoma	
	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Marked
[Adenoma TGLs = 5-6]			
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Moderate
* Salivary Glands	Artery	Inflammation	Chronic Active, Moderate
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Moderate
* Stomach, Glandular	Artery	Inflammation	Chronic Active, Moderate
Testis	Interstit Cell	Adenoma	
	Germ Cell	Degeneration	Marked
	Artery	Inflammation	Chronic Active, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 771

TRT#: 3

SEX: Male

DAY ON TEST: 687

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-771

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 8-16A]

[Degeneration TGLs = 7-16A]

* Thymus

Atrophy

Moderate

Cyst

Artery

Inflammation

Chronic Active, Moderate

* Trachea

Artery

Inflammation

Chronic Active, Moderate

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 772

TRT#: 3

SEX: Male

DAY ON TEST: 687

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-772

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Islets, Pancreatic
- * Pituitary Gland
- * Thyroid Gland
- * Adrenal Medulla
- * Liver
- * Skin
- * Trachea
- * Esophagus
- * Lung
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Harderian Gland
- * Lymph Node, Mesenteric
- * Stomach, Forestomach
- * Urinary Bladder

MISSING

- * Nerve Trigeminal

AUTO PRECLUDES DIAG.

- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum

OBSERVATIONS

- * Aorta
- * Bone
- * Bone Marrow
- * Brain
 - Meninges
 - Note: Olfactory bulbs unavailable for evaluation.
- * Epididymis
- * Eye
- * Heart
- * Intestine Large, Cecum
- * Kidney
 - [Nephropathy TGLs = 8,9-13]
- * Lymph Node, Mandibular
- * Mammary Gland
 - [Fibroadenoma TGLs = 11-20]
- * Nose
- * Pancreas
- Mineral
- Fibrous Osteodystrophy
- Hypercellularity
- Granular Cell Tumor Benign
- Exfoliated Germ Cell
- Inflammation
- Cardiomyopathy
- Mineral
- Inflammation
- Nephropathy
- Proliferation
- Fibroadenoma
- Accumulation, Hyaline Droplet
- Atrophy
- Atrophy
- Inflammation
- Moderate
- Minimal
- Minimal
- Acute, Moderate
- Moderate
- Minimal
- Chronic Active, Minimal
- Chronicprogr, Marked
- Plasma Cell, Mild
- Mild
- Minimal
- Minimal
- Chronic Active, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 772

TRT#: 3

SEX: Male

DAY ON TEST: 687

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-772

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland [Hyperplasia TGLs = 10-8]		Hyperplasia	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland Note: Pars nervosa and intermedia available for evaluation.			
* Preputial Gland Duct [Dilation TGLs = 5,6-16]		Dilation Inflammation	Marked Chronic Active, Mild
* Prostate		Decreased Secretory Fluid	Mild
* Salivary Glands Parotid GI		Inflammation	Acute, Moderate
* Seminal Vesicle [Decreased Secretory Fluid TGLs = 3-16]		Decreased Secretory Fluid	Moderate
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar Nerve		Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen White Pulp Red Pulp		Atrophy Atrophy Pigment	Mild Moderate Mild
* Stomach, Glandular Mineral		Inflammation	Granulomatous, Mild Moderate
Testis Germ Cell Artery [Degeneration TGLs = 1-16A]		Degeneration Inflammation	Minimal Chronic Active, Mild
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 2,4,7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 773

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-773

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Mammary Gland
- * Seminal Vesicle
- * Thyroid Gland
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Prostate
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Bone Marrow
 - Hypercellularity
- * Epididymis
 - Hypospermia
- [Hypospermia TGLs = 4-16A]
- * Eye
 - Cornea
 - Inflammation
- * Heart
 - Cardiomyopathy
- * Islets, Pancreatic
 - Adenoma
- [Adenoma TGLs = 7-6]
- * Kidney
 - Nephropathy
- [Nephropathy TGLs = 8-13]
- * Liver
- * Lung
 - Alveolus
 - Mixed Cell Focus
 - Infiltration Cellular
- [Infiltration Cellular TGLs = 9-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Lymph Node, Mesenteric
 - Erythrophagocytosis
- Mesentery
 - Necrosis
- [Necrosis TGLs = 5,6-20,21]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Respirat Epith
 - Accumulation, Hyaline Droplet
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 773

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-773

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Inflammation Hyperplasia	Suppurative, Minimal Mild
[Hyperplasia TGLs = 7-6,14]			
* Peripheral Nerve, Sciatic		Degeneration	Mild
Note: Longitudinal section available for evaluation.			
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland	Duct	Dilation Inflammation	Mild Chronic Active, Minimal
[Dilation TGLs = 2-16]			
Skeletal Muscle		Degeneration	Minimal
* Skin	Hair Follicle	Atrophy	Minimal
[Atrophy TGLs = 1-20]			
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
Testis	Germ Cell	Degeneration	Mild
	Seminif Tub	Dilation	Mild
[Degeneration TGLs = 3-16A]			
* Thymus		Atrophy	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 774

TRT#: 3

SEX: Male

DAY ON TEST: 705

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-774

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Intestine Small, Duodenum
- * Mammary Gland
- * Thyroid Gland
- * Esophagus
- * Intestine Small, Ileum
- * Salivary Glands
- * Trachea
- * Harderian Gland
- * Islets, Pancreatic
- * Skin
- Trigeminal Ganglion
- * Intestine Large, Rectum
- * Lung
- * Stomach, Forestomach
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
- * Aorta
 - Mineral
- * Bone
 - Fibrous Osteodystrophy
- * Brain
 - Hemorrhage
 - Necrosis
- * Epididymis
 - Exfoliated Germ Cell
 - Hypospermia
 - Mesothelioma Malignant
- [Hypospermia TGLs = 4-16A]
- [Mesothelioma Malignant TGLs = 5-16A]
- * Eye
 - Retina
 - Dysplasia
 - Cornea, Epithelium
 - Hyperplasia
 - Cornea
 - Inflammation
- * Heart
 - Ventricle Rgt
 - Cardiomyopathy
 - Cardiomyopathy
 - Artery
 - Mineral
- [Cardiomyopathy TGLs = 13-11]
- * Kidney
 - Nephropathy
- [Nephropathy TGLs = 10,11,12-13]
- * Liver
 - Bile Duct
 - Hyperplasia
- * Lymph Node, Mandibular
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 774

TRT#: 3

SEX: Male

DAY ON TEST: 705

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-774

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric		Proliferation	Plasma Cell, Mild
* Nerve Trigeminal		Erythrophagocytosis	Mild
* Nose	Olfactory Epi	Degeneration	Mild
* Pancreas		Accumulation, Hyaline Droplet	Mild
	Acinus	Adenoma	
	Artery	Hyperplasia	Mild
		Inflammation	Chronic Active, Marked
	[Adenoma TGLs = 16-6]		
* Parathyroid Gland		Hyperplasia	Marked
	[Hyperplasia TGLs = 15-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation	Moderate
	[Dilation TGLs = 1,2-16]		
* Prostate		Decreased Secretory Fluid	Mild
	Epithelium	Hyperplasia	Minimal
	[Decreased Secretory Fluid TGLs = 9-16]		
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
	[Decreased Secretory Fluid TGLs = 8-16]		
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Minimal
* Stomach, Glandular		Mineral	Mild
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Marked
		Mesothelioma Malignant	
	[Degeneration TGLs = 3-16A]		
	[Inflammation TGLs = 6-16A]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 774

TRT#: 3

SEX: Male

DAY ON TEST: 705

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-774

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Moderate

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 7,14 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 775

TRT#: 3

SEX: Male

DAY ON TEST: 425

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-775

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Mild

Hemorrhage

Mild

* Thyroid GI

Note: One of pair available for evaluation

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 776

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-776

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Preputial Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Mammary Gland
- * Seminal Vesicle
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Pituitary Gland
- * Skin
- * Trachea

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hyperplasia
 - Moderate
 - [Hyperplasia TGLs = 3-7]
- * Epididymis
 - Artery
 - Hypospermia
 - Inflammation
 - Mild
 - Chronic Active, Minimal
 - Note: One epididymis has normal amount of sperm present.
 - [Hypospermia TGLs = 2-16A]
- * Heart
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Marked
 - [Nephropathy TGLs = 4-13]
- * Liver
 - Mixed Cell Focus
 - Degeneration
 - Mild
- * Nerve Trigeminal
 - Accumulation, Hyaline Droplet
 - Mild
- * Nose
 - Olfactory Epi
 - Atrophy
 - Minimal
- * Pancreas
 - Acinus
 - Hyperplasia
 - Marked
 - [Hyperplasia TGLs = 5-6,14]
- * Parathyroid Gland
 - Hyperplasia
 - Minimal
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Moderate
- * Peripheral Nerve, Tibial
 - Degeneration
 - Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 776

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-776

ORGAN AND ACCOUNTABLE SITE STATUS

* Prostate		Inflammation	Chronic Active, Minimal
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Minimal
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Moderate
Note: One testis normal			
[Degeneration TGLs = 1-16A]			
* Thymus		Atrophy	Moderate

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 777

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-777

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Epididymis
- * Esophagus
- * Eye
- * Harderian Gland
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Pancreas
- * Prostate
- * Salivary Glands
- * Seminal Vesicle
- * Skin
- * Spinal Cord, Cervical
- * Stomach, Forestomach
- * Stomach, Glandular
- * Testis
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

MISSING

- * Mammary Gland
- Trigeminal Ganglion

OBSERVATIONS

- * Bone Marrow
- Hypercellularity
- Mild
- * Brain
- Mineral
- Minimal
- * Heart
- Cardiomyopathy
- Minimal
- Ventricl Rgt
- Cardiomyopathy
- Minimal
- Endocardium
- Hyperplasia
- Schwann Cell, Minimal
- Adenoma
- * Islets, Pancreatic
- [Adenoma TGLs = 4-21]
- * Kidney
- Nephropathy
- Chronicprogr, Mild
- * Liver
- Mixed Cell Focus
- [Mixed Cell Focus TGLs = 3-12]
- * Lung
- Alveolus
- Infiltration Cellular
- Histiocyte, Minimal
- Lymph Node
- Pancreatic
- Erythrophagocytosis
- Mild
- [Erythrophagocytosis TGLs = 7,8-20]
- * Lymph Node, Mandibular
- Lymph Sinus
- Ectasia
- Minimal
- Hyperplasia
- Lymphocyte, Mild
- Proliferation
- Plasma Cell, Minimal
- Erythrophagocytosis
- Moderate
- * Lymph Node, Mesenteric
- [Erythrophagocytosis TGLs = 5,6-15]
- * Nerve Trigeminal
- Degeneration
- Mild
- * Nose
- Olfactory Epi
- Accumulation, Hyaline Droplet
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 777

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-777

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
Note: Longitudinal section available for evaluation.			
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Suppurative, Mild
	[Dilation TGLs = 1-16]		
	[Inflammation TGLs = 2-16]		
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	Red Pulp	Atrophy	Mild
		Hyperplasia	Lymphocyte, Minimal
* Thymus		Thymoma Benign	
	[Thymoma Benign TGLs = 9-6]		

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 778

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-778

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- Skeletal Muscle
- Testis
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Skin
- * Thymus
- * Esophagus
- * Intestine Large, Colon
- * Lung
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Mild
 - Hypertrophy Mild
- * Adrenal Medulla
 - Pheochromocytoma Benign
- * Bone Marrow
 - Hypercellularity Mild
- * Brain
 - Pineal Gland
 - Vacuolation, Cytoplasmic Minimal
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy Minimal
 - Adenocarcinoma Minimal
- * Intestine Small, Jejunum
 - [Adenocarcinoma TGLs = 2-20]
- * Islets, Pancreatic
 - [Adenoma TGLs = 5-6]
- * Kidney
 - Nephropathy Chronicprogr, Moderate
- * Liver
 - Mixed Cell Focus
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Minimal
 - Proliferation Plasma Cell, Mild
- * Nerve Trigeminal
 - Degeneration Minimal
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet Mild
- * Pancreas
 - Acinus
 - Atrophy Minimal
 - Acinus
 - Hyperplasia Marked
 - [Hyperplasia TGLs = 5-6,14]
- * Peripheral Nerve, Sciatic
 - Degeneration Mild
- * Peripheral Nerve, Tibial
 - Degeneration Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 778

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-778

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland [Hyperplasia TGLs = 3-4]	Pars Distalis	Hyperplasia	Mild
* Preputial Gland [Dilation TGLs = 1-16]	Duct	Dilation Inflammation	Moderate Chronic Active, Mild
* Prostate		Inflammation	Chronic Active, Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 780

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-780

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Skin
- * Trachea
- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nose
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- Skeletal Muscle
- Testis

OBSERVATIONS

- * Adrenal Cortex
- * Heart
- * Kidney
- * Liver
- * Lung
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Pancreas
- [Adenoma TGLs = 2-6]
- [Hyperplasia TGLs = 2-6]
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Preputial Gland
- * Prostate
- * Spinal Cord, Cervical
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- Vacuolation, Cytoplasmic
- Cardiomyopathy
- Ventricl Rgt
- Cardiomyopathy
- Nephropathy
- Bile Duct
- Hyperplasia
- Mixed Cell Focus
- Alveolus
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Degeneration
- Adenoma
- Acinus
- Hyperplasia
- Degeneration
- Degeneration
- Inflammation
- Epithelium
- Hyperplasia
- Degeneration
- Nerve
- Degeneration
- Degeneration
- Mild
- Minimal
- Minimal
- Chronicprogr, Marked
- Minimal
- Histiocyte, Minimal
- Lymphocyte, Minimal
- Plasma Cell, Minimal
- Mild
- Multiple
- Moderate
- Moderate
- Moderate
- Chronic Active, Minimal
- Minimal
- Minimal
- Moderate
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 780

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-780

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Mild
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 781

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-781

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Rectum
- * Lung
- * Prostate
- * Stomach, Glandular
- * Aorta
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- Testis
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- * Trachea
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - [Vacuolation, Cytoplasmic TGLs = 2-7]
- * Brain
 - Glial Cell
 - Hyperplasia
- * Eye
 - Cornea
 - Fibrosis
 - Cornea, Epithelium
 - Hyperplasia
 - Cornea
 - Inflammation
 - Cornea
 - Neovascularization
- * Harderian Gland
 - Atrophy
- * Heart
 - Cardiomyopathy
 - Mild
 - Ventricl Rgt
 - Cardiomyopathy
 - Minimal
 - Adenoma
- * Islets, Pancreatic
 - [Adenoma TGLs = 3-6]
- * Kidney
 - Nephropathy
 - Chronicprogr, Moderate
- * Liver
 - Bile Duct
 - Clear Cell Focus
 - Hyperplasia
 - Mild
 - Mixed Cell Focus
- * Lymph Node, Mandibular
 - Hyperplasia
 - Lymphocyte, Mild
 - Proliferation
 - Plasma Cell, Moderate
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Mild
 - Respirat Epith
 - Hyperplasia
 - Minimal
 - Inflammation
 - Suppurative, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 781

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-781

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Olfactory Epi	Metaplasia	Respiratory, Mild
	Acinus	Adenoma	
		Hyperplasia	Mild
	[Adenoma TGLs = 3-6]		
	[Hyperplasia TGLs = 3-6,14]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Intermed	Cyst	
	Pars Distalis	Hyperplasia	Marked
* Preputial Gland	Duct	Dilation	Minimal
Skeletal Muscle		Degeneration	Minimal
* Skin	Subcut Tiss	Fibroma	
	[Fibroma TGLs = 1-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 783

TRT#: 3

SEX: Male

DAY ON TEST: 728

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-783

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Harderian Gland
- * Intestine Small, Duodenum
- * Preputial Gland
- * Thyroid Gland
- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Seminal Vesicle
- * Trachea
- * Bone
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Skin
- Trigeminal Ganglion
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Adenoma
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Compression
- [Compression TGLs = 15-2]
- * Epididymis
 - Exfoliated Germ Cell
- * Eye
 - Cornea
 - Inflammation
 - Neovascularization
- * Heart
 - Cardiomyopathy
- * Islets, Pancreatic
 - Hyperplasia
- * Kidney
 - Nephropathy
- [Nephropathy TGLs = 8,9-13]
- * Liver
 - Hepatocyte
 - Vacuolation, Cytoplasmic
- [Vacuolation, Cytoplasmic TGLs = 7-12]
- * Lung
 - Congestion
- [Congestion TGLs = 12-10]
- * Lymph Node, Mandibular
 - Proliferation
- * Mammary Gland
 - Duct
 - Dilation
- [Dilation TGLs = 1,2-9.1,20]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Acinus
 - Hyperplasia
- * Parathyroid Gland
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 783

TRT#: 3

SEX: Male

DAY ON TEST: 728

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-783

ORGAN AND ACCOUNTABLE SITE STATUS

	[Hyperplasia TGLs = 13-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 14-4]		
* Prostate		Inflammation	Chronic Active, Minimal
* Salivary Glands	Parotid GI	Atrophy	Marked
	Duct, Parotid GI	Dilation	Moderate
	Parotid GI	Inflammation	Acute, Minimal
Skeletal Muscle		Degeneration	Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	Red Pulp	Atrophy	Minimal
		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		Inflammation	Chronic Active, Mild
Testis	Artery	Inflammation	Chronic Active, Minimal
* Thymus		Atrophy	Minimal
		Thymoma Benign	

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGLs 3,4,5,6,10,11 = NCL (No Corresponding Lesion)

Animal Note: TGL 16 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 784

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-784

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Seminal Vesicle
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Preputial Gland
- * Skin
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Prostate
- * Stomach, Glandular
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Salivary Glands
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Minimal
 - Mild
 - Mild
- [Hypertrophy TGLs = 2-7]
- * Adrenal Medulla
 - Hyperplasia
 - Minimal
- * Heart
 - Cardiomyopathy
 - Mild
- * Islets, Pancreatic
 - Adenoma
 - Carcinoma
- Note: Adenoma and carcinoma in close proximity in tissue section.
- [Adenoma TGLs = 5-20]
- [Carcinoma TGLs = 5-20]
- * Kidney
 - Nephropathy
 - Chronicprogr, Marked
- [Nephropathy TGLs = 7-13]
- * Liver
- * Lung
 - Alveolus
 - Mixed Cell Focus
 - Infiltration Cellular
 - Inflammation
 - Histiocyte, Minimal
 - Chronic Active, Minimal
- [Infiltration Cellular TGLs = 6-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Lymphocyte, Mild
 - Plasma Cell, Moderate
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Minimal
- * Pancreas
 - Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 784

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-784

ORGAN AND ACCOUNTABLE SITE STATUS

	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Mild
	Artery	Inflammation	Chronic Active, Minimal
[Adenoma TGLs = 4-6]			
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Pigment	Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
Testis	Tunic	Hemorrhage	Mild
	Artery	Inflammation	Chronic Active, Mild
[Hemorrhage TGLs = 1-16A]			
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Mild

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 785

TRT#: 3

SEX: Male

DAY ON TEST: 531

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-785

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Bone Marrow | * Epididymis |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Lung | * Lymph Node, Mesenteric | * Parathyroid Gland |
| * Pituitary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| Testis | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

MISSING

- * Mammary Gland

OBSERVATIONS

- | | | | |
|---|---------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Meninges | Mineral | Minimal |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Heart | Ventricle Rgt | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Adenoma | |
| | | Carcinoma | |
| [Carcinoma TGLs = 3-6] | | | |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Preputial Gland | | Inflammation | Chronic Active, Mild |
| Skeletal Muscle | | Degeneration | Moderate |
| [Degeneration TGLs = 1-11] | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 785

TRT#: 3

SEX: Male

DAY ON TEST: 531

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-785

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Minimal
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tissue NOS	Abdominal, Fat	Hemangiosarcoma	
[Hemangiosarcoma	TGLs = 2-20]		

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 786

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-786

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Preputial Gland
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- Skeletal Muscle
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Stomach, Glandular
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Trachea

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Adrenal Medulla
 - Hyperplasia
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Glioma Malignant
- * Epididymis
 - Exfoliated Germ Cell
- * Heart
 - Cardiomyopathy
- * Islets, Pancreatic
 - Carcinoma
- * Kidney
 - [Carcinoma TGLs = 7-6]
 - Urothelium
 - Hyperplasia
 - Pelvis
 - Inflammation
 - Nephropathy
 - [Nephropathy TGLs = 9-13]
- * Liver
 - Bile Duct
 - Hyperplasia
- * Lung
 - Inflammation
 - TGLs = 11-10
- Lymph Node
 - Renal
 - Hyperplasia
 - [Hyperplasia TGLs = 13-20]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Duct
 - Dilation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 786

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-786

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Marked
[Hyperplasia TGLs = 8-6]			
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 12-4]			
* Prostate		Inflammation	Chronic Active, Moderate
[Inflammation TGLs = 5,6-16]			
* Salivary Glands	Parotid GI	Atrophy	Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
[Decreased Secretory Fluid TGLs = 14-16]			
* Skin	Subcut Tiss	Lipoma	
[Lipoma TGLs = 2-20]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Inflammation	Chronic Active, Mild
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Adenoma	
Trigeminal Ganglion		Degeneration	Minimal
* Urinary Bladder	Urothelium	Hyperplasia	Moderate

Animal Note: TGL 1 = NST (No Section Taken)

Animal Note: TGLs 3,4,10 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 787

TRT#: 3

SEX: Male

DAY ON TEST: 673

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-787

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Brain
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Stomach, Forestomach
- * Esophagus
- * Intestine Small, Duodenum
- * Pituitary Gland
- * Trachea
- * Eye
- * Intestine Small, Ileum
- * Salivary Glands
- * Urinary Bladder
- * Harderian Gland
- * Lymph Node, Mandibular
- * Spinal Cord, Cervical

MISSING

Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy
 - Necrosis
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Pheochromocytoma Benign
- * Aorta
 - Mineral
- Blood Vessel
 - Pulmn Artery
 - Inflammation
 - Pulmn Artery
 - Necrosis
- * Bone
 - Fibrous Osteodystrophy
- * Bone Marrow
 - Hypercellularity
- * Epididymis
 - Exfoliated Germ Cell
 - Hypospermia
- * Heart
 - Cardiomyopathy
 - Myocardium
 - Mineral
 - Artery
 - Mineral
- * Islets, Pancreatic
 - Adenoma
- * Kidney
 - Renal Tubule
 - Cyst
 - Nephropathy
- [Cyst TGLs = 9-13]
 - [Nephropathy TGLs = 7,8-13]
- * Liver
 - Bile Duct
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 787

TRT#: 3

SEX: Male

DAY ON TEST: 673

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-787

ORGAN AND ACCOUNTABLE SITE STATUS

* Lung		Inflammation	Chronic Active, Minimal
	[Inflammation TGLs = 5-10]		
* Mammary Gland		Hyperplasia	Minimal
Mesentery	Artery	Inflammation	Chronic Active, Mild
	Artery	Mineral	Moderate
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
	Respirat Epith	Atrophy	Minimal
* Pancreas		Adenoma	
	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Mild
	[Adenoma TGLs = 3-6]		
* Parathyroid Gland		Hyperplasia	Marked
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Mild
* Prostate		Inflammation	Acute, Mild
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 1-16]		
Skeletal Muscle		Degeneration	Mild
* Skin	Subcut Tiss	Fibroma	
	[Fibroma TGLs = 12-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Mild
		Pigment	Moderate
	[Atrophy TGLs = 10-12]		
* Stomach, Glandular		Mineral	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 787

TRT#: 3

SEX: Male

DAY ON TEST: 673

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-787

ORGAN AND ACCOUNTABLE SITE STATUS

Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Moderate
[Degeneration TGLs = 2-16A]			
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Carcinoma	
[Carcinoma TGLs = 11-8]			

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 4,6,13 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 788

TRT#: 3

SEX: Male

DAY ON TEST: 655

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-788

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Harderian Gland
- * Islets, Pancreatic
- * Nerve Trigeminal
- Skeletal Muscle
- * Stomach, Glandular
- * Aorta
- * Intestine Large, Cecum
- * Liver
- * Prostate
- * Skin
- * Thyroid Gland
- * Bone
- * Intestine Large, Colon
- * Lymph Node, Mandibular
- * Salivary Glands
- * Spinal Cord, Cervical
- * Trachea
- * Esophagus
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Spinal Cord, Thoracic
- * Urinary Bladder

MISSING

Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Brain
 - [Compression TGLs = 10-2]
- * Epididymis
- * Heart
- * Kidney
 - [Nephropathy TGLs = 6-13]
- * Lung
 - [Infiltration Cellular TGLs = 5-10]
- * Mammary Gland
- * Nose
- * Pancreas
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- Hypertrophy
- Hypercellularity
- Compression
- Granular Cell Tumor Benign
- Meninges
- Artery
- Alveolus
- Duct
- Olfactory Epi
- Acinus
- Artery
- Hypospermia
- Cardiomyopathy
- Inflammation
- Nephropathy
- Infiltration Cellular
- Dilation
- Accumulation, Hyaline Droplet
- Hyperplasia
- Inflammation
- Hyperplasia
- Degeneration
- Mild
- Minimal
- Mild
- Marked
- Minimal
- Chronic Active, Minimal
- Chronicprogr, Marked
- Histiocyte, Minimal
- Minimal
- Mild
- Mild
- Chronic Active, Minimal
- Minimal
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 788

TRT#: 3

SEX: Male

DAY ON TEST: 655

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-788

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 4-4]			
* Preputial Gland	Duct	Dilation	Moderate
[Dilation TGLs = 7-16]		Inflammation	Chronic Active, Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Pigment	Marked
* Stomach, Forestomach		Edema	Minimal
	Epithelium	Hyperplasia	Marked
		Inflammation	Chronic Active, Mild
		Ulcer	Minimal
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Marked
[Degeneration TGLs = 9-16A]			
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 1,2,3,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 789

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-789

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Brain
- * Esophagus
- * Harderian Gland
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Lung
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Parathyroid Gland
- * Prostate
- * Salivary Glands
- * Seminal Vesicle
- * Skeletal Muscle
- * Skin
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- Trigeminal Ganglion
- * Urinary Bladder

OBSERVATIONS

- * Epididymis
 - Exfoliated Germ Cell Minimal
 - Hypospermia Moderate
- [Hypospermia TGLs = 2-16A]
- * Eye
 - Retina Atrophy Minimal
- * Heart
 - Cardiomyopathy Minimal
 - Ventricl Rgt Cardiomyopathy Minimal
- * Kidney
 - Nephropathy Chronicprogr, Minimal
- * Liver
 - Mixed Cell Focus
- * Nerve Trigeminal
 - Degeneration Minimal
- * Nose
 - Olfactory Epi Accumulation, Hyaline Droplet Moderate
- * Pancreas
 - Acinus Hyperplasia Minimal
- [Hyperplasia TGLs = 6-6]
- * Peripheral Nerve, Sciatic
 - Degeneration Moderate
- * Peripheral Nerve, Tibial
 - Degeneration Moderate
- * Pituitary Gland
 - Pars Distalis Cyst
- * Preputial Gland
 - Inflammation Chronic Active, Moderate
- [Inflammation TGLs = 1-16]
- * Spinal Cord, Cervical
 - Degeneration Minimal
- * Spinal Cord, Lumbar
 - Nerve Degeneration Marked
- * Spinal Cord, Thoracic
 - Degeneration Minimal
- * Spleen
 - Extramedullary Hematopoiesis Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 789

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-789

ORGAN AND ACCOUNTABLE SITE STATUS

Pigment

Mild

Note: TGL 7 = NCL (No Correlating Lesion)

Testis

Germ Cell

Degeneration

Moderate

[Degeneration TGLs = 3,4-16A]

Atrophy

Minimal

* Thymus

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 790

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-790

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Brain	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	Skeletal Muscle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland
* Trachea	Trigeminal Ganglion	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Mild
* Epididymis		Exfoliated Germ Cell	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Minimal
* Liver		Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular	Lymph Sinus	Ectasia	Minimal
		Hyperplasia	Lymphocyte, Minimal
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Cyst	
	Pars Intermed	Cyst	
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Moderate
Testis	Germ Cell	Degeneration	Minimal
* Thymus		Atrophy	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 790

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-790

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 791

TRT#: 3

SEX: Male

DAY ON TEST: 606

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-791

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Islets, Pancreatic
- * Pancreas
- * Salivary Glands
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Epididymis
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- * Trachea
- * Esophagus
- * Intestine Large, Rectum
- * Mammary Gland
- * Pituitary Gland
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Eye
- * Intestine Small, Duodenum
- * Nerve Trigeminal
- * Prostate
- * Skin
- Testis

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Bone
- * Bone Marrow
- * Brain
- * Heart
- * Kidney
- * Liver
- * Lung
- * Lymph Node, Mandibular
- * Nose
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Preputial Gland
- Pineal Gland
- Pineal Gland
- Ventricle Rgt
- Artery
- [Nephropathy TGLs = 1,4-13]
- [Congestion TGLs = 3-10]
- Olfactory Epi
- Duct
- Hyperplasia
- Hyperplasia
- Fibrous Osteodystrophy
- Hypercellularity
- Mineral
- Vacuolation, Cytoplasmic
- Cardiomyopathy
- Cardiomyopathy
- Mineral
- Nephropathy
- Mixed Cell Focus
- Congestion
- Hyperplasia
- Proliferation
- Accumulation, Hyaline Droplet
- Degeneration
- Degeneration
- Dilation
- Minimal
- Minimal
- Minimal
- Minimal
- Minimal
- Mild
- Mild
- Mild
- Minimal
- Chronicprogr, Marked
- Mild
- Mild
- Moderate
- Lymphocyte, Mild
- Plasma Cell, Minimal
- Mild
- Mild
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 791

TRT#: 3

SEX: Male

DAY ON TEST: 606

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-791

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Inflammation	Chronic Active, Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Degeneration	Mild
* Thymus		Extramedullary Hematopoiesis	Mild
Trigeminal Ganglion		Atrophy	Mild
		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 792

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-792

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Seminal Vesicle
- * Stomach, Glandular
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Skin
- Trigeminal Ganglion
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Spinal Cord, Cervical
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Compression
 Moderate
Minimal
Minimal
- * Brain
 - [Compression TGLs = 9-2]
 Exfoliated Germ Cell
 - Atrophy
 - Cardiomyopathy
 - Cardiomyopathy
 Minimal
Minimal
Moderate
Mild
- * Eye
 - Retina
- * Heart
 - Ventricl Rgt
 - [Cardiomyopathy TGLs = 5-11]
 Nephropathy
 - [Nephropathy TGLs = 3,4-13]
 Chronicprogr, Marked
- * Kidney
- * Liver
 - Bile Duct
 Hyperplasia
- * Lung
 - Artery
 - Mediastinal
 - [Erythrophagocytosis TGLs = 6,7-20]
 Alveolar/Bronchiolar Adenoma
 - Inflammation
 - Erythrophagocytosis
 Minimal
Chronic Active, Minimal
Mild
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 Lymphocyte, Mild
Plasma Cell, Mild
- * Mammary Gland
 - Duct
 Dilation
 - Accumulation, Hyaline Droplet
 Minimal
Mild
- * Nose
 - Olfactory Epi
 Adenoma
 - Hyperplasia
 - Inflammation
 Moderate
Chronic Active, Mild
- * Pancreas
 - Acinus
 - Artery

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 792

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-792

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 2-6]			
[Hyperplasia TGLs = 2-6,14]			
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 8-4]			
* Preputial Gland	Duct	Dilation Inflammation	Moderate Chronic Active, Minimal
[Dilation TGLs = 1-16]			
* Prostate		Inflammation	Acute, Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
* Stomach, Forestomach	Artery	Inflammation	Chronic Active, Minimal
Testis	Germ Cell	Degeneration	Minimal
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 793

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-793

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Small, Duodenum
- * Preputial Gland
- * Trachea
- * Bone
- * Intestine Small, Ileum
- * Salivary Glands
- * Esophagus
- * Intestine Small, Jejunum
- * Spinal Cord, Cervical
- * Harderian Gland
- * Islets, Pancreatic
- * Stomach, Glandular

MISSING

- * Lymph Node, Mesenteric

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hyperplasia Mild
 - Necrosis Mild
 - Vacuolation, Cytoplasmic Minimal
- * Adrenal Medulla
 - Hyperplasia Marked
- * Bone Marrow
 - Hypercellularity Mild
- * Brain
 - Pineal Gland
 - Mineral Minimal
 - Pineal Gland
 - Vacuolation, Cytoplasmic Minimal
- * Epididymis
 - Exfoliated Germ Cell Minimal
 - Hypospermia Moderate
- * Eye
 - Artery
 - Inflammation Chronic Active, Moderate
 - Retina
 - Atrophy Minimal
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy Mild
 - Cardiomyopathy Moderate
 - Artery
 - Inflammation Chronic Active, Minimal
- * Intestine Large, Cecum
 - Artery
 - Inflammation Chronic Active, Moderate
- * Intestine Large, Colon
 - Artery
 - Inflammation Chronic Active, Moderate
- * Intestine Large, Rectum
 - Artery
 - Inflammation Chronic Active, Moderate
- * Kidney
 - Renal Tubule
 - Cyst
 - Nephropathy Chronicprogr, Marked
- [Cyst TGLs = 11,13-13,22]
- [Nephropathy TGLs = 10-13]
- * Liver
 - Bile Duct
 - Cyst

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 793

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-793

ORGAN AND ACCOUNTABLE SITE STATUS

	Bile Duct	Eosinophilic Focus Hyperplasia	Minimal
[Cyst TGLs = 5-21]			
* Lung	Artery	Inflammation	Chronic Active, Mild
Lymph Node	Lymph Sinus, Renal Mediastinal	Ectasia Infiltration Cellular	Minimal Histiocyte, Mild
[Ectasia TGLs = 12-21]			
[Infiltration Cellular TGLs = 15-23]			
* Lymph Node, Mandibular	Lymph Sinus	Ectasia Hyperplasia Proliferation	Minimal Lymphocyte, Minimal Plasma Cell, Mild
[Proliferation TGLs = 14-9]			
* Mammary Gland		Hyperplasia	Minimal
Mesentery	Artery	Inflammation	Chronic Active, Marked
[Inflammation TGLs = 7-14,15,22]			
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus Acinus Artery	Adenoma Atrophy Hyperplasia Inflammation	Minimal Moderate Chronic Active, Mild
[Adenoma TGLs = 8-6]			
[Hyperplasia TGLs = 8-6]			
* Parathyroid Gland		Adenoma	
[Adenoma TGLs = 16-8]			
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Prostate	Artery	Inflammation	Chronic Active, Mild
* Seminal Vesicle		Decreased Secretory Fluid	Marked
[Decreased Secretory Fluid TGLs = 3-16]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 793

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-793

ORGAN AND ACCOUNTABLE SITE STATUS

Skeletal Muscle		Degeneration	Minimal
* Skin		Cyst Epithelial Inclusion	
	[Cyst Epithelial Inclusion TGLs = 1-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Stomach, Forestomach	Artery	Inflammation	Chronic Active, Minimal
Testis	Germ Cell	Degeneration	Mild
	Interstit Cell	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Marked
	[Degeneration TGLs = 19-16A]		
* Thymus		Atrophy	Mild
	Artery	Inflammation	Chronic Active, Moderate
* Thyroid Gland	C Cell	Adenoma	
	[Adenoma TGLs = 17-8]		
Trigeminal Ganglion		Degeneration	Minimal
* Urinary Bladder	Serosa	Inflammation	Chronic Active, Moderate

Animal Note: TGLs 2,4,6,18 = NCL (No Corresponding Lesion)
TGL 9 = NCL (No Corresponding Lesion) tissue unavailable for evaluation.

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 795

TRT#: 3

SEX: Male

DAY ON TEST: 665

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-795

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Parathyroid Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- * Aorta
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Small, Jejunum
- * Mammary Gland
- * Prostate
- * Skin
- Trigeminal Ganglion
- * Bone Marrow
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Nerve Trigeminal
- * Salivary Glands
- * Spinal Cord, Cervical
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Large, Cecum
- * Intestine Small, Ileum

OBSERVATIONS

- * Adrenal Cortex Hyperplasia Mild
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Epididymis Exfoliated Germ Cell Minimal
 - Hypospermia Marked
- * Heart Cardiomyopathy Mild
 - Ventricle Rgt Cardiomyopathy Mild
 - Nephropathy Chronicprogr, Marked
- * Kidney Nephropathy Chronicprogr, Marked
 - [Nephropathy TGLs = 4-13]
- * Liver Necrosis Minimal
- * Lung Congestion Moderate
 - [Congestion TGLs = 2-10]
- * Nose Accumulation, Hyaline Droplet Marked
- * Pancreas Adenoma Multiple
 - Acinus Hyperplasia Marked
 - [Adenoma TGLs = 6-6]
- * Peripheral Nerve, Sciatic Degeneration Mild
- * Peripheral Nerve, Tibial Degeneration Moderate
- * Preputial Gland Inflammation Chronic Active, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 795

TRT#: 3

SEX: Male

DAY ON TEST: 665

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-795

ORGAN AND ACCOUNTABLE SITE STATUS

[Inflammation TGLs = 7-16]

* Spinal Cord, Lumbar

Degeneration

Moderate

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

White Pulp

Atrophy

Minimal

Extramedullary Hematopoiesis

Mild

Pigment

Minimal

Degeneration

Moderate

Testis

Germ Cell

Note: One testis is normal.

[Degeneration TGLs = 1-16A]

* Thymus

Atrophy

Marked

* Thyroid Gland

Chemodectoma Malignant

Metastatic (Tissue Nos)

Tissue NOS

Chemodectoma Malignant

Note: Tumor in connective tissue surrounding thyroid glands.

[Chemodectoma Malignant TGLs = 8-8]

* Trachea

Chemodectoma Malignant

Metastatic (Tissue Nos)

PRIMARY CAUSE OF DEATH - Tissue NOS Chemodectoma Malignant

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 796

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-796

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Mammary Gland
- * Thyroid Gland
- * Aorta
- * Eye
- * Intestine Small, Duodenum
- * Prostate
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Ileum
- * Seminal Vesicle
- Trigeminal Ganglion
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Mild
- * Brain
 - Pineal Gland
 - Hypertrophy
 - Minimal
 - Pineal Gland
 - Mineral
 - Minimal
 - Epididymis
 - Vacuolation, Cytoplasmic
 - Minimal
 - Exfoliated Germ Cell
 - Moderate
 - Hypospermia
 - Marked
 - * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Mild
 - [Cardiomyopathy TGLs = 5-11,22]
 - * Intestine Large, Colon
 - Edema
 - Minimal
 - * Islets, Pancreatic
 - Hyperplasia
 - Mild
 - * Kidney
 - Nephropathy
 - Chronicprogr, Mild
 - [Nephropathy TGLs = 9-13]
 - * Liver
 - Bile Duct
 - Cyst
 - Bile Duct
 - Hyperplasia
 - Minimal
 - Hepatocyte
 - Mixed Cell Focus
 - [Vacuolation, Cytoplasmic TGLs = 8-12]
 - Vacuolation, Cytoplasmic
 - Minimal
 - * Lung
 - Alveolar/Bronchiolar Carcinoma
 - Hyperplasia
 - Mild
 - [Alveolar/Bronchiolar Carcinoma TGLs = 4-10,23]
 - * Lymph Node, Mandibular
 - Epithlm Alvlus
 - Ectasia
 - Mild
 - * Lymph Node, Mesenteric
 - Lymph Sinus
 - Erythrophagocytosis
 - Minimal
 - [Erythrophagocytosis TGLs = 3-15]
 - * Nerve Trigeminal
 - Degeneration
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 796

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-796

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Pancreas	Acinus	Hyperplasia	Moderate
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Intermed	Cyst	
	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Mild
* Salivary Glands	Parotid GI	Atrophy	Mild
Skeletal Muscle		Degeneration	Mild
* Skin		Cyst Epithelial Inclusion	
	[Cyst Epithelial Inclusion TGLs = 1-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Stomach, Forestomach	Epithelium	Degeneration	Mild
		Edema	Minimal
	Epithelium	Hyperplasia	Minimal
		Inflammation	Acute, Mild
Testis	Germ Cell	Degeneration	Mild
	Note: Abnormal spermatogenesis unilaterally.		
	[Degeneration TGLs = 2-16A]		
* Thymus		Alveolar/Bronchiolar Carcinoma	Metastatic (Lung)
	[Alveolar/Bronchiolar Carcinoma TGLs = 6,6]		

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 797

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-797

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Seminal Vesicle
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Salivary Glands
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Adrenal Medulla
 - Pheochromocytoma Benign
- [Pheochromocytoma Benign TGLs = 4-7]
- * Brain
 - Pineal Gland
- * Eye
 - Cornea, Epithelium
 - Cornea
- * Heart
 - Cardiomyopathy
- * Kidney
 - Nephropathy
- [Nephropathy TGLs = 3-13]
- * Liver
 - Mixed Cell Focus
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Adenoma
- * Preputial Gland
 - Duct
 - Dilation
- [Dilation TGLs = 2-16]
- Skeletal Muscle
 - Degeneration
- * Skin
 - Hyperkeratosis

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 797

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-797

ORGAN AND ACCOUNTABLE SITE STATUS

	Epidermis	Hyperplasia	Minimal
[Hyperkeratosis TGLs = 1-20]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Moderate

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 798

TRT#: 3

SEX: Male

DAY ON TEST: 670

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-798

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|----------------------|-------------------|-----------------------------|
| * Epididymis | * Esophagus | * Harderian Gland | * Intestine Small, Duodenum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Liver | * Lung |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pituitary Gland | * Salivary Glands |
| * Seminal Vesicle | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Stomach, Forestomach | * Thyroid Gland | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | | | |

AUTO PRECLUDES DIAG.

- | | |
|--------------------------|--------------------------|
| * Intestine Large, Cecum | * Intestine Small, Ileum |
|--------------------------|--------------------------|

OBSERVATIONS

- | | | | |
|-------------------------------|--------------------|--------------------------|--------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Aorta | | Aneurysm | Marked |
| [Aneurysm TGLs = 5-11] | | | |
| * Bone | | Fibrous Osteodystrophy | Minimal |
| * Bone Marrow | | Hypercellularity | Mild |
| * Brain | Pineal Gland | Vacuolation, Cytoplasmic | Moderate |
| * Eye | Cornea, Epithelium | Hyperplasia | Minimal |
| | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Mild |
| * Intestine Large, Colon | Artery | Inflammation | Chronic Active, Mild |
| * Intestine Large, Rectum | Artery | Inflammation | Chronic Active, Moderate |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| [Nephropathy TGLs = 1,2-13] | | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Respirat Epith | Hyperplasia | Mild |
| * Pancreas | | Carcinoma | |
| | Acinus | Hyperplasia | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 798

TRT#: 3

SEX: Male

DAY ON TEST: 670

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-798

ORGAN AND ACCOUNTABLE SITE STATUS

[Carcinoma TGLs = 4-6]	Artery	Inflammation	Chronic Active, Moderate
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Mild
* Prostate		Inflammation	Chronic Active, Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Mild
* Stomach, Glandular	Artery	Inflammation	Chronic Active, Mild
Testis	Artery	Inflammation	Chronic Active, Marked
* Thymus		Atrophy	Minimal

PRIMARY CAUSE OF DEATH - Aorta Aneurysm

Animal Note: TGL 3 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 799

TRT#: 3

SEX: Male

DAY ON TEST: 582

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-799

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Mammary Gland
- * Salivary Glands
- * Thyroid Gland
- * Brain
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Nerve Trigeminal
- * Skin
- * Trachea
- * Esophagus
- * Intestine Small, Duodenum
- * Liver
- * Pituitary Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Harderian Gland
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Large, Rectum

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Vacuolation, Cytoplasmic
- * Aorta
 - Mineral
- * Bone
 - Fibrous Osteodystrophy
- * Bone Marrow
 - Hypercellularity
- * Epididymis
 - Exfoliated Germ Cell
 - Hypospermia
- * Eye
 - Cornea
 - Inflammation
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Artery
 - Cardiomyopathy
 - Mineral
- * Kidney
 - Renal Tubule
 - Cyst
 - Nephropathy
- [Cyst TGLs = 9,10-13]
- [Nephropathy TGLs = 8,12-13]
- * Lung
 - Alveolus
 - Infiltration Cellular
- [Infiltration Cellular TGLs = 5-10]
- Lymph Node
 - Mediastinal
 - Artery, Mediastinal
 - Artery, Mediastinal
- [Hemorrhage TGLs = 2,3-20]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 799

TRT#: 3

SEX: Male

DAY ON TEST: 582

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-799

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mandibular		Proliferation	Plasma Cell, Minimal
Mesentery	Artery	Mineral	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Minimal
	Artery	Inflammation	Chronic Active, Mild
	Artery	Mineral	Mild
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland	Duct	Dilation	Mild
[Dilation TGLs = 11-16]			
* Seminal Vesicle		Decreased Secretory Fluid	Mild
[Decreased Secretory Fluid TGLs = 1-16]			
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
[Atrophy TGLs = 7-12]			
* Stomach, Glandular		Mineral	Mild
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Moderate
[Degeneration TGLs = 6-16A]			
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 800

TRT#: 3

SEX: Male

DAY ON TEST: 636

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-800

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Stomach, Forestomach
- * Urinary Bladder
- * Esophagus
- * Intestine Small, Duodenum
- * Prostate
- * Thyroid Gland
- * Harderian Gland
- * Intestine Small, Ileum
- * Skin
- * Trachea
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Spinal Cord, Cervical
- Trigeminal Ganglion

MISSING

- * Mammary Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy Mild
 - Vacuolation, Cytoplasmic Mild
- * Adrenal Medulla
 - Hyperplasia Mild
 - Pheochromocytoma Malignant
- [Pheochromocytoma Malignant TGLs = 4-7]
 - Bilateral
- * Aorta
 - Mineral Moderate
- * Bone
 - Fibrous Osteodystrophy Minimal
- * Brain
 - Mineral Minimal
 - Pineal Gland
 - Vacuolation, Cytoplasmic Mild
- Note: Olfactory bulbs unavailable for evaluation.
- * Epididymis
 - Exfoliated Germ Cell Moderate
 - Hypospermia Moderate
- * Eye
 - Cornea, Epithelium
 - Hyperplasia Minimal
 - Antr Chamber
 - Inflammation Acute, Mild
 - Cornea
 - Inflammation Acute, Mild
- * Heart
 - Cardiomyopathy Moderate
 - Ventricl Rgt
 - Cardiomyopathy Mild
 - Myocardium
 - Mineral Mild
 - Artery
 - Mineral Moderate
- * Intestine Large, Cecum
 - Artery
 - Inflammation Chronic Active, Minimal
- * Islets, Pancreatic
 - Carcinoma
- [Carcinoma TGLs = 6-6]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 800

TRT#: 3

SEX: Male

DAY ON TEST: 636

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-800

ORGAN AND ACCOUNTABLE SITE STATUS

* Kidney		Nephropathy	Chronicprogr, Marked
	[Nephropathy TGLs = 3,7-13]		
* Liver	Artery	Inflammation	Chronic Active, Mild
* Lung	Epithlm Alvlus	Hyperplasia	Moderate
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	[Hyperplasia TGLs = 5-10]		
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Mild
		Proliferation	Plasma Cell, Mild
Mesentery	Artery	Inflammation	Chronic Active, Moderate
	Vein	Inflammation	Chronic Active, Mild
	Artery	Mineral	Mild
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
	Respirat Epith	Hyperplasia	Mild
* Pancreas	Acinus	Hyperplasia	Marked
	Artery	Inflammation	Chronic Active, Mild
	Artery	Mineral	Mild
* Parathyroid Gland		Hyperplasia	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Hyperplasia	Marked
	[Hyperplasia TGLs = 8-4]		
* Preputial Gland	Duct	Dilation	Mild
* Salivary Glands	Parotid GI	Atrophy	Mild
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Minimal
	Red Pulp	Atrophy	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 800

TRT#: 3

SEX: Male

DAY ON TEST: 636

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-800

ORGAN AND ACCOUNTABLE SITE STATUS

* Stomach, Glandular		Pigment	Mild
		Inflammation	Chronic Active, Mild
		Mineral	Marked
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Moderate
[Degeneration	TGLs = 2-16A]		
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Adrenal Medulla Bilateral Pheochromocytoma Malignant

Animal Note: TGL 1 = NCL (No Corresponding Lesion) as tissue available for evaluation is uninterpretable. Only keratin and inflammatory exudate present.

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 801

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-801

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Parathyroid Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	Testis	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Eye	Retina	Atrophy	Minimal
* Heart		Cardiomyopathy	Minimal
	Myocardium	Schwannoma Malignant	
* Islets, Pancreatic		Carcinoma	Multiple
	[Carcinoma TGLs = 6-6,20]		
* Kidney		Nephropathy	Chronicprogr, Minimal
* Liver	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	[Infiltration Cellular TGLs = 4-20]		
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Hyperplasia	Marked
	[Hyperplasia TGLs = 2-6]		
* Peripheral Nerve, Sciatic		Degeneration	Marked
* Peripheral Nerve, Tibial		Degeneration	Marked
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	
	[Adenoma TGLs = 5-4]		
* Preputial Gland		Inflammation	Chronic Active, Minimal
Skeletal Muscle		Degeneration	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 801

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-801

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Moderate
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGLs 1,3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 804

TRT#: 3

SEX: Male

DAY ON TEST: 656

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-804

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Esophagus	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver
* Lung	* Lymph Node, Mesenteric	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Mild
		Vacuolation, Cytoplasmic	Minimal
* Bone		Fibrous Osteodystrophy	Minimal
* Bone Marrow		Hemorrhage	Mild
		Hypercellularity	Marked
* Brain		Compression	Mild
	Pineal Gland	Vacuolation, Cytoplasmic	Moderate
	[Compression TGLs = 9-2]		
* Epididymis		Hypospermia	Marked
	[Hypospermia TGLs = 3-16A]		
* Eye	Cornea	Inflammation	Acute, Minimal
* Heart		Cardiomyopathy	Moderate
	Ventricl Rgt	Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Cyst	
		Nephropathy	Chronicprogr, Marked
	[Cyst TGLs = 8-13]		
	[Nephropathy TGLs = 5,6,7-13]		
* Lymph Node, Mandibular	Lymph Sinus	Ectasia	Marked
		Proliferation	Plasma Cell, Marked
	[Ectasia TGLs = 16-9]		
* Mammary Gland	Duct	Dilation	Moderate
	[Dilation TGLs = 12-9]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 804

TRT#: 3

SEX: Male

DAY ON TEST: 656

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-804

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Hyperplasia	Mild
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 10-4]			
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Moderate
* Prostate		Decreased Secretory Fluid	Mild
* Salivary Glands	Parotid GI	Inflammation	Acute, Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Marked
Skeletal Muscle		Degeneration	Marked
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Marked
[Degeneration TGLs = 2-16A]			
* Thymus		Atrophy	Marked
		Cyst	
* Thyroid Gland	Follicular Cel	Adenoma	Multiple
[Adenoma TGLs = 14-8]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 1,4,11,13 = NCL (No Corresponding Lesion)

Animal Note: TGL 15 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 805

TRT#: 3

SEX: Male

DAY ON TEST: 720

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-805

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Aorta | * Bone | * Epididymis |
| * Esophagus | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Prostate | * Seminal Vesicle |
| * Skin | * Spinal Cord, Cervical | * Spinal Cord, Thoracic | * Stomach, Glandular |
| Testis | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

- | | |
|----------|---------------------|
| * Thymus | Trigeminal Ganglion |
|----------|---------------------|

OBSERVATIONS

- | | | | |
|--------------------------|--------------------------------------|-------------------------------|------------------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | | Vacuolation, Cytoplasmic | Minimal |
| | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| * Eye | Cornea, Epithelium | Hyperplasia | Minimal |
| | Cornea | Inflammation | Acute, Mild |
| | Cornea | Neovascularization | Minimal |
| * Harderian Gland | | Hypertrophy | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Carcinoma | |
| | [Carcinoma TGLs = 7-6] | | |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| | [Nephropathy TGLs = 5-13] | | |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| * Lung | | Schwannoma Malignant | Metastatic (Salivary Glands) |
| | [Schwannoma Malignant TGLs = 3-10] | | |
| * Lymph Node, Mandibular | | Schwannoma Malignant | Metastatic (Salivary Glands) |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | | Inflammation | Suppurative, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 805

TRT#: 3

SEX: Male

DAY ON TEST: 720

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-805

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Moderate
[Hyperplasia TGLs = 7-6]			
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Intermed	Cyst	
	Pars Intermed	Hyperplasia	Marked
* Preputial Gland	Duct	Dilation	Mild
* Salivary Glands		Schwannoma Malignant	
[Schwannoma Malignant TGLs = 1-9,20]			
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Inflammation	Chronic Active, Mild

PRIMARY CAUSE OF DEATH - Salivary Glands Schwannoma Malignant

Animal Note: TGLs 2,4,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 806

TRT#: 3

SEX: Male

DAY ON TEST: 715

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-806

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Lung
- * Salivary Glands
- * Stomach, Glandular
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Trachea
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Skin
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Bone
 - Fibrous Osteodystrophy
- * Eye
 - Cornea, Epithelium
 - Cornea, Epithelium
 - Cornea
 - Cornea
- * Heart
 - Ventricl Rgt
 - [Cardiomyopathy TGLs = 12-11]
- * Islets, Pancreatic
 - [Carcinoma TGLs = 8-6]
- * Kidney
 - Renal Tubule
 - [Nephropathy TGLs = 5,6,7-13]
- * Liver
 - Bile Duct
- * Lymph Node, Mandibular
 - Lymph Sinus
- Mesentery
 - Artery
- * Nerve Trigeminal
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Fibrous Osteodystrophy
 - Degeneration
 - Hyperplasia
 - Inflammation
 - Neovascularization
 - Cardiomyopathy
 - Cardiomyopathy
 - Carcinoma
 - Hyperplasia
 - Nephropathy
 - Hyperplasia
 - Ectasia
 - Hyperplasia
 - Proliferation
 - Inflammation
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 806

TRT#: 3

SEX: Male

DAY ON TEST: 715

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-806

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Adenoma Hyperplasia	Moderate
	[Adenoma TGLs = 8-14]		
	[Hyperplasia TGLs = 8-6]		
* Parathyroid Gland		Hyperplasia	Mild
	[Hyperplasia TGLs = 4-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Mild
* Prostate	Epithelium	Hyperplasia Inflammation	Minimal Acute, Minimal
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Hyperplasia Pigment	Lymphocyte, Mild Minimal
* Stomach, Forestomach		Edema	Minimal
Testis	Interstit Cell Artery	Adenoma Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 1,2,3,9,10,11 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 807

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-807

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- Skeletal Muscle
- Testis
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Lung
- * Prostate
- * Skin
- * Thyroid Gland
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 Mild
- * Adrenal Medulla
 - Hyperplasia
 Minimal
- * Heart
 - Cardiomyopathy
 - Ventricl Rgt
 - Cardiomyopathy
 Minimal
- * Islets, Pancreatic
 - Adenoma
 Minimal
- [Adenoma TGLs = 4-6]
- * Kidney
 - Nephropathy
 Chronicprogr, Mild
- * Liver
 - Cholangioma
 - Mixed Cell Focus
- [Cholangioma TGLs = 2-12]
- [Mixed Cell Focus TGLs = 1-12]
- * Lymph Node, Mandibular
 - Proliferation
 Plasma Cell, Mild
- * Nerve Trigeminal
 - Degeneration
 Mild
- * Nose
 - Accumulation, Hyaline Droplet
 Mild
- * Pancreas
 - Adenoma
 - Olfactory Epi
 - Hyperplasia
 - Acinus
 - Hyperplasia
 Moderate
- [Adenoma TGLs = 4-6]
- [Hyperplasia TGLs = 4-6]
- * Peripheral Nerve, Sciatic
 - Degeneration
 Moderate
- * Peripheral Nerve, Tibial
 - Degeneration
 Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 807

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-807

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Note: Pars distalis available for evaluation.			
* Preputial Gland	Duct	Dilation Inflammation	Moderate Chronic Active, Mild
[Dilation TGLs = 5-16]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis Pigment	Minimal Minimal
* Thymus		Atrophy	Mild
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 808

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-808

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Aorta | * Bone | * Brain |
| * Epididymis | * Esophagus | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Trachea | * Urinary Bladder | | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|-------------------------|----------------------|
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Eye | Retina | Atrophy | Minimal |
| | Cornea | Fibrosis | Minimal |
| | Cornea, Epithelium | Hyperplasia | Minimal |
| | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Mild |
| * Kidney | Renal Tubule | Cyst | |
| | | Nephropathy | Chronicprogr, Marked |
| | [Cyst TGLs = 3-13] | | |
| | [Nephropathy TGLs = 2,10-13] | | |
| * Liver | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 4-10] | | |
| Lymph Node | Lumbar, Lymph Sinus | Ectasia | Mild |
| | [Ectasia TGLs = 6-20] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 808

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-808

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Proliferation	Plasma Cell, Mild
* Nose	Olfactory Epi	Degeneration	Mild
* Pancreas		Accumulation, Hyaline Droplet	Mild
	Acinus	Adenoma	Multiple
		Hyperplasia	Moderate
	[Adenoma TGLs = 7-6]		
	[Hyperplasia TGLs = 7-6,14]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 8-4]		
* Preputial Gland	Duct	Dilation	Moderate
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Mild
* Thyroid Gland	Follicular Cel	Hypertrophy	Mild
	[Hypertrophy TGLs = 5-8]		

Animal Note: TGL 9 = NCL (No Corresponding Lesion)

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 810

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-810

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Mammary Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Pituitary Gland
- * Stomach, Forestomach
- * Trachea
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Salivary Glands
- * Stomach, Glandular
- Trigeminal Ganglion
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- Skeletal Muscle
- Testis
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Minimal
 - Hypertrophy Mild
 - Vacuolation, Cytoplasmic Minimal
- * Adrenal Medulla
 - Hyperplasia Moderate
 - Pheochromocytoma Benign
- * Bone Marrow
 - Hypercellularity Mild
- * Epididymis
 - Inflammation Chronic Active, Minimal
- * Heart
 - Cardiomyopathy Minimal
 - Ventricl Rgt
 - Cardiomyopathy Minimal
 - [Cardiomyopathy TGLs = 13-23]
- * Islets, Pancreatic
 - Adenoma
 - [Adenoma TGLs = 15-6]
- * Kidney
 - Renal Tubule
 - Perirenal Tiss
 - Cyst
 - Lymphoma Malignant
 - Nephropathy Chronicprogr, Moderate
 - [Nephropathy TGLs = 7,8-13]
- * Liver
 - Lymphoma Malignant
 - Mixed Cell Focus
 - [Lymphoma Malignant TGLs = 9-12]
- * Lung
 - Hemorrhage Minimal
 - Lymphoma Malignant
 - [Hemorrhage TGLs = 16-10]
 - [Lymphoma Malignant TGLs = 16-10]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 810

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-810

ORGAN AND ACCOUNTABLE SITE STATUS

Lymph Node	Lymph Sinus, Mediastinal	Ectasia	Moderate
	Mediastinal	Erythrophagocytosis	Minimal
	Mediastinal	Lymphoma Malignant	
	[Ectasia TGLs = 10-23]		
	[Erythrophagocytosis TGLs = 11-23]		
	[Lymphoma Malignant TGLs = 10-23]		
* Lymph Node, Mandibular		Lymphoma Malignant	
* Lymph Node, Mesenteric		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 14-15]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
		Foreign Body	
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Minimal
* Pancreas	Acinus	Hyperplasia	Mild
	[Hyperplasia TGLs = 15-6]		
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Marked
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland			
	Note: Pars distalis available for evaluation.		
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Prostate		Decreased Secretory Fluid	Mild
		Inflammation	Chronic Active, Minimal
		Lymphoma Malignant	
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
		Inflammation	Chronic Active, Minimal
		Lymphoma Malignant	
	[Decreased Secretory Fluid TGLs = 4-16]		
* Skin		Cyst Epithelial Inclusion	
		Keratoacanthoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 810

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-810

ORGAN AND ACCOUNTABLE SITE STATUS

	Subcut Tiss	Lipoma	
	[Cyst Epithelial Inclusion TGLs = 1-20]		
	[Keratoacanthoma TGLs = 3-22]		
	[Lipoma TGLs = 2-21]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 5,6-12]		
* Thymus		Atrophy	Moderate
		Ectopic Thyroid	

Animal Note: TGL 12 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 811

TRT#: 3

SEX: Male

DAY ON TEST: 723

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-811

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric Testis
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Salivary Glands
- * Trachea
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Stomach, Forestomach
- Trigeminal Ganglion

MISSING

- * Mammary Gland

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Adenoma
- * Adrenal Medulla
 - Pheochromocytoma Benign
- [Pheochromocytoma Benign TGLs = 10-7]
- * Bone Marrow
 - Hypercellularity
- * Heart
 - Cardiomyopathy
 - Cardiomyopathy
 - Necrosis
 - Carcinoma
- Ventricl Rgt Artery
- * Islets, Pancreatic
 - Carcinoma
- [Carcinoma TGLs = 7-6]
- * Kidney
 - Renal Tubule
 - Cyst
 - Nephropathy
- [Cyst TGLs = 1-13]
- [Nephropathy TGLs = 2,3-13]
- * Liver
 - Mixed Cell Focus
- * Lung
 - Congestion
 - Infiltration Cellular
- Alveolus
- [Congestion TGLs = 5-10]
- * Lymph Node, Mandibular
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet

Marked
Mild
Mild
Mild
Chronicprogr, Moderate

Minimal
Histiocyte, Minimal

Plasma Cell, Mild
Mild
Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 811

TRT#: 3

SEX: Male

DAY ON TEST: 723

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-811

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Olfactory Epi	Metaplasia	Respiratory, Mild
	Acinus	Adenoma	Minimal
	Acinus	Atrophy	Mild
	[Adenoma TGLs = 7-6]	Hyperplasia	
* Parathyroid Gland		Hyperplasia	Mild
	[Hyperplasia TGLs = 11-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Marked
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland		Inflammation	Chronic Active, Mild
* Prostate	Epithelium	Hyperplasia	Mild
		Inflammation	Chronic Active, Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
	[Decreased Secretory Fluid TGLs = 9-16]		
Skeletal Muscle		Degeneration	Moderate
* Skin	Subcut Tiss	Fibroma	
	[Fibroma TGLs = 8-20,21RT]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibroma

Animal Note: TGLs 4,6,12 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 812

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-812

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|-----------------------------|--|---|--|
| * Adrenal Medulla | | Pheochromocytoma Benign
Pheochromocytoma Malignant | |
| | [Pheochromocytoma Benign TGLs = 4-7] | | |
| * Eye | Cornea, Epithelium
Cornea
Cornea | Hyperplasia
Inflammation
Neovascularization | Mild
Acute, Minimal
Mild |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 5,6,7-13] | | |
| * Liver | | Clear Cell Focus
Eosinophilic Focus | |
| * Lung | | Inflammation | Chronic Active, Minimal |
| Lymph Node | Iliac, Lymph Sinus | Ectasia | Minimal |
| | [Ectasia TGLs = 10-20] | | |
| * Lymph Node, Mandibular | | Hyperplasia
Proliferation | Lymphocyte, Mild
Plasma Cell, Minimal |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Hyperplasia | Marked |
| | [Hyperplasia TGLs = 8-6] | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 812

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-812

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Mild
	[Dilation TGLs = 1,2-16]		
* Prostate	Epithelium	Hyperplasia	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
Testis	Artery	Inflammation	Chronic Active, Mild
* Thymus		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Moderate
	[Hyperplasia TGLs = 11-8]		
Tissue NOS	Abdominal, Fat	Inflammation	Chronic Active, Marked
	[Inflammation TGLs = 3-20]		
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 813

TRT#: 3

SEX: Male

DAY ON TEST: 599

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-813

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Mammary Gland
- * Seminal Vesicle
- * Spinal Cord, Thoracic
- * Brain
- * Islets, Pancreatic
- * Nerve Trigeminal
- Skeletal Muscle
- * Stomach, Forestomach
- * Esophagus
- * Lung
- * Prostate
- * Skin
- * Thyroid Gland

MISSING

- * Parathyroid Gland
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Intestine Large, Rectum
- * Stomach, Glandular
- * Intestine Small, Duodenum
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Bone Marrow
- * Epididymis
- * Heart
- * Kidney
- * Liver
- * Lymph Node, Mandibular
- * Nose
- * Pancreas
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- Hyperplasia
- Pheochromocytoma Benign
- Hypercellularity
- Hypospermia
- Cardiomyopathy
- Ventricl Rgt
- Nephropathy
- Extramedullary Hematopoiesis
- Bile Duct
- Hyperplasia
- Mixed Cell Focus
- Hyperplasia
- Proliferation
- Accumulation, Hyaline Droplet
- Hyperplasia
- Degeneration
- Degeneration
- Mild
- Moderate
- Marked
- Minimal
- Minimal
- Chronicprogr, Mild
- Minimal
- Minimal
- Lymphocyte, Mild
- Plasma Cell, Minimal
- Moderate
- Mild
- Mild
- Mild

[Hyperplasia TGLs = 2-9]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 813

TRT#: 3

SEX: Male

DAY ON TEST: 599

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-813

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Preputial Gland		Inflammation	Chronic Active, Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Marked
Testis	Germ Cell	Degeneration	Moderate
		Edema	Moderate
	[Degeneration TGLs = 3-16A]		
* Thymus		Atrophy	Mild

PRIMARY CAUSE OF DEATH - UNCERTAIN

Animal Note: TGLs 1,4,5,6,7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 814

TRT#: 3

SEX: Male

DAY ON TEST: 486

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-814

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric | * Nerve Trigeminal |
| * Pancreas | * Prostate | * Seminal Vesicle | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Spinal Cord, Lumbar | * Spinal Cord, Thoracic |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum

OBSERVATIONS

- | | | | |
|---|---------------|-------------------------------|------------------------|
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | | Compression | Mild |
| Note: Olfactory bulbs not available for evaluation.
[Compression TGLs = 7-2] | | | |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| * Heart | Ventricl Rgt | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Hepatocyte | Necrosis | Minimal |
| | Kupffer Cell | Pigment | Minimal |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Moderate |
| * Mammary Gland | Duct | Dilation | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| Oral Mucosa | | Ulcer | Marked |
| [Ulcer TGLs = 4-20] | | | |
| * Parathyroid Gland | | Hyperplasia | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 814

TRT#: 3

SEX: Male

DAY ON TEST: 486

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-814

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 5-4]

* Preputial Gland		Inflammation	Chronic Active, Minimal
* Salivary Glands	Parotid GI	Atrophy	Moderate
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Inflammation	Chronic Active, Minimal
		Ulcer	Mild
Testis	Germ Cell	Degeneration	Minimal
	[Degeneration TGLs = 1-16A]		
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tooth		Dysplasia	
	[Dysplasia TGLs = 6-20]		
Trigeminal Ganglion		Degeneration	Moderate

Note: Likely secondary to adjacent pituitary tumor.

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGLs 2,3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 815

TRT#: 3

SEX: Male

DAY ON TEST: 702

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-815

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Rectum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone
- * Esophagus
- * Intestine Small, Ileum
- * Pituitary Gland
- * Stomach, Glandular
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Lymph Node, Mesenteric
- * Salivary Glands
- Testis
- * Brain
- * Intestine Large, Colon
- * Pancreas
- * Skin
- * Thyroid Gland

MISSING

- * Mammary Gland

AUTO PRECLUDES DIAG.

- * Eye
- * Trachea
- * Intestine Large, Cecum
- * Intestine Small, Duodenum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - * Adrenal Medulla
 - * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
 - * Heart
 - Atrium
 - * Islets, Pancreatic
 - * Kidney
 - * Liver
 - Bile Duct
 - * Lung
 - [Congestion TGLs = 2-10]
 - * Lymph Node, Mandibular
 - * Nerve Trigeminal
 - * Nose
 - Olfactory Epi
 - * Peripheral Nerve, Sciatic
 - * Peripheral Nerve, Tibial
- Adenoma
 - Pheochromocytoma Benign
 - Cardiomyopathy
 - Thrombus
 - Carcinoma
 - Nephropathy
 - Hyperplasia
 - Mixed Cell Focus
 - Congestion
 - Proliferation
 - Degeneration
 - Accumulation, Hyaline Droplet
 - Degeneration
 - Degeneration
- Mild
 - Mild
 - Chronicprogr, Moderate
 - Minimal
 - Moderate
 - Plasma Cell, Mild
 - Mild
 - Minimal
 - Moderate
 - Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 815

TRT#: 3

SEX: Male

DAY ON TEST: 702

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-815

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland	Duct	Dilation	Mild
* Prostate		Decreased Secretory Fluid	Mild
* Seminal Vesicle		Decreased Secretory Fluid	Mild
	[Decreased Secretory Fluid TGLs = 1-16]		
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Minimal
	Red Pulp	Atrophy	Mild
		Pigment	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Inflammation	Chronic Active, Mild
		Ulcer	Moderate
* Thymus		Atrophy	Mild
		Hemorrhage	Mild

PRIMARY CAUSE OF DEATH - Islets, Pancreatic Carcinoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 923

TRT#: 5

SEX: Male

DAY ON TEST: 636

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-923

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Rectum
- * Salivary Glands
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Lymph Node, Mandibular
- Skeletal Muscle
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Lymph Node, Mesenteric
- * Skin
- * Bone Marrow
- * Intestine Large, Colon
- * Prostate
- * Stomach, Forestomach

MISSING

- * Mammary Gland

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Small, Jejunum
- * Stomach, Glandular
- * Intestine Large, Cecum
- * Islets, Pancreatic
- * Thyroid Gland
- * Intestine Small, Duodenum
- * Pancreas
- * Trachea
- * Intestine Small, Ileum
- * Seminal Vesicle

OBSERVATIONS

- * Adrenal Cortex
- * Brain
- Note: No olfactory bulbs available for evaluation.
- * Epididymis
- * Heart
- * Kidney
- [Nephropathy TGLs = 5,6-13]
- * Liver
- * Lung
- Note: Large pieces of plant-based material in airways.
- [Inflammation TGLs = 3-10]
- Lymph Node
- Mesentery
- * Nerve Trigeminal
- Hyperplasia
- Exfoliated Germ Cell
- Cardiomyopathy
- Ventricl Rgt
- Cardiomyopathy
- Nephropathy
- Vacuolation, Cytoplasmic
- Foreign Body
- Inflammation
- Infiltration Cellular
- Inflammation
- Degeneration
- Minimal
- Minimal
- Mild
- Mild
- Chronicprogr, Marked
- Minimal
- Suppurative, Moderate
- Histiocyte, Mild
- Chronic Active, Minimal
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 923

TRT#: 5

SEX: Male

DAY ON TEST: 636

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-923

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet Foreign Body Inflammation	Mild Suppurative, Moderate
Note: Plant based material present in nasal lumen.			
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland	Duct	Dilation	Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration Degeneration	Mild Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Mild
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Marked
* Thymus		Atrophy	Mild

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 2,4,7,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 924

TRT#: 5

SEX: Male

DAY ON TEST: 709

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-924

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Skin
- * Bone
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Glandular
- * Bone Marrow
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Trachea
- * Esophagus
- * Intestine Small, Duodenum
- * Mammary Gland
- * Seminal Vesicle
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
[Vacuolation, Cytoplasmic TGLs = 2-7]
Vacuolation, Cytoplasmic Mild
- * Adrenal Medulla
[Pheochromocytoma Benign TGLs = 1-7]
Hyperplasia Moderate
Pheochromocytoma Benign
- * Brain
Glioma Malignant
- * Epididymis
Exfoliated Germ Cell Moderate
Hypospermia Moderate
- * Eye
Retrobulbar Schwannoma Malignant Metastatic (Uncertain Primary Site)
- * Harderian Gland
Schwannoma Malignant Metastatic (Uncertain Primary Site)
- * Heart
Ventricl Rgt
Cardiomyopathy Minimal
Cardiomyopathy Mild
- * Islets, Pancreatic
Carcinoma
- * Kidney
Nephropathy Chronicprogr, Moderate
[Nephropathy TGLs = 4-13]
- * Liver
Hepatocyte
[Vacuolation, Cytoplasmic TGLs = 6-12]
Vacuolation, Cytoplasmic Moderate
- * Lung
Congestion Minimal
[Congestion TGLs = 7-10]
- * Lymph Node, Mandibular
Mesentery
[Necrosis TGLs = 10-6]
Proliferation Plasma Cell, Moderate
Necrosis Moderate
- * Nose
Olfactory Epi
Accumulation, Hyaline Droplet Minimal
- * Pancreas
Acinus
Atrophy Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 924

TRT#: 5

SEX: Male

DAY ON TEST: 709

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-924

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic	Artery	Inflammation	Chronic Active, Minimal
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland		Degeneration	Moderate
Note: Increased glial cells.			
* Preputial Gland	Duct	Dilation	Mild
* Prostate	Epithelium	Hyperplasia	Minimal
* Salivary Glands	Parotid Gland	Atrophy	Marked
Skeletal Muscle		Degeneration	Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Moderate
		Pigment	Mild
[Atrophy TGLs = 3-12]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
Testis	Interstit Cell	Adenoma	
	Germ Cell	Degeneration	Mild
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Harderian Gland Schwannoma Malignant Uncertain Primary Site

Animal Note: TGLs 5,8 = NCL (No Corresponding Lesion)

Animal Note: TGL 9 = NST (No Section Taken)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 926

TRT#: 5

SEX: Male

DAY ON TEST: 570

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-926

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Epididymis
- * Esophagus
- * Harderian Gland
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Pancreas
- * Parathyroid Gland
- * Prostate
- * Salivary Glands
- * Seminal Vesicle
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Spinal Cord, Lumbar
- * Stomach, Glandular
- * Testis
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

MISSING

- * Mammary Gland

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic

OBSERVATIONS

- * Brain
 - * Eye
 - Note: Tumor is very anaplastic.
 - Note: Eye - Sarcoma NOS and its metastases have neural and/or myoid morphologic features.
 - [Sarcoma TGLs = 1-5,20]
 - * Harderian GI
 - Note: Both glands present on slide.
 - * Heart
 - * Kidney
 - * Liver
 - * Lung
 - [Congestion TGLs = 3-10]
 - * Lymph Node, Mandibular
 - * Nerve Trigeminal
 - * Nose
- | | | |
|--------------|----------------|------------------------|
| | Sarcoma | Metastatic (Eye) |
| Retrobulbar | Sarcoma | |
| Ventricl Rgt | Cardiomyopathy | Mild |
| | Cardiomyopathy | Mild |
| | Nephropathy | Chronicprogr, Moderate |
| Bile Duct | Hyperplasia | Minimal |
| | Congestion | Moderate |
| | Proliferation | Plasma Cell, Moderate |
| | Degeneration | Minimal |
| | Sarcoma | Metastatic (Eye) |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 926

TRT#: 5

SEX: Male

DAY ON TEST: 570

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-926

ORGAN AND ACCOUNTABLE SITE STATUS

[Sarcoma TGLs = 2-19]

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland		Sarcoma	Metastatic (Eye)
* Preputial Gland	Duct	Dilation	Marked
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Minimal
		Pigment	Moderate
* Stomach, Forestomach		Ulcer	Mild
* Thymus		Atrophy	Marked
Trigeminal Ganglion		Sarcoma	Metastatic (Eye)

PRIMARY CAUSE OF DEATH - Eye Retrobulbar Sarcoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 927

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-927

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|-----------------------------|---------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Epididymis | | Hypospermia | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Carcinoma | |
| [Carcinoma TGLs = 3-20] | | | |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Clear Cell Focus | |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Moderate |
| | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| [Ectasia TGLs = 6-9] | | | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | | Adenoma | |
| | Acinus | Hyperplasia | Moderate |
| [Adenoma TGLs = 5-6] | | | |
| [Hyperplasia TGLs = 5-6] | | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Marked |
| * Peripheral Nerve, Tibial | | Degeneration | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 927

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-927

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Mild
[Dilation TGLs = 1-16]			
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
	Artery	Inflammation	Chronic Active, Mild
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Minimal
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 928

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-928

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Seminal Vesicle
- * Thyroid Gland
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Medulla Bilateral Pheochromocytoma Benign
[Pheochromocytoma Benign TGLs = 3-7]
- * Bone Marrow Hypercellularity Mild
- * Heart Cardiomyopathy Mild
- * Kidney Nephropathy Chronicprogr, Mild
- * Liver Bile Duct Hyperplasia Minimal
Mixed Cell Focus
- * Lung Alveolus Infiltration Cellular Histiocyte, Minimal
[Infiltration Cellular TGLs = 5-10,20]
- * Lymph Node, Mandibular Lymph Sinus Ectasia Moderate
Hyperplasia Lymphocyte, Minimal
Adenocarcinoma
- * Mammary Gland [Adenocarcinoma TGLs = 2-20]
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Minimal
- * Pancreas Acinus Adenoma
Hyperplasia Marked
[Adenoma TGLs = 4-6]
[Hyperplasia TGLs = 4-6,14]
- * Peripheral Nerve, Sciatic Degeneration Moderate
- * Peripheral Nerve, Tibial Degeneration Moderate
- * Pituitary Gland Pars Intermed Cyst
Pars Distalis Hyperplasia Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 928

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-928

ORGAN AND ACCOUNTABLE SITE STATUS

	Pars Intermed	Hyperplasia	Mild
[Hyperplasia TGLs = 6-4]			
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Mild
Skeletal Muscle		Degeneration	Minimal
* Skin		Keratoacanthoma	
[Keratoacanthoma TGLs = 1-21]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Minimal
* Thymus		Atrophy	Mild
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 930

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-930

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Lung | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | Skeletal Muscle |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|-----------------------------|---------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | Meninges | Granular Cell Tumor Benign | |
| * Epididymis | | Exfoliated Germ Cell | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Adenoma | |
| [Adenoma TGLs = 3-6] | | | |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| [Nephropathy TGLs = 2-13] | | | |
| * Liver | | Clear Cell Focus | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Acinus | Hyperplasia | Mild |
| [Hyperplasia TGLs = 3-6] | | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| * Preputial Gland | Duct | Dilation | Minimal |
| * Skin | | Keratoacanthoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 930

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-930

ORGAN AND ACCOUNTABLE SITE STATUS

[Keratoacanthoma TGLs = 1-20]

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 931

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-931

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Aorta | * Bone | * Brain | * Esophagus |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lung | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Pituitary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|--------------------------------------|-------------------------|--------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| | | Hypospermia | Marked |
| * Eye | Retina | Atrophy | Minimal |
| * Heart | Ventricl Rgt | Cardiomyopathy | Mild |
| | Endocardium | Schwannoma Malignant | |
| | [Cardiomyopathy TGLs = 6-20] | | |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| | [Nephropathy TGLs = 4-13] | | |
| * Liver | | Angiectasis | Moderate |
| | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| | [Angiectasis TGLs = 5-12] | | |
| | Lymph Node | Erythrophagocytosis | Minimal |
| | [Erythrophagocytosis TGLs = 10-20] | | |
| * Lymph Node, Mandibular | Mediastinal | | |
| | Lymph Sinus | Ectasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 931

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-931

ORGAN AND ACCOUNTABLE SITE STATUS

		Hyperplasia Proliferation	Lymphocyte, Moderate Plasma Cell, Minimal
[Hyperplasia TGLs = 1-9]			
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Hyperplasia	Mild
[Hyperplasia TGLs = 9-6]			
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Moderate
[Degeneration TGLs = 3-16A]			

Animal Note: TGLs 2,7,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 932

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-932

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Epididymis |
| * Esophagus | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Pituitary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Thymus | * Thyroid Gland | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|-----------------------------|-------------------------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Minimal |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| * Eye | Retina | Atrophy | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Mild |
| | | Mixed Cell Focus | |
| * Lung | Epithlm Alvlus | Hyperplasia | Moderate |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Moderate |
| | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Marked |
| | [Hyperplasia TGLs = 2-6,14] | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Preputial Gland | Duct | Dilation | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 932

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-932

ORGAN AND ACCOUNTABLE SITE STATUS

[Inflammation TGLs = 1-16]	Inflammation	Chronic Active, Minimal
Skeletal Muscle	Degeneration	Minimal
* Spinal Cord, Cervical	Degeneration	Minimal
* Spinal Cord, Lumbar	Degeneration	Mild
* Spinal Cord, Thoracic	Degeneration	Minimal
* Spleen	Extramedullary Hematopoiesis	Minimal

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 933

TRT#: 5

SEX: Male

DAY ON TEST: 645

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-933

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large, Colon	* Intestine Large, Rectum
* Islets, Pancreatic	* Nerve Trigeminal	* Parathyroid Gland	* Seminal Vesicle
Skeletal Muscle	* Stomach, Glandular	Testis	* Thyroid Gland
* Trachea	Trigeminal Ganglion	* Urinary Bladder	

MISSING

* Mammary Gland

AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
--------------------------	-----------------------------	--------------------------	----------------------------

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Minimal
* Bone Marrow		Lymphoma Malignant	
* Brain		Hypercellularity	Marked
	[Lymphoma Malignant TGLs = 7-2]	Lymphoma Malignant	
* Eye		Lymphoma Malignant	
* Heart		Cardiomyopathy	Moderate
* Kidney		Nephropathy	Chronicprogr, Mild
* Liver		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 2,3-12]		
* Lung		Lymphoma Malignant	
Lymph Node	Mediastinal	Lymphoma Malignant	
	Pancreatic	Lymphoma Malignant	
	Bronchial	Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 1-6]		
* Lymph Node, Mandibular		Lymphoma Malignant	
* Lymph Node, Mesenteric		Lymphoma Malignant	
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas		Lymphoma Malignant	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 933

TRT#: 5

SEX: Male

DAY ON TEST: 645

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-933

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland		Inflammation	Chronic Active, Mild
* Prostate		Inflammation	Acute, Marked
		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 6-16]		
* Salivary Glands		Lymphoma Malignant	
* Skin	Subcut Tiss	Lymphoma Malignant	
* Spinal Cord, Cervical		Lymphoma Malignant	
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
		Lymphoma Malignant	
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 4,5-12]		
* Stomach, Forestomach		Lymphoma Malignant	
* Thymus		Atrophy	Mild
		Hemorrhage	Mild

PRIMARY CAUSE OF DEATH - Spleen Lymphoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 934

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-934

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Nose
- Skeletal Muscle
- * Thymus
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Parathyroid Gland
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Eye
 - Choroid
 - Schwannoma Malignant
- * Heart
 - Cardiomyopathy
- * Kidney
 - Nephropathy
 - [Nephropathy TGLs = 2,3-13]
- * Liver
 - Hepatodiaphragmatic Nodule
 - Mixed Cell Focus
 - [Hepatodiaphragmatic Nodule TGLs = 6-12]
- * Lymph Node, Mandibular
 - Lymph Sinus
 - Ectasia
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Pancreas
 - Acinus
 - Hyperplasia
 - [Hyperplasia TGLs = 4-6,14]
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Adenoma
- * Preputial Gland
 - Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 934

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-934

ORGAN AND ACCOUNTABLE SITE STATUS

* Prostate	Epithelium	Hyperplasia	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
Testis	Germ Cell	Degeneration	Minimal
* Thyroid Gland	C Cell	Adenoma	

Animal Note: TGLs 1,5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 935

TRT#: 5

SEX: Male

DAY ON TEST: 610

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-935

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Spinal Cord, Thoracic
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- Skeletal Muscle
- Testis
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Preputial Gland
- * Skin
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy
 - Lymphoma Malignant
- * Adrenal Medulla
 - Hyperplasia
- * Bone Marrow
 - Lymphoma Malignant
- * Brain
 - Edema
 - Hemorrhage
 - Mineral
 - Vacuolation, Cytoplasmic
- Brain Stem
 - Pineal Gland
 - Pineal Gland
- * Heart
 - [Hemorrhage TGLs = 13-1]
 - Ventricl Rgt
 - Cardiomyopathy
 - Lymphoma Malignant
- * Kidney
 - [Nephropathy TGLs = 1-13]
 - Nephropathy
- * Liver
 - Bile Duct
 - Hepatocyte
 - Hepatocyte
 - [Lymphoma Malignant TGLs = 6,7-12]
- * Lung
 - Hyperplasia
 - Lymphoma Malignant
 - Necrosis
 - Vacuolation, Cytoplasmic
 - Inflammation
 - Lymphoma Malignant
- * Lymph Node, Mandibular
 - Lymphoma Malignant
- * Lymph Node, Mesenteric
 - Lymphoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 935

TRT#: 5

SEX: Male

DAY ON TEST: 610

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-935

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet Inflammation	Mild Suppurative, Minimal
Note: Level 3 largely absent.			
* Pancreas	Acinus Artery	Atrophy Inflammation	Minimal Chronic Active, Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis Pars Distalis	Adenoma Cyst	
* Seminal Vesicle		Decreased Secretory Fluid	Mild
[Decreased Secretory Fluid TGLs = 10-16]			
* Spinal Cord, Cervical		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Lymphoma Malignant	
[Lymphoma Malignant TGLs = 3,4,14-12]			
* Stomach, Glandular		Lymphoma Malignant	
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - Spleen Lymphoma Malignant

Animal Note: TGLs 2,5,8,9,11,12 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59
Test Type: CHRONIC
Route: Whole Body Exposure
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
Time Report Requested: 11:58:55
First Dose M/F: 09/16/12 / 09/16/12
Lab: IIT

ANIMAL ID: 937

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-937

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Aorta	* Bone	* Esophagus	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lymph Node, Mesenteric	* Mammary Gland
* Parathyroid Gland	* Seminal Vesicle	Skeletal Muscle	* Skin
* Spinal Cord, Cervical	* Stomach, Forestomach	* Stomach, Glandular	* Trachea
Trigeminal Ganglion	* Urinary Bladder		

MISSING

* Thymus

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	
		Hypertrophy	Mild
* Adrenal Medulla		Hyperplasia	Minimal
		Pheochromocytoma Malignant	
	[Pheochromocytoma Malignant TGLs = 4-7]		
* Bone Marrow		Hypercellularity	Minimal
* Brain		Compression	Minimal
	Pineal Gland	Vacuolation, Cytoplasmic	Moderate
	[Compression TGLs = 6-2]		
* Epididymis		Exfoliated Germ Cell	Minimal
* Eye	Cornea, Epithelium	Hyperplasia	Minimal
	Cornea	Inflammation	Acute, Minimal
	Cornea	Neovascularization	Minimal
	[Hyperplasia TGLs = 1-5.1]		
* Heart		Cardiomyopathy	Mild
	Ventricl Rgt	Cardiomyopathy	Mild
	Artery	Infiltration Cellular	Histiocyte, Minimal
* Islets, Pancreatic		Adenoma	
* Kidney		Nephropathy	Chronicprogr, Moderate
	[Nephropathy TGLs = 5-13]		
* Liver	Bile Duct	Hyperplasia	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 937

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-937

ORGAN AND ACCOUNTABLE SITE STATUS

* Lung	Artery	Mixed Cell Focus Inflammation	Chronic Active, Moderate
* Lymph Node, Mandibular		Hyperplasia Proliferation	Lymphocyte, Mild Plasma Cell, Mild
Mesentery	Artery	Inflammation	Chronic Active, Moderate
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Adenoma	Moderate
	Artery	Hyperplasia Inflammation	Chronic Active, Moderate
[Adenoma TGLs = 3-6.1]			
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 7-4]			
* Preputial Gland	Duct	Dilation Inflammation	Moderate Chronic Active, Minimal
[Dilation TGLs = 2-16]			
* Prostate		Inflammation	Acute, Minimal
* Salivary Glands	Artery	Inflammation	Chronic Active, Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis Pigment	Mild Minimal
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Moderate
* Thyroid Gland	C Cell	Hyperplasia	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 938

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-938

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Trachea
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Mammary Gland
- * Skin
- Trigeminal Ganglion

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Epididymis
 - Hypospermia
- * Harderian Gland
 - Inflammation
- * Islets, Pancreatic
 - Carcinoma
- * Kidney
 - Nephropathy
- * Liver
 - Clear Cell Focus
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 2-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Adenoma

- Marked
- Mild
- Minimal
- Mild
- Granulomatous, Minimal
- Chronicprogr, Mild
- Histiocyte, Mild
- Lymphocyte, Mild
- Plasma Cell, Moderate
- Minimal
- Minimal
- Mild
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 938

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-938

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Minimal
* Prostate		Inflammation	Suppurative, Minimal
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
Testis	Germ Cell	Degeneration	Mild
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Carcinoma	
	[Carcinoma TGLs = 3-8]		

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 939

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-939

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nerve Trigeminal | * Prostate | * Seminal Vesicle | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Stomach, Glandular | * Thymus |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|-----------------------------|---|-------------------------------|--------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 2-7] | | |
| * Brain | | | |
| | Note: Olfactory bulbs unavailable for evaluation. | | |
| * Eye | Cornea | Neovascularization | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| | [Nephropathy TGLs = 3-13] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | | Inflammation | Chronic Active, Moderate |
| * Pancreas | Artery | Inflammation | Chronic Active, Minimal |
| * Parathyroid Gland | | Hyperplasia | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 939

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-939

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland	Duct	Dilation Inflammation	Marked Chronic Active, Mild
[Dilation TGLs = 1-16]			
* Salivary Glands	Parotid GI	Atrophy	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Basal Cell, Mild
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thyroid Gland	C Cell	Hyperplasia	Moderate

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 941

TRT#: 5

SEX: Male

DAY ON TEST: 717

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-941

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Thyroid Gland
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Trachea
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Spinal Cord, Thoracic

OBSERVATIONS

- * Adrenal Cortex
- * Aorta
- * Bone
- * Bone Marrow
- * Epididymis
- * Eye
- * Heart
- * Kidney
- * Liver
- * Lung
- * Lymph Node, Mandibular
- * Mammary Gland
- * Mesentery
- * Nose
- Hyperplasia
- Mineral
- Fibrous Osteodystrophy
- Hypercellularity
- Exfoliated Germ Cell
- Mesothelioma Malignant
- Cornea, Epithelium
- Cornea
- Cornea
- Ventricl Rgt
- Renal Tubule
- Pelvis
- Alveolus
- Artery
- Artery
- Olfactory Epi
- Hyperplasia
- Inflammation
- Mineral
- Accumulation, Hyaline Droplet
- Mild
- Minimal
- Minimal
- Moderate
- Minimal
- Minimal
- Mild
- Acute, Mild
- Minimal
- Mild
- Minimal
- Moderate
- Moderate
- Chronicprogr, Marked
- Mixed Cell Focus
- Infiltration Cellular
- Proliferation
- Hyperplasia
- Inflammation
- Mineral
- Accumulation, Hyaline Droplet
- Mild
- Histiocyte, Mild
- Plasma Cell, Mild
- Minimal
- Chronic Active, Mild
- Minimal
- Mild

[Dilation TGLs = 10,11-13]
[Nephropathy TGLs = 8,9-13]

[Infiltration Cellular TGLs = 12-10]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 941

TRT#: 5

SEX: Male

DAY ON TEST: 717

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-941

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland [Hyperplasia TGLs = 13-8]	Olfactory Epi	Metaplasia Hyperplasia	Respiratory, Minimal Moderate
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland [Dilation TGLs = 2,3-16]	Duct	Dilation	Marked
* Prostate [Carcinoma TGLs = 6-16]		Carcinoma	
* Salivary Glands	Parotid GI	Atrophy	Moderate
	Duct, Parotid GI	Dilation	Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Marked
Skeletal Muscle		Inflammation	Chronic, Mild
* Skin [Neural Crest Tumor TGLs = 1-20]		Degeneration Neural Crest Tumor	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen	White Pulp	Atrophy	Mild
		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Inflammation	Chronic Active, Moderate
* Stomach, Glandular		Mineral	Minimal
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Minimal
		Mesothelioma Malignant	
[Degeneration TGLs = 4-16A]			
* Thymus		Atrophy	Marked
Urethra	Transit Epithe	Papilloma	
* Urinary Bladder		Carcinoma	Metastatic (Prostate)
		Dilation	Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 941

TRT#: 5

SEX: Male

DAY ON TEST: 717

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-941

ORGAN AND ACCOUNTABLE SITE STATUS

Urothelium

Hyperplasia

Minimal

[Dilation TGLs = 5-13]

PRIMARY CAUSE OF DEATH - Prostate Carcinoma

Animal Note: TGL 7 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 942

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-942

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Mammary Gland | * Salivary Glands |
| * Seminal Vesicle | Skeletal Muscle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | Testis | * Trachea | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|---|---------------------------------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Eye | Cornea | Neovascularization | Minimal |
| * Heart | Ventricle Rgt | Cardiomyopathy | Mild |
| | [Cardiomyopathy TGLs = 6-11] | | |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | | Clear Cell Focus | |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 4-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Minimal |
| * Lymph Node, Mesenteric | | Erythrophagocytosis | Mild |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Parathyroid Gland | | Hyperplasia | Marked |
| | [Hyperplasia TGLs = 5-8] | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 942

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-942

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Intermed	Cyst	
	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Marked
		Inflammation	Chronic Active, Moderate
* Prostate		Adenoma	
		Inflammation	Acute, Minimal
[Adenoma TGLs = 1-20]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Hemorrhage	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGLs 2,3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 943

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-943

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Esophagus
- * Intestine Large, Rectum
- * Mammary Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Stomach, Glandular
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Salivary Glands
- Testis
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Spinal Cord, Cervical
- * Trachea

OBSERVATIONS

- * Adrenal Medulla
 - [Pheochromocytoma Benign TGLs = 6-7]
 - * Bone Marrow
 - * Brain
 - * Eye
 - Cornea
 - * Heart
 - Ventricl Rgt
 - * Islets, Pancreatic
 - [Carcinoma TGLs = 9-6]
 - * Kidney
 - [Nephropathy TGLs = 7-13]
 - * Liver
 - Bile Duct
 - * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 10-20]
 - * Lymph Node, Mandibular
 - * Lymph Node, Mesenteric
 - Lymph Sinus
 - * Nerve Trigeminal
 - * Nose
 - Olfactory Epi
 - * Pancreas
- Hyperplasia
Pheochromocytoma Benign
- Hypercellularity
Glioma Malignant
Neovascularization
Cardiomyopathy
Cardiomyopathy
Carcinoma
- Nephropathy
- Clear Cell Focus
Hyperplasia
Mixed Cell Focus
Infiltration Cellular
- Hyperplasia
Proliferation
Ectasia
Degeneration
Accumulation, Hyaline Droplet
Adenoma
- Mild
Mild
Mild
Moderate
Mild
Chronicprogr, Moderate
Minimal
Histiocyte, Minimal
Lymphocyte, Mild
Plasma Cell, Mild
Mild
Mild
Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 943

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-943

ORGAN AND ACCOUNTABLE SITE STATUS

	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Mild
[Adenoma TGLs = 8-21]			
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Marked
* Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation	Marked
[Dilation TGLs = 3-16]			
* Prostate		Adenoma	
		Inflammation	Chronic Active, Mild
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
Skeletal Muscle		Degeneration	Mild
* Skin		Basal Cell Carcinoma	
	Subcut Tiss	Fibroma	
[Basal Cell Carcinoma TGLs = 1-20]			
[Fibroma TGLs = 2-21]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tissue NOS	Fat	Necrosis	Mild
[Necrosis TGLs = 4-20]			
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 944

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-944

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Salivary Glands
- * Stomach, Glandular
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Seminal Vesicle
- * Trachea
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pituitary Gland
- * Skin
- Trigeminal Ganglion
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
- [Degeneration TGLs = 2-7]
- * Adrenal Medulla
 - Hyperplasia
 - Pheochromocytoma Benign
- * Bone
 - Fibrous Osteodystrophy
- * Brain
 - Pineal Gland
 - Retina
 - Cornea, Epithelium
 - Cornea
 - Cornea
- * Eye
 - Atrophy
 - Hyperplasia
 - Inflammation
 - Neovascularization
- [Hyperplasia TGLs = 1-5]
- * Heart
 - Cardiomyopathy
 - Ventricl Rgt
 - Cardiomyopathy
- [Cardiomyopathy TGLs = 5-11]
- * Kidney
 - Renal Tubule
 - Cyst
 - Nephropathy
- [Cyst TGLs = 3-13]
- [Nephropathy TGLs = 4-13]
- * Liver
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 944

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-944

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Mild
		Proliferation	Plasma Cell, Mild
* Lymph Node, Mesenteric		Erythrophagocytosis	Mild
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
	Respirat Epith	Hyperplasia	Minimal
* Pancreas	Artery	Inflammation	Chronic Active, Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
Note: Longitudinal section available for evaluation.			
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Mild
Skeletal Muscle		Degeneration	Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Hyperplasia	Lymphocyte, Mild
		Pigment	Mild
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 945

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-945

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lung
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Seminal Vesicle
- * Thyroid Gland
- * Bone
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Esophagus
- * Intestine Small, Duodenum
- * Liver
- * Prostate
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - * Bone Marrow
 - Hypercellularity
 - * Brain
 - Vacuolation, Cytoplasmic
 - * Epididymis
 - Lymphoma Malignant
 - * Eye
 - Lymphoma Malignant
 - * Harderian Gland
 - Inflammation
 - Lymphoma Malignant
 - * Heart
 - Cardiomyopathy
 - * Kidney
 - Cardiomyopathy
 - * Lymph Node, Mandibular
 - Nephropathy
 - Ectasia
 - Erythrophagocytosis
 - Hyperplasia
 - Proliferation
 - * Lymph Node, Mesenteric
 - Hyperplasia
 - * Nerve Trigeminal
 - Degeneration
 - * Nose
 - Accumulation, Hyaline Droplet
 - * Pancreas
 - Adenoma
- [Ectasia TGLs = 1-9]
- [Erythrophagocytosis TGLs = 2-9]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 945

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-945

ORGAN AND ACCOUNTABLE SITE STATUS

	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Marked
	[Adenoma TGLs = 6-6]		
	[Hyperplasia TGLs = 6-6]		
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
		Lymphoma Malignant	
* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland		Lymphoma Malignant	
Skeletal Muscle		Lymphoma Malignant	
Note: Affecting skeletal muscle around cranium.			
* Skin	Subcut Tiss	Fibroma	
		Inflammation	Chronic Active, Moderate
		Ulcer	Marked
	[Fibroma TGLs = 4-21]		
	[Ulcer TGLs = 3-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Hemorrhage	Minimal
		Pigment	Minimal
Testis		Lymphoma Malignant	
* Thymus		Atrophy	Moderate
Tissue NOS	Fat	Necrosis	Moderate
	[Necrosis TGLs = 5-20]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 946

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-946

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Epididymis |
| * Esophagus | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Lung | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|---|---------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Brain | Glial Cell | Hyperplasia | Moderate |
| Note: Increased glial cells unilaterally in caudate putamen, thalamus and internal capsule. | | | |
| * Eye | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Mild |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Mild |
| * Islets, Pancreatic | | Adenoma | |
| [Adenoma TGLs = 1-6] | | | |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Clear Cell Focus | |
| | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| * Preputial Gland | Duct | Dilation | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 946

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-946

ORGAN AND ACCOUNTABLE SITE STATUS

[Dilation TGLs = 2-16]		Inflammation	Chronic Active, Minimal
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 947

TRT#: 5

SEX: Male

DAY ON TEST: 699

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-947

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- Skeletal Muscle
- Testis
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- * Skin
- * Trachea
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Angiectasis Mild
 - Hyperplasia Minimal
 - Vacuolation, Cytoplasmic Moderate
 - [Angiectasis TGLs = 1-7]
- * Adrenal Medulla
 - Hyperplasia Mild
- * Bone Marrow
 - Hypercellularity Mild
- * Brain
 - Meninges
 - Granular Cell Tumor Malignant
 - Necrosis Mild
- * Eye
 - Retina
 - Atrophy Minimal
 - Cornea
 - Inflammation Acute, Minimal
 - Cornea
 - Neovascularization Minimal
- * Heart
 - Ventricle Rgt
 - Cardiomyopathy Mild
 - Cardiomyopathy Moderate
 - [Cardiomyopathy TGLs = 3-20]
- * Kidney
 - Nephropathy
 - Chronicprogr, Moderate
 - [Nephropathy TGLs = 4-13]
- * Liver
 - Mixed Cell Focus
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Mild
 - Proliferation Plasma Cell, Mild
- * Lymph Node, Mesenteric
 - Erythrophagocytosis Mild
- * Nerve Trigeminal
 - Degeneration Moderate
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 947

TRT#: 5

SEX: Male

DAY ON TEST: 699

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-947

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Atrophy	Mild
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Intermed	Cyst	
	Pars Distalis	Hyperplasia	Mild
* Preputial Gland		Inflammation	Chronic Active, Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Moderate
* Thymus		Atrophy	Mild
	Artery	Inflammation	Chronic Active, Moderate
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH - Brain Meninges Granular Cell Tumor Malignant

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 949

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-949

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular |
| Testis | * Thyroid Gland | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|---------------------------------------|----------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Moderate |
| | | Hypertrophy | Minimal |
| | | Vacuolation, Cytoplasmic | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Carcinoma | |
| [Carcinoma TGLs = 2-6] | | | |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| [Infiltration Cellular TGLs = 3-10] | | | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Mild |
| | | Proliferation | Plasma Cell, Minimal |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| | | Hyperplasia | Lymphocyte, Mild |
| | Respirat Epith | Hyperplasia | Mild |
| | | Inflammation | Suppurative, Mild |
| | Respirat Epith | Metaplasia | Squamous, Minimal |
| * Parathyroid Gland | | Hyperplasia | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 949

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-949

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation	Minimal
[Dilation TGLs = 1-16]			
* Prostate	Epithelium	Hyperplasia	Mild
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 950

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-950

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Skin
- * Trachea
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Preputial Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Stomach, Glandular
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Thyroid Gland

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hyperplasia Mild
 - Hypertrophy Mild
 - Vacuolation, Cytoplasmic Minimal
- * Adrenal Medulla
 - Bilateral
 - [Pheochromocytoma Benign TGLs = 5,6-7]
 - Pheochromocytoma Benign
- * Bone
 - Fibrous Osteodystrophy Minimal
- * Brain
 - Pineal Gland
 - Vacuolation, Cytoplasmic Minimal
- * Epididymis
 - Exfoliated Germ Cell Mild
- * Eye
 - Cornea, Epithelium
 - Cornea
 - Cornea, Epithelium
 - Cornea
 - Degeneration Minimal
 - Fibrosis Minimal
 - Hyperplasia Minimal
 - Inflammation Acute, Minimal
 - [Fibrosis TGLs = 1-5]
 - [Inflammation TGLs = 1-5]
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy Moderate
 - Cardiomyopathy Minimal
- * Kidney
 - Nephropathy
 - Sarcoma
 - [Nephropathy TGLs = 7-13,20]
 - [Sarcoma TGLs = 8-20]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 950

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-950

ORGAN AND ACCOUNTABLE SITE STATUS

* Liver		Hepatocellular Carcinoma	
	Artery	Inflammation	Chronic Active, Minimal
	[Hepatocellular Carcinoma TGLs = 9-21]		
* Lung	Interstitium	Fibrosis	Minimal
	Artery	Inflammation	Chronic Active, Marked
		Inflammation	Chronic Active, Moderate
	[Inflammation TGLs = 14-10]		
Lymph Node	Lymph Sinus, Renal	Ectasia	Minimal
	Renal	Erythrophagocytosis	Minimal
	[Ectasia TGLs = 10-22]		
	[Erythrophagocytosis TGLs = 11-22]		
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Mild
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas		Adenoma	
	Acinus	Hyperplasia	Marked
	Artery	Inflammation	Chronic Active, Mild
	[Adenoma TGLs = 15-6]		
	[Hyperplasia TGLs = 15-14]		
* Parathyroid Gland		Hyperplasia	Moderate
	[Hyperplasia TGLs = 13-8]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Marked
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 3-16]		
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 950

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-950

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Degeneration	Mild
		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Minimal
	[Degeneration TGLs = 2-16A]		
* Thymus		Atrophy	Minimal

Animal Note: TGL 4 = NST (No Section Taken)

Animal Note: TGL 12 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 951

TRT#: 5

SEX: Male

DAY ON TEST: 718

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-951

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skin
- Trigeminal Ganglion
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Preputial Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Thyroid Gland
- * Harderian Gland
- * Intestine Small, Duodenum
- * Liver
- * Seminal Vesicle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
 - Pheochromocytoma Benign
- * Aorta
 - Mineral
- * Brain
 - Hemorrhage
- * Epididymis
 - Exfoliated Germ Cell
 - Hypospermia
- [Hyospermia TGLs = 5-16A]
- * Eye
 - Cornea, Epithelium
 - Cornea, Epithelium
 - Cornea
 - Cornea
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
- * Kidney
 - Renal Tubule
 - Renal Tubule
- [Cyst TGLs = 3- 20]
- [Nephropathy TGLs = 1,2-13]
- * Lung
 - Alveolus
- * Lymph Node, Mandibular
 - Infiltration Cellular
 - Erythrophagocytosis
 - Hyphplasia

- Minimal
- Mild
- Minimal
- Multiple
- Minimal
- Moderate
- Minimal
- Marked
- Mild
- Marked
- Acute, Marked
- Minimal
- Moderate
- Moderate
- Chronicprogr, Marked
- Histiocyte, Minimal
- Mild
- Lymphocyte, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 951

TRT#: 5

SEX: Male

DAY ON TEST: 718

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-951

ORGAN AND ACCOUNTABLE SITE STATUS

		Proliferation	Plasma Cell, Moderate
	[Erythrophagocytosis TGLs = 13-9]		
	[Proliferation TGLs = 12-9]		
* Mammary Gland	Duct	Dilation	Mild
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas		Adenoma	
	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Mild
	[Adenoma TGLs = 8-6]		
	[Hyperplasia TGLs = 8-6]		
* Parathyroid Gland		Hyperplasia	Mild
	[Hyperplasia TGLs = 11-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland		Necrosis	Moderate
	[Necrosis TGLs = 10-4]		
* Prostate		Inflammation	Chronic Active, Minimal
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Pigment	Moderate
* Stomach, Glandular		Mineral	Minimal
Testis	Interstit Cell	Adenoma	
	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Marked
	[Adenoma TGLs = 7-16A]		
	[Degeneration TGLs = 4-16A]		
	[Inflammation TGLs = 6-16A]		
* Thymus		Atrophy	Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 951

TRT#: 5

SEX: Male

DAY ON TEST: 718

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-951

ORGAN AND ACCOUNTABLE SITE STATUS

Hyperplasia

Epithelial, Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Necrosis

CONTRIBUTORY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 953

TRT#: 5

SEX: Male

DAY ON TEST: 716

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-953

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Thyroid Gland
- * Aorta
- * Harderian Gland
- * Intestine Small, Ileum
- * Mammary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Intestine Large, Cecum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Epididymis
- * Intestine Large, Rectum
- * Lung
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Medulla
 - [Pheochromocytoma Malignant TGLs = 4-7]
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Meninges
 - Note: Small focus of granular cells.
- * Eye
 - Retina
- * Heart
 - Ventricl Rgt
 - Serosa
- * Intestine Large, Colon
 - Pheochromocytoma Malignant
- * Kidney
 - [Nephropathy TGLs = 9-13]
 - Nephropathy
- * Liver
 - Bile Duct
 - Hepatocyte
 - Hyperplasia
 - Necrosis
 - Pheochromocytoma Malignant
- * Lymph Node
 - [Pheochromocytoma Malignant TGLs = 10-20]
 - Mediastinal
 - Pancreatic
- * Lymph Node, Mandibular
 - Pheochromocytoma Malignant
 - Pheochromocytoma Malignant
 - Hyperplasia
 - Proliferation
- Mesentery
 - Pheochromocytoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 953

TRT#: 5

SEX: Male

DAY ON TEST: 716

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-953

ORGAN AND ACCOUNTABLE SITE STATUS

[Pheochromocytoma Malignant	TGLs = 13-21]		
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas		Adenoma	
	Acinus	Hyperplasia	Moderate
		Pheochromocytoma Malignant	Metastatic (Adrenal Medulla)
[Adenoma	TGLs = 14-6]		
[Pheochromocytoma Malignant	TGLs = 11-6,14]		
* Parathyroid Gland		Hyperplasia	Mild
[Hyperplasia	TGLs = 8-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma	TGLs = 15-4]		
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Mild
[Dilation	TGLs = 1-16]		
* Prostate		Inflammation	Chronic Active, Minimal
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	White Pulp	Atrophy	Minimal
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal
Tissue NOS	Abdominal, Fat	Pheochromocytoma Malignant	Metastatic (Adrenal Medulla)
[Pheochromocytoma Malignant	TGLs = 12-20]		

PRIMARY CAUSE OF DEATH - Adrenal Medulla Pheochromocytoma Malignant

Animal Note: TGLs 2,3,5,6,7 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 954

TRT#: 5

SEX: Male

DAY ON TEST: 699

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-954

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Aorta | * Bone | * Bone Marrow |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric |
| * Nerve Trigeminal | * Pancreas | * Parathyroid Gland | * Prostate |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|------------------------------|---------------|-------------------------------|-------------------------|
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Brain | | Compression | Mild |
| [Compression TGLs = 4-2] | | | |
| * Epididymis | | Exfoliated Germ Cell | Mild |
| | | Mesothelioma Malignant | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Minimal |
| | | Hyperplasia | Lymphocyte, Minimal |
| [Proliferation TGLs = 2-9] | | Proliferation | Plasma Cell, Moderate |
| * Mammary Gland | Duct | Dilation | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 3-4] | | | |
| * Preputial Gland | | Inflammation | Chronic Active, Minimal |
| [Inflammation TGLs = 1-16] | | | |
| * Seminal Vesicle | | Decreased Secretory Fluid | Mild |
| Skeletal Muscle | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 954

TRT#: 5

SEX: Male

DAY ON TEST: 699

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-954

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Pigment	Moderate
Testis	Germ Cell	Degeneration	Mild
		Mesothelioma Malignant	
* Thymus		Atrophy	Moderate
		Cyst	

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 955

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-955

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- Skeletal Muscle
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Prostate
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex Hyperplasia Minimal
- * Brain Hypertrophy Minimal
Glial Cell Hyperplasia Mild
Note: Focal increased cellularity within caudate putamen.
- * Heart Cardiomyopathy Moderate
Ventricl Rgt Cardiomyopathy Mild
[Cardiomyopathy TGLs = 5-11]
- * Kidney Nephropathy Chronicprogr, Mild
- * Liver Clear Cell Focus
- * Lung Hyperplasia Minimal
Bile Duct Congestion Mild
Alveolus Infiltration Cellular Histiocyte, Minimal
[Congestion TGLs = 6-10]
[Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular Proliferation Plasma Cell, Minimal
- * Nose Accumulation, Hyaline Droplet Mild
Olfactory Epi Hyperplasia Minimal
Respirat Epith Inflammation Suppurative, Minimal
- * Pancreas Hyperplasia Minimal
- * Peripheral Nerve, Sciatic Degeneration Mild
- * Peripheral Nerve, Tibial Degeneration Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 955

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-955

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation Inflammation	Moderate Chronic Active, Mild
[Dilation TGLs = 1,2-16]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration Degeneration	Mild Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis Pigment	Minimal Minimal
Testis	Germ Cell	Degeneration	Minimal
* Thymus		Atrophy Cyst	Mild

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 957

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-957

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Liver | * Lung | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Prostate | * Salivary Glands |
| * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|-----------------------------|--------------------------------|--------------------------|-------------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Pineal Gland | Vacuolation, Cytoplasmic | Mild |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| | | Hypospermia | Marked |
| | [Hypospermia TGLs = 2-16A] | | |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Kidney | Renal Tubule | Adenoma | |
| | Renal Tubule | Cyst | |
| | | Nephropathy | Chronicprogr, Marked |
| | [Cyst TGLs = 6-20] | | |
| | [Nephropathy TGLs = 5-13,20] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| Mesentery | Artery | Inflammation | Chronic Active, Minimal |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Pancreas | Acinus | Hyperplasia | Mild |
| | Artery | Inflammation | Chronic Active, Minimal |
| * Parathyroid Gland | | Hyperplasia | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 957

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-957

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[Hyperplasia TGLs = 9-4]			
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
[Decreased Secretory Fluid TGLs = 4-16]			
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	Red Pulp	Atrophy	Mild
		Pigment	Mild
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Marked
[Degeneration TGLs = 1-16A]			
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGLs 3,7 = NCL (No Corresponding Lesion)

Animal Note: TGL 8 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 959

TRT#: 5

SEX: Male

DAY ON TEST: 454

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-959

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Aorta	* Bone
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Nerve Trigeminal	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Seminal Vesicle	Skeletal Muscle	* Skin	* Spinal Cord, Cervical
* Spinal Cord, Thoracic	* Stomach, Forestomach	* Stomach, Glandular	Testis
* Thyroid Gland	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Bone Marrow		Hypercellularity	Minimal
* Brain			
Note: Olfactory bulbs unavailable for evaluation.			
* Kidney		Nephropathy	Chronicprogr, Minimal
* Liver		Clear Cell Focus	
* Mammary Gland		Fibroadenoma	
[Fibroadenoma TGLs = 1-20]			
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland		Inflammation	Chronic Active, Mild
* Prostate	Epithelium	Hyperplasia	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
* Thymus		Cyst	

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 960

TRT#: 5

SEX: Male

DAY ON TEST: 728

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-960

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|--------------------------|
| * Aorta | * Bone | * Brain | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Pancreas | * Pituitary Gland | * Preputial Gland | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

MISSING

- * Mammary Gland

AUTO PRECLUDES DIAG.

- | | |
|--------------------------|----------------------------|
| * Intestine Small, Ileum | * Intestine Small, Jejunum |
|--------------------------|----------------------------|

OBSERVATIONS

- | | | | |
|--------------------------|---|--------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Vacuolation, Cytoplasmic | Mild |
| | [Vacuolation, Cytoplasmic TGLs = 6-7] | | |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| * Bone Marrow | | Hypercellularity | Mild |
| * Brain | | | |
| | Note: Olfactory bulbs unavailable for evaluation. | | |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | | | |
| | Ventricl Rgt | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 8-13] | | |
| * Liver | | Hyperplasia | Minimal |
| | Bile Duct | Vacuolation, Cytoplasmic | Mild |
| | Hepatocyte | Congestion | Minimal |
| * Lung | | Infiltration Cellular | Histiocyte, Minimal |
| | Alveolus | | |
| | [Congestion TGLs = 10-10] | | |
| * Lymph Node, Mandibular | | Ectasia | Mild |
| | Lymph Sinus | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 960

TRT#: 5

SEX: Male

DAY ON TEST: 728

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-960

ORGAN AND ACCOUNTABLE SITE STATUS

		Erythrophagocytosis	Moderate
		Proliferation	Plasma Cell, Mild
	[Ectasia TGLs = 1-9.1]		
	[Erythrophagocytosis TGLs = 2-9.1]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
	Olfactory Epi	Metaplasia	Respiratory, Minimal
* Parathyroid Gland		Hyperplasia	Moderate
	[Hyperplasia TGLs = 9-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild
* Prostate	Epithelium	Hyperplasia	Mild
		Inflammation	Chronic Active, Minimal
	[Inflammation TGLs = 5-16]		
* Salivary Glands	Parotid GI	Atrophy	Mild
* Seminal Vesicle		Decreased Secretory Fluid	Minimal
	[Decreased Secretory Fluid TGLs = 4-16]		
Skeletal Muscle		Degeneration	Mild
* Skin	Subcut Tiss	Malignant Fibrous Histiocytoma	
	[Malignant Fibrous Histiocytoma TGLs = 11-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
Testis	Germ Cell	Degeneration	Minimal
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Malignant Fibrous Histiocytoma

Animal Note: TGLs 3,7,12,13,14,15 = NCL (No Corresponding Lesion)

Animal Note: TGL 16 = NST (No Section Taken)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 961

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-961

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Pituitary Gland |
| * Seminal Vesicle | Skeletal Muscle | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

- | | |
|--------------------|---------------------|
| * Nerve Trigeminal | Trigeminal Ganglion |
|--------------------|---------------------|

OBSERVATIONS

- | | | | |
|-----------------------------|-----------------------------|-------------------------------|-------------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Minimal |
| | | Vacuolation, Cytoplasmic | Minimal |
| * Heart | Ventricl Rgt | Cardiomyopathy | Mild |
| | | Cardiomyopathy | Mild |
| * Kidney | Renal Tubule | Cyst | |
| | | Nephropathy | Chronicprogr, Marked |
| | [Cyst TGLs = 5-13] | | |
| | [Nephropathy TGLs = 4-13] | | |
| Lacrimal Gland | | Metaplasia | Harderian GI, Moderate |
| | [Metaplasia TGLs = 7-20] | | |
| * Liver | | Mixed Cell Focus | |
| * Mammary Gland | | Fibroadenoma | |
| | | Hyperplasia | Marked |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Hyperplasia | Mild |
| | Artery | Inflammation | Chronic Active, Minimal |
| | [Hyperplasia TGLs = 3-6] | | |
| * Parathyroid Gland | | Hyperplasia | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 961

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-961

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland	Duct	Dilation Inflammation	Mild Chronic Active, Mild
	[Dilation TGLs = 2-16]		
* Prostate		Adenoma Inflammation	Chronic Active, Mild
* Salivary Glands	Parotid GI	Atrophy	Minimal
* Skin		Inflammation	Chronic, Marked
	[Inflammation TGLs = 1-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis Pigment	Mild Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Ectopic Thymus Hyperplasia	Minimal

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 962

TRT#: 5

SEX: Male

DAY ON TEST: 693

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-962

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Brain
- * Esophagus
- * Harderian Gland
- * Intestine Small, Duodenum
- * Islets, Pancreatic
- * Mammary Gland
- * Skin
- * Spinal Cord, Cervical
- * Stomach, Forestomach
- * Thyroid Gland
- * Trachea

MISSING

Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex Hyperplasia Moderate
- * Adrenal Medulla Hyperplasia Marked
- * Aorta Mineral Minimal
- * Bone Fibrous Osteodystrophy Minimal
- * Bone Marrow Hypercellularity Minimal
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Epididymis Exfoliated Germ Cell Mild
- * Eye
 - Cornea Inflammation Acute, Minimal
 - Antr Chamber Inflammation Acute, Mild
 - Note: Retina too autolyzed for evaluation, bilaterally.
- * Heart
 - Cardiomyopathy Moderate
 - Ventricle Rgt Cardiomyopathy Moderate
 - Artery Inflammation Chronic Active, Minimal
 - Artery Mineral Minimal
 - [Cardiomyopathy TGLs = 8-11]
- * Kidney
 - Nephropathy Chronicprogr, Marked
 - [Nephropathy TGLs = 5,6-13]
- * Liver
 - Bile Duct Hyperplasia Minimal
 - Hepatocyte Necrosis Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 962

TRT#: 5

SEX: Male

DAY ON TEST: 693

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-962

ORGAN AND ACCOUNTABLE SITE STATUS

* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Interstitium	Mineral	Mild
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Mild
Mesentery	Artery	Inflammation	Chronic Active, Mild
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
	Respirat Epith	Hyperplasia	Minimal
* Pancreas	Acinus	Hyperplasia	Mild
	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland		Hyperplasia	Marked
[Hyperplasia TGLs = 9-8]			
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Suppurative, Minimal
* Prostate		Decreased Secretory Fluid	Moderate
[Decreased Secretory Fluid TGLs = 3-16]			
* Salivary Glands	Parotid Gl	Inflammation	Acute, Mild
* Seminal Vesicle		Decreased Secretory Fluid	Mild
[Decreased Secretory Fluid TGLs = 4-16]			
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Mild
		Pigment	Moderate
[Atrophy TGLs = 7-12]			
* Stomach, Glandular		Mineral	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 962

TRT#: 5

SEX: Male

DAY ON TEST: 693

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-962

ORGAN AND ACCOUNTABLE SITE STATUS

Testis

Germ Cell

Degeneration

Mild

Artery

Inflammation

Chronic Active, Marked

[Degeneration TGLs = 1-16A]

* Thymus

Atrophy

Mild

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 2,11 = NCL (No Corresponding Lesion)

Animal Note: TGL 10 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 963

TRT#: 5

SEX: Male

DAY ON TEST: 539

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-963

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone
- * Eye
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Prostate
- * Spinal Cord, Cervical
- * Stomach, Glandular
- * Urinary Bladder
- * Brain
- * Harderian Gland
- * Islets, Pancreatic
- * Mammary Gland
- * Salivary Glands
- * Spinal Cord, Thoracic
- Testis
- * Epididymis
- * Intestine Large, Cecum
- * Liver
- * Pancreas
- * Seminal Vesicle
- * Spleen
- * Thyroid Gland
- * Esophagus
- * Intestine Large, Rectum
- * Lung
- * Parathyroid Gland
- * Skin
- * Stomach, Forestomach
- * Trachea

AUTO PRECLUDES DIAG.

- * Intestine Large, Colon
- * Intestine Small, Duodenum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone Marrow
- * Heart
- * Kidney
- [Nephropathy TGLs = 1-13]
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Nose
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Preputial Gland
- Skeletal Muscle
- * Spinal Cord, Lumbar
- * Thymus
- Ventricle Rgt
- Olfactory Epi
- Pars Distalis
- Nerve
- Hypertrophy
- Hyperplasia
- Mineral
- Hypercellularity
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Hyperplasia
- Proliferation
- Degeneration
- Accumulation, Hyaline Droplet
- Degeneration
- Degeneration
- Adenoma
- Inflammation
- Degeneration
- Degeneration
- Atrophy
- Minimal
- Minimal
- Minimal
- Minimal
- Moderate
- Mild
- Chronic progr, Marked
- Lymphocyte, Minimal
- Plasma Cell, Minimal
- Mild
- Moderate
- Mild
- Mild
- Chronic Active, Minimal
- Minimal
- Mild
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 963

TRT#: 5

SEX: Male

DAY ON TEST: 539

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-963

ORGAN AND ACCOUNTABLE SITE STATUS

Trigeminal Ganglion

Degeneration

Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 2,3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 964

TRT#: 5

SEX: Male

DAY ON TEST: 628

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-964

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Harderian Gland
- * Islets, Pancreatic
- * Prostate
- * Skin
- * Trachea
- * Aorta
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Salivary Glands
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone Marrow
- * Intestine Small, Ileum
- * Pituitary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- * Urinary Bladder
- * Esophagus
- * Intestine Small, Jejunum
- * Preputial Gland
- Skeletal Muscle
- * Thyroid Gland

INSUFFICIENT TISSUE

- * Nerve Trigeminal

OBSERVATIONS

- * Adrenal Medulla
Blood Vessel
- * Bone
- * Brain
- * Epididymis
- * Eye
- * Heart
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Kidney
- [Cyst TGLs = 5-20]
- [Nephropathy TGLs = 3,4-13]
- * Liver
- * Lung
- * Lymph Node, Mesenteric
- * Mammary Gland
- Pulmn Artery
- Pulmn Artery
- Cornea, Epithelium
- Cornea
- Ventricl Rgt
- Artery
- Artery
- Artery
- Renal Tubule
- Pheochromocytoma Benign
- Inflammation
- Necrosis
- Fibrous Osteodystrophy
- Necrosis
- Exfoliated Germ Cell
- Hyperplasia
- Inflammation
- Cardiomyopathy
- Cardiomyopathy
- Inflammation
- Inflammation
- Inflammation
- Cyst
- Nephropathy
- Mixed Cell Focus
- Inflammation
- Inflammation
- Hyperplasia
- Chronic Active, Mild
- Minimal
- Minimal
- Mild
- Minimal
- Mild
- Acute, Minimal
- Mild
- Minimal
- Chronic Active, Moderate
- Chronic Active, Mild
- Chronic Active, Mild
- Chronicprogr, Marked
- Chronic Active, Mild
- Chronic Active, Mild
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 964

TRT#: 5

SEX: Male

DAY ON TEST: 628

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-964

ORGAN AND ACCOUNTABLE SITE STATUS

Mesentery	Artery	Inflammation	Chronic Active, Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
Note: Approximately two-thirds of Level 3 available for evaluation.			
* Pancreas	Acinus	Hyperplasia	Marked
	Artery	Inflammation	Chronic Active, Mild
[Hyperplasia TGLs = 1-6]			
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Minimal
* Stomach, Glandular	Artery	Inflammation	Chronic Active, Minimal
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 6,7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 965

TRT#: 5

SEX: Male

DAY ON TEST: 722

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-965

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skeletal Muscle
- * Stomach, Glandular
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
- * Eye
 - Note: One lens available for evaluation.
- * Heart
 - Cardiomyopathy
- * Kidney
 - Nephropathy
- [Nephropathy TGLs = 14,15-13]
- * Liver
 - Bile Duct
 - Bile Duct
 - Hepatocyte
- [Cyst TGLs = 2-12]
 - [Necrosis TGLs = 1-12]
- * Lung
 - Alveolus
- [Inflammation TGLs = 11-10]
- Lymph Node
 - Lumbar, Lymph Sinus
 - Lumbar
 - Renal
- [Ectasia TGLs = 19-21]
 - [Erythrophagocytosis TGLs = 17,18-20]

- Mild
- Moderate
- Minimal
- Mild
- Mild
- Chronicprogr, Marked
- Minimal
- Minimal
- Histiocyte, Minimal
- Suppurative, Mild
- Mild
- Minimal
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 965

TRT#: 5

SEX: Male

DAY ON TEST: 722

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-965

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Mild
	[Proliferation TGLs = 4-9]		
Mesentery	Artery	Inflammation	Chronic Active, Marked
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
* Pancreas	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Marked
	[Hyperplasia TGLs = 12-6,14]		
* Parathyroid Gland		Hyperplasia	Mild
	[Hyperplasia TGLs = 13-8]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 20-4]		
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Moderate
	[Dilation TGLs = 7-16]		
* Prostate		Inflammation	Acute, Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 3,5,6,8,9,10,21 = NCL (No Corresponding Lesion)

Animal Note: TGL 16 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 966

TRT#: 5

SEX: Male

DAY ON TEST: 636

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-966

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hemorrhage Mild
 - Hypertrophy Mild
 - [Hemorrhage TGLs = 3-7]
- * Adrenal Medulla
 - Pheochromocytoma Malignant
 - [Pheochromocytoma Malignant TGLs = 4-7]
- * Bone
 - Fibrous Osteodystrophy Minimal
- * Bone Marrow
 - Hypercellularity Moderate
- * Brain
 - Pineal Gland
 - Vacuolation, Cytoplasmic Mild
- * Epididymis
 - Exfoliated Germ Cell Moderate
 - Hypospermia Moderate
- * Eye
 - Cornea
 - Inflammation Acute, Mild
 - Neovascularization Minimal
 - Cornea, Epithelium
 - Regeneration Mild
- * Heart
 - Cardiomyopathy Mild
- * Kidney
 - Ventricl Rgt
 - Cardiomyopathy Minimal
 - Renal Tubule
 - Cyst
 - Nephropathy Chronicprogr, Marked
 - Oncocytoma Benign
 - [Cyst TGLs = 1,2-20]
 - [Nephropathy TGLs = 5,6-13]
- * Liver
 - Mixed Cell Focus
- * Lung
 - Hemorrhage Mild
 - Bronchiole
 - Hyperplasia Epithelial, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 966

TRT#: 5

SEX: Male

DAY ON TEST: 636

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-966

ORGAN AND ACCOUNTABLE SITE STATUS

	Artery	Inflammation Inflammation	Chronic Active, Moderate Chronic Active, Moderate
[Hemorrhage TGLs = 8-10]			
[Inflammation TGLs = 8-10]			
Lymph Node	Bronchial	Erythrophagocytosis	Marked
[Erythrophagocytosis TGLs = 9,10-20]			
* Lymph Node, Mandibular		Proliferation	Plasma Cell, Moderate
Mesentery	Artery	Inflammation	Chronic Active, Marked
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
	Artery	Inflammation	Chronic Active, Marked
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Moderate
[Degeneration TGLs = 7-16A]			
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 968

TRT#: 5

SEX: Male

DAY ON TEST: 708

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-968

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Intestine Small, Ileum
- * Mammary Gland
- * Skin
- * Thyroid Gland
- * Esophagus
- * Islets, Pancreatic
- * Nose
- * Spinal Cord, Cervical
- * Eye
- * Liver
- * Pancreas
- * Spinal Cord, Thoracic
- * Harderian Gland
- * Lymph Node, Mandibular
- * Pituitary Gland
- * Stomach, Forestomach

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Urinary Bladder
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- * Intestine Large, Rectum
- * Stomach, Glandular
- * Intestine Small, Duodenum
- * Trachea

OBSERVATIONS

- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Brain
- * Epididymis
- [Hypospermia TGLs = 2-16A]
- * Heart
- Pineal Gland
- Ventricle Rgt
- Atrium
- Myocardium
- * Kidney
- Renal Tubule
- [Cyst TGLs = 9,10,11-20,21.1,22]
- [Nephropathy TGLs = 7,8-13]
- * Lung
- Alveolus
- [Congestion TGLs = 21-10]
- Lymph Node
- Renal Iliac
- Pheochromocytoma Benign
- Mineral
- Fibrous Osteodystrophy
- Hemorrhage
- Vacuolation, Cytoplasmic
- Hypospermia
- Cardiomyopathy
- Cardiomyopathy
- Dilation
- Mineral
- Cyst
- Nephropathy
- Congestion
- Infiltration Cellular
- Erythrophagocytosis
- Pigment
- Mild
- Minimal
- Mild
- Moderate
- Marked
- Marked
- Mild
- Mild
- Minimal
- Chronicprogr, Marked
- Minimal
- Histiocyte, Mild
- Moderate
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 968

TRT#: 5

SEX: Male

DAY ON TEST: 708

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-968

ORGAN AND ACCOUNTABLE SITE STATUS

	Iliac	Proliferation	Plasma Cell, Minimal
	[Erythrophagocytosis TGLs = 12,13-20]		
	[Pigment TGLs = 15-21.1]		
	[Proliferation TGLs = 14-21.1]		
* Nerve Trigeminal		Degeneration	Mild
* Parathyroid Gland		Hyperplasia	Moderate
	[Hyperplasia TGLs = 20-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Mild
* Prostate		Decreased Secretory Fluid	Marked
		Inflammation	Chronic Active, Mild
	[Decreased Secretory Fluid TGLs = 3-16]		
* Salivary Glands	Parotid GI	Atrophy	Mild
* Seminal Vesicle		Decreased Secretory Fluid	Marked
		Inflammation	Acute, Moderate
	[Decreased Secretory Fluid TGLs = 4-16]		
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Moderate
		Pigment	Marked
	[Atrophy TGLs = 5-12]		
Testis	Germ Cell	Degeneration	Marked
	Artery	Inflammation	Chronic Active, Marked
	[Degeneration TGLs = 1-16A]		
* Thymus		Atrophy	Marked
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 16,17,18 = NCL (No Corresponding Lesion) Tissue autolysis precludes evaluation.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 968

TRT#: 5

SEX: Male

DAY ON TEST: 708

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-968

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: TGL 19 = NST (No Section Taken)

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 970

TRT#: 5

SEX: Male

DAY ON TEST: 727

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-970

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Intestine Small, Ileum
- * Prostate
- * Trachea
- * Brain
- * Islets, Pancreatic
- * Salivary Glands
- * Urinary Bladder
- * Esophagus
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Intestine Large, Rectum
- * Preputial Gland
- * Thyroid Gland

MISSING

- * Mammary Gland

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Lymph Node, Mesenteric
- * Intestine Large, Colon
- * Intestine Small, Duodenum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Necrosis
 - Vacuolation, Cytoplasmic
 - Mineral
 - Fibrous Osteodystrophy
 - Hypercellularity
- * Aorta
- * Bone
- * Bone Marrow
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Epididymis
 - Hypospermia
 - Mesothelioma Malignant
- [Hypospermia TGLs = 6-16A]
- * Eye
 - Cornea
 - Antr Chamber
 - Inflammation
 - Inflammation
- Note: Retina cannot be evaluated due to autolysis bilaterally.
- * Harderian Gland
 - Inflammation
- * Heart
 - Cardiomyopathy
 - Ventricle Rgt
 - Artery
 - Myocardium
 - Cardiomyopathy
 - Mineral
 - Mineral

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 970

TRT#: 5

SEX: Male

DAY ON TEST: 727

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-970

ORGAN AND ACCOUNTABLE SITE STATUS

* Kidney		Nephropathy	Chronicprogr, Marked
	[Nephropathy TGLs = 4-13]		
* Liver	Hepatocyte	Necrosis	Mild
* Lung		Hemorrhage	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Marked
	[Hemorrhage TGLs = 7-10]		
	[Infiltration Cellular TGLs = 7-10]		
* Lymph Node, Mandibular		Proliferation	Plasma Cell, Mild
Mesentery	Artery	Inflammation	Chronic Active, Marked
	Artery	Mineral	Moderate
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
		Inflammation	Suppurative, Minimal
	Note: Level 3 not evaluated due to limited amount of tissue on slide and extent of postmortem autolysis of available tissue.		
* Pancreas	Artery	Inflammation	Chronic Active, Mild
	Artery	Mineral	Moderate
* Parathyroid Gland		Hyperplasia	Mild
	[Hyperplasia TGLs = 9-8]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 3-16]		
Skeletal Muscle		Degeneration	Moderate
* Skin	Subcut Tiss	Fibroma	
	[Fibroma TGLs = 1-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	Red Pulp	Atrophy	Mild
	White Pulp	Atrophy	Mild
		Pigment	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 970

TRT#: 5

SEX: Male

DAY ON TEST: 727

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-970

ORGAN AND ACCOUNTABLE SITE STATUS

* Stomach, Glandular

Mineral

Marked

Testis

Germ Cell

Degeneration

Marked

Mesothelioma Malignant

[Degeneration TGLs = 2-16A]

* Thymus

Atrophy

Marked

Trigeminal Ganglion

Degeneration

Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 8 = NCL (No Corresponding Lesion)

Animal Note: TGL 5 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 971

TRT#: 5

SEX: Male

DAY ON TEST: 700

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-971

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Lung
- * Pituitary Gland
- * Skeletal Muscle
- * Thyroid Gland
- * Bone
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Prostate
- * Skin
- * Trachea
- * Brain
- * Islets, Pancreatic
- * Mammary Gland
- * Salivary Glands
- * Stomach, Forestomach
- * Trigeminal Ganglion
- * Esophagus
- * Liver
- * Parathyroid Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Mild
 - Hypertrophy Minimal
 - Vacuolation, Cytoplasmic Mild
- * Adrenal Medulla
 - [Pheochromocytoma Malignant TGLs = 1-7]
 - Pheochromocytoma Malignant
- * Bone Marrow
 - Hypercellularity Minimal
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Epididymis
 - Exfoliated Germ Cell Minimal
 - Artery Inflammation Chronic Active, Marked
- * Heart
 - Ventricl Rgt Cardiomyopathy Moderate
 - Artery Cardiomyopathy Minimal
- * Intestine Large, Cecum
 - Artery Inflammation Chronic Active, Moderate
- * Intestine Large, Colon
 - Artery Inflammation Chronic Active, Moderate
- * Intestine Large, Rectum
 - Artery Inflammation Chronic Active, Mild
- * Kidney
 - [Nephropathy TGLs = 2-13]
 - Nephropathy Chronicprogr, Marked
- * Lymph Node, Mandibular
 - Lymph Sinus Ectasia Mild
 - Hyperplasia Lymphocyte, Mild
 - Proliferation Plasma Cell, Mild
- * Nerve Trigeminal
 - Degeneration Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 971

TRT#: 5

SEX: Male

DAY ON TEST: 700

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-971

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Artery	Inflammation	Chronic Active, Moderate
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Suppurative, Marked
[Inflammation TGLs = 3-16]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Marked
* Thymus		Atrophy	Mild

PRIMARY CAUSE OF DEATH - Adrenal Medulla Pheochromocytoma Malignant

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 972

TRT#: 5

SEX: Male

DAY ON TEST: 550

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-972

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nose
- * Prostate
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Trachea
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Preputial Gland
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Brain
- * Epididymis
- * Kidney
- * Liver
- * Lung
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Skin
- Pineal Gland
- Epithlm Alvlus
- Alveolus
- Lymph Sinus
- Hypertrophy
- Hypercellularity
- Vacuolation, Cytoplasmic
- Exfoliated Germ Cell
- Hypospermia
- Mesothelioma Malignant
- Infarct
- Nephropathy
- Mixed Cell Focus
- Hyperplasia
- Infiltration Cellular
- Ectasia
- Hyperplasia
- Proliferation
- Degeneration
- Hyperplasia
- Degeneration
- Degeneration
- Sarcoma
- Minimal
- Marked
- Mild
- Mild
- Moderate
- Minimal
- Chronicprogr, Minimal
- Mild
- Histiocyte, Mild
- Minimal
- Lymphocyte, Minimal
- Plasma Cell, Mild
- Mild
- Mild
- Mild

[Infiltration Cellular TGLs = 2-10]

[Sarcoma TGLs = 1-20]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 972

TRT#: 5

SEX: Male

DAY ON TEST: 550

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-972

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Mild
		Mesothelioma Malignant	
* Thymus		Atrophy	Mild

PRIMARY CAUSE OF DEATH - Skin Sarcoma

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 973

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-973

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Aorta | * Bone | * Brain | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Lymph Node, Mesenteric | * Mammary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|-----------------------|-------------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Marked |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| | | Hypospermia | Moderate |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricle Rgt | Cardiomyopathy | Minimal |
| | Artery | Inflammation | Chronic Active, Minimal |
| | [Cardiomyopathy TGLs = 3-11] | | |
| * Islets, Pancreatic | | Carcinoma | |
| | | Hyperplasia | Mild |
| | [Carcinoma TGLs = 6-6] | | |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 2-13] | | |
| * Liver | | Eosinophilic Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 5-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 973

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-973

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
	Olfactory Epi	Metaplasia	Respiratory, Mild
* Pancreas	Acinus	Hyperplasia	Marked
	Artery	Inflammation	Chronic Active, Marked
	[Hyperplasia TGLs = 6-6]		
* Parathyroid Gland		Hyperplasia	Minimal
	[Hyperplasia TGLs = 4-8]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Cyst	
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Minimal
Skeletal Muscle		Degeneration	Minimal
* Skin		Keratoacanthoma	
	[Keratoacanthoma TGLs = 1-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen	Red Pulp	Atrophy	Minimal
		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Marked
* Thymus		Atrophy	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 974

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-974

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Prostate
- * Stomach, Glandular
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nose
- * Salivary Glands
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Seminal Vesicle
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Preputial Gland
- * Stomach, Forestomach

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Vacuolation, Cytoplasmic
 - Minimal
- * Brain
 - Mineral
 - Minimal
 - Note: Olfactory bulbs unavailable for evaluation.
- * Heart
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Moderate
 - [Nephropathy TGLs = 5-13]
- * Liver
 - Clear Cell Focus
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Inflammation
 - Histiocyte, Minimal
 - Granulomatous, Minimal
 - [Infiltration Cellular TGLs = 6-10]
- * Mammary Gland
 - Fibroadenoma
 - [Fibroadenoma TGLs = 2-20]
- * Nerve Trigeminal
- * Pancreas
 - Acinus
 - Degeneration
 - Adenoma
 - Hyperplasia
 - Moderate
 - [Adenoma TGLs = 4-6]
 - [Hyperplasia TGLs = 4-14]
- * Parathyroid Gland
 - Hyperplasia
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 974

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-974

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial GI			
Note: One of pair available for evaluation.			
Skeletal Muscle		Degeneration	Minimal
* Skin		Keratoacanthoma	
[Keratoacanthoma TGLs = 1-21]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
Testis		Edema	Moderate
[Edema TGLs = 3-16A]			
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Moderate

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 975

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-975

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Bone | * Bone Marrow | * Epididymis |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nerve Trigeminal | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|--------------------------|---|-------------------------------|--------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Aorta | | Dilation | Minimal |
| | | Mineral | Minimal |
| | [Dilation TGLs = 8-11,20] | | |
| * Brain | | Mineral | Minimal |
| | Note: Olfactory bulbs unavailable for evaluation. | | |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricle Rgt | Cardiomyopathy | Mild |
| | Artery | Inflammation | Chronic Active, Minimal |
| * Intestine Large, Cecum | | Cyst | |
| * Kidney | Renal Tubule | Hyperplasia | Mild |
| | Renal Tubule | Nephropathy | Chronicprogr, Marked |
| | [Cyst TGLs = 3-20] | | |
| | [Nephropathy TGLs = 4-13] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Moderate |
| | | Proliferation | Plasma Cell, Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Mild |
| | Artery | Inflammation | Chronic Active, Moderate |
| | [Hyperplasia TGLs = 6-6] | | |
| * Parathyroid Gland | | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 975

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-975

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
[Hyperplasia TGLs = 7-4]			
* Preputial Gland	Duct	Dilation	Moderate
[Dilation TGLs = 1,2-16]		Inflammation	Chronic Active, Mild
* Prostate	Epithelium	Hyperplasia	Mild
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
	Artery	Inflammation	Chronic Active, Mild
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 976

TRT#: 5

SEX: Male

DAY ON TEST: 663

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-976

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone Marrow
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Islets, Pancreatic
- * Preputial Gland
- * Thyroid Gland
- * Esophagus
- * Lymph Node, Mesenteric
- * Prostate
- * Trachea
- * Harderian Gland
- * Mammary Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum

OBSERVATIONS

- * Adrenal Cortex: Hyperplasia (Mild)
- * Adrenal Medulla: Pheochromocytoma Benign
- * Aorta: Dilation (Mild), Mineral (Marked)
- [Dilation TGLs = 7-11]
- * Bone: Fibrous Osteodystrophy (Minimal)
- * Epididymis: Exfoliated Germ Cell (Minimal), Hypospermia (Moderate), Mesothelioma Malignant
- [Hypospermia TGLs = 2-16A]
- * Eye: Cornea (Inflammation: Acute, Marked; Neovascularization: Minimal; Regeneration: Minimal; Ulcer: Moderate)
- Note: Retina too autolyzed to evaluate bilaterally.
- * Heart: Ventricl Rgt (Cardiomyopathy: Marked), Artery (Cardiomyopathy: Moderate), Myocardium (Mineral: Moderate)
- * Kidney: Mineral (Moderate), Nephropathy (Chronicprogr, Marked)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 976

TRT#: 5

SEX: Male

DAY ON TEST: 663

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-976

ORGAN AND ACCOUNTABLE SITE STATUS

[Nephropathy TGLs = 4,5-13]

* Liver	Bile Duct	Hyperplasia	Minimal
* Lung		Congestion	Mild
	Interstitialium	Mineral	Moderate

[Congestion TGLs = 8-10]

* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Mild
		Proliferation	Plasma Cell, Minimal
Mesentery	Artery	Inflammation	Chronic Active, Mild
	Artery	Mineral	Marked
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Pancreas	Artery	Inflammation	Chronic Active, Moderate
	Artery	Mineral	Mild
* Parathyroid Gland		Hyperplasia	Marked

[Hyperplasia TGLs = 6-8]

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Salivary Glands	Parotid GI	Inflammation	Acute, Mild
* Seminal Vesicle		Decreased Secretory Fluid	Marked

[Decreased Secretory Fluid TGLs = 3-16]

Skeletal Muscle		Degeneration	Mild
* Skin		Cyst Epithelial Inclusion	

Note: Cyst is ruptured.

[Cyst Epithelial Inclusion TGLs = 9-20]

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Hyperplasia	Plasma Cell, Mild
	Artery	Mineral	Mild
		Pigment	Mild
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 976

TRT#: 5

SEX: Male

DAY ON TEST: 663

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-976

ORGAN AND ACCOUNTABLE SITE STATUS

Artery

Inflammation

Chronic Active, Marked

Mesothelioma Malignant

[Degeneration TGLs = 1-16A]

Atrophy

Marked

* Thymus

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 977

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-977

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Thyroid Gland
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Liver
- * Seminal Vesicle
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Skin
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Stomach, Glandular

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------|-------------------------------|--------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Brain | Meninges | Granular Cell Tumor Benign | |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| * Heart | | Cardiomyopathy | Moderate |
| | Ventricl Rgt | Cardiomyopathy | Mild |
| * Islets, Pancreatic | | Carcinoma | |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 2,3,4-13] | | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| Mesentery | Artery | Inflammation | Chronic Active, Moderate |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Hyperplasia | Moderate |
| | Artery | Inflammation | Chronic Active, Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 7-4] | | |
| * Preputial Gland | Duct | Dilation | Marked |
| | | Inflammation | Chronic Active, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 977

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-977

ORGAN AND ACCOUNTABLE SITE STATUS

[Dilation TGLs = 1-16]

* Prostate		Inflammation	Chronic Active, Minimal
* Salivary Glands	Artery	Inflammation	Chronic Active, Moderate
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Stomach, Forestomach	Artery	Inflammation	Chronic Active, Mild
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Moderate
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 6,8,9 = NCL (No Corresponding Lesion)

TGL 5 = NCL (No Corresponding Lesion) Lymph node not present in slide; tissue consistent with pancreas and islets.

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 978

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-978

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- Skeletal Muscle
- Testis
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 Minimal
- * Adrenal Medulla
 - Hyperplasia
 Mild
- * Heart
 - Cardiomyopathy
 Mild
- * Kidney
 - Ventricl Rgt
 - Cardiomyopathy
 - Nephropathy
 Minimal
- [Nephropathy TGLs = 8-13]
 - Chronicprogr, Moderate
- Lacrimal Gland
 - Inflammation
 - Metaplasia
 Granulomatous, Mild
- [Metaplasia TGLs = 10-20]
 - Harderian GI, Moderate
- * Liver
 - Clear Cell Focus
 - Mixed Cell Focus
- [Clear Cell Focus TGLs = 6-12]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 Lymphocyte, Minimal
- * Nerve Trigeminal
 - Degeneration
 Plasma Cell, Minimal
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 Mild
- * Peripheral Nerve, Sciatic
 - Degeneration
 Mild
- * Peripheral Nerve, Tibial
 - Degeneration
 Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 978

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-978

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland [Adenoma TGLs = 11-4]	Pars Distalis	Adenoma	
* Preputial Gland [Dilation TGLs = 2,3-16] [Inflammation TGLs = 4-16]	Duct	Dilation Inflammation	Moderate Chronic Active, Moderate
* Prostate [Adenoma TGLs = 5-16]		Adenoma	
* Skin [Lipoma TGLs = 1--20]	Subcut Tiss	Lipoma	
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
* Thymus		Pigment	Moderate
* Thyroid Gland	C Cell	Atrophy Hyperplasia	Minimal Minimal

Animal Note: TGL 7,9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 979

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-979

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Salivary Glands
- * Stomach, Glandular
Trigeminal Ganglion
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Seminal Vesicle
Testis
- * Urinary Bladder
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Preputial Gland
- * Skin
- * Thyroid Gland
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Prostate
- * Stomach, Forestomach
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
- * Bone Marrow
 - Hypercellularity
- * Heart
 - Cardiomyopathy
- * Kidney
 - Ventricl Rgt
 - Cardiomyopathy
 - Nephropathy
- * Liver
 - Bile Duct
 - Clear Cell Focus
 - Hyperplasia
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Adenoma
- [Adenoma TGLs = 1-6]
- * Peripheral Nerve, Sciatic
 - Degeneration
- Note: Longitudinal section available for evaluation.
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 979

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-979

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 2-4]

Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Moderate
		Ectopic Parathyroid Gland	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 980

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-980

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Preputial Gland
- * Stomach, Forestomach
- * Bone
- * Eye
- * Intestine Small, Duodenum
- * Mammary Gland
- * Prostate
- * Stomach, Glandular
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Seminal Vesicle
- * Trachea
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Adrenal Medulla
 - Hyperplasia
 - Pheochromocytoma Benign
- [Pheochromocytoma Benign TGLs = 4-7]
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Epididymis
 - Exfoliated Germ Cell
 - Hypospermia
- * Harderian Gland
 - Schwannoma Malignant
- * Heart
 - Cardiomyopathy
- * Kidney
 - Ventricle Rgt
 - Cardiomyopathy
 - Nephropathy
- [Nephropathy TGLs = 2-13]
- * Liver
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Lymph Node, Mesenteric
 - Infiltration Cellular
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Artery
 - Adenoma
 - Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 981

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-981

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | Skeletal Muscle |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|--------------------------|---|-------------------------|-------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Marked |
| | | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 6-7] | | |
| * Brain | | | |
| | Note: Olfactory bulbs unavailable for evaluation. | | |
| * Eye | Cornea, Epithelium | Hyperplasia | Mild |
| | Cornea | Inflammation | Acute, Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Mild |
| | Artery | Inflammation | Chronic Active, Minimal |
| * Kidney | Renal Tubule | Adenoma | |
| | | Nephropathy | Chronicprogr, Moderate |
| | [Adenoma TGLs = 5-20] | | |
| * Liver | | Mixed Cell Focus | |
| * Lung | | Congestion | Minimal |
| | [Congestion TGLs = 8-10] | | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Moderate |
| | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Moderate |
| | [Ectasia TGLs = 3-9] | | |
| * Nerve Trigeminal | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 981

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-981

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet Inflammation	Minimal Suppurative, Minimal
* Pancreas [Hyperplasia TGLs = 7-6.1]	Acinus	Hyperplasia	Moderate
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland	Duct	Dilation Inflammation	Mild Chronic Active, Minimal
* Skin	Subcut Tiss	Fibroma Hyperkeratosis	Mild Mild
	Epidermis	Hyperplasia	Mild
	[Fibroma TGLs = 4-22]		
	[Hyperkeratosis TGLs = 1-20]		
	[Hyperplasia TGLs = 1-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Minimal
* Thymus		Atrophy Thrombus	Minimal Mild

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 982

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-982

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Seminal Vesicle
- * Thyroid Gland
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skeletal Muscle
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Stomach, Forestomach
- * Trigeminal Ganglion
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Adenoma
 - Vacuolation, Cytoplasmic Mild
- * Adrenal Medulla
 - Pheochromocytoma Benign
- * Brain
 - Compression Minimal
- * Heart
 - Cardiomyopathy Mild
- * Kidney
 - Ventricle Rgt
 - Cardiomyopathy Mild
 - Nephropathy Chronicprogr, Moderate
- * Liver
 - [Nephropathy TGLs = 1-13]
 - Clear Cell Focus
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Moderate
 - Proliferation Plasma Cell, Moderate
- * Mammary Gland
 - Duct
 - Dilation Minimal
- * Nerve Trigeminal
 - Degeneration Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet Mild
- * Pancreas
 - Acinus
 - Hyperplasia Mild
 - [Hyperplasia TGLs = 2-6]
- * Parathyroid Gland
 - Hyperplasia Minimal
- * Peripheral Nerve, Sciatic
 - Degeneration Moderate
- Note: Longitudinal section available for evaluation.
- * Peripheral Nerve, Tibial
 - Degeneration Moderate
- * Pituitary Gland
 - Pars Distalis
 - Adenoma Multiple

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 982

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-982

ORGAN AND ACCOUNTABLE SITE STATUS

	[Adenoma TGLs = 4-4]			
* Preputial Gland		Duct	Dilation Inflammation	Minimal Chronic Active, Moderate
* Prostate			Inflammation	Chronic Active, Minimal
* Skin			Keratoacanthoma	
	[Keratoacanthoma TGLs = 3-20]			
* Spinal Cord, Cervical			Degeneration	Minimal
* Spinal Cord, Lumbar		Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic			Degeneration	Moderate
* Spleen			Extramedullary Hematopoiesis Pigment	Mild Minimal
Testis		Artery	Inflammation	Chronic Active, Mild
* Thymus			Atrophy Cyst Ectopic Parathyroid Gland	Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 983

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-983

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Epididymis
- * Esophagus
- * Eye
- * Harderian Gland
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Seminal Vesicle
- Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

MISSING

- * Mammary Gland

OBSERVATIONS

- * Bone Marrow Hypercellularity Minimal
- * Brain Compression Minimal
- * Heart Cardiomyopathy Mild
- Ventricl Rgt Cardiomyopathy Mild
- Adenoma Adenoma
- * Islets, Pancreatic Adenoma TGLs = 8-6]
- * Kidney Nephropathy Chronicprogr, Mild
- [Nephropathy TGLs = 3-13]
- * Liver Mixed Cell Focus
- * Lung Infiltration Cellular Histiocyte, Minimal
- Alveolus Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Moderate
- [Hyperplasia TGLs = 4-9] Proliferation Plasma Cell, Mild
- * Nerve Trigeminal Degeneration Moderate
- * Nose Accumulation, Hyaline Droplet Moderate
- * Pancreas Hyperplasia Marked
- [Hyperplasia TGLs = 8-6,14]
- * Parathyroid Gland Hyperplasia Focal, Moderate
- * Peripheral Nerve, Sciatic Degeneration Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 983

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-983

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 6-4]			
* Preputial Gland	Duct	Dilation	Moderate
[Dilation TGLs = 1-16]		Inflammation	Chronic Active, Minimal
* Prostate	Artery	Inflammation	Chronic Active, Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
	Artery	Inflammation	Chronic Active, Mild
		Pigment	Mild
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Mild
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGLs 2,7,9 = NCL (No Corresponding Lesion)

Animal Note: TGL 10 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 984

TRT#: 5

SEX: Male

DAY ON TEST: 677

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-984

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Pancreas
- Trigeminal Ganglion
- * Bone
- * Harderian Gland
- * Intestine Small, Ileum
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Brain
- * Intestine Large, Cecum
- * Islets, Pancreatic
- * Thyroid Gland
- * Esophagus
- * Intestine Large, Colon
- * Mammary Gland
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Bone Marrow
- * Epididymis
- * Heart
- * Intestine Small, Duodenum
 - [Dilation TGLs = 10-14.1]
- * Intestine Small, Jejunum
 - [Adenocarcinoma TGLs = 1-21.1]
 - [Dilation TGLs = 11-14.1]
- * Kidney
- * Liver
 - [Vacuolation, Cytoplasmic TGLs = 4-12.1]
- * Lung
- Lymph Node
 - [Proliferation TGLs = 12-6]
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Nerve Trigeminal
- * Nose
- Hepatocyte
 - [Vacuolation, Cytoplasmic TGLs = 4-12.1]
- Alveolus
- Pancreatic
- Lymph Sinus
- Olfactory Epi
- Olfactory Epi
- Hypertrophy
- Hyperplasia
- Hypercellularity
- Exfoliated Germ Cell
- Hypospermia
- Cardiomyopathy
- Dilation
- Adenocarcinoma
- Dilation
- Nephropathy
- Vacuolation, Cytoplasmic
- Infiltration Cellular
- Proliferation
- Hyperplasia
- Proliferation
- Ectasia
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Minimal
- Minimal
- Moderate
- Mild
- Mild
- Mild
- Mild
- Mild
- Mild
- Mild
- Chronicprogr, Minimal
- Mild
- Histiocyte, Minimal
- Plasma Cell, Mild
- Lymphocyte, Minimal
- Plasma Cell, Mild
- Mild
- Mild
- Minimal
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 984

TRT#: 5

SEX: Male

DAY ON TEST: 677

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-984

ORGAN AND ACCOUNTABLE SITE STATUS

Respirat Epith

Hyperplasia

Mild

Olfactory Epi

Hyperplasia

Minimal

Inflammation

Suppurative, Mild

* Pancreas

Note: Diffuse depletion of zymogen granules.

* Parathyroid Gland

Hyperplasia

Mild

* Peripheral Nerve, Sciatic

Degeneration

Mild

* Peripheral Nerve, Tibial

Degeneration

Moderate

* Pituitary Gland

Pars Distalis

Hyperplasia

Mild

* Preputial Gland

Duct

Dilation

Moderate

Inflammation

Chronic Active, Mild

* Prostate

Decreased Secretory Fluid

Mild

[Decreased Secretory Fluid TGLs = 9-16.1]

* Salivary Glands

Parotid GI

Atrophy

Moderate

Submandibul GI

Atrophy

Moderate

* Seminal Vesicle

Decreased Secretory Fluid

Marked

[Decreased Secretory Fluid TGLs = 6-16.1]

Skeletal Muscle

Degeneration

Mild

* Skin

Hair Follicle

Atrophy

Mild

Cyst Epithelial Inclusion

[Atrophy TGLs = 7-20]

[Cyst Epithelial Inclusion TGLs = 2-20]

* Spinal Cord, Lumbar

Nerve

Degeneration

Mild

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

White Pulp

Atrophy

Mild

Red Pulp

Atrophy

Moderate

Pigment

Minimal

* Stomach, Forestomach

Epithelium

Hyperplasia

Marked

Inflammation

Chronic Active, Mild

Ulcer

Mild

* Stomach, Glandular

Erosion

Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 984

TRT#: 5

SEX: Male

DAY ON TEST: 677

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-984

ORGAN AND ACCOUNTABLE SITE STATUS

Testis	Germ Cell	Degeneration	Mild
[Degeneration TGLs = 8-16A]			
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Intestine Small, Jejunum Adenocarcinoma

Animal Note: TGLs 5,13 = NCL (No Corresponding Lesion)

Animal Note: TGL 3 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 985

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-985

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Epididymis | * Esophagus | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|-----------------------------------|-------------------------|
| * Adrenal Cortex | | Accessory Adrenal Cortical Nodule | |
| | | Hypertrophy | Minimal |
| | | Vacuolation, Cytoplasmic | Mild |
| * Brain | Meninges | Granular Cell Tumor Benign | |
| | Pineal Gland | Infiltration Cellular | Mononuclear CI, Minimal |
| | Pineal Gland | Mineral | Minimal |
| * Eye | Retina | Atrophy | Minimal |
| | Cornea, Epithelium | Hyperplasia | Mild |
| | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Minimal |
| * Harderian Gland | | Cyst | |
| * Heart | Ventricl Rgt | Cardiomyopathy | Minimal |
| | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| | [Nephropathy TGLs = 2-13] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 3-10] | | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Marked |
| | | Hyphplasia | Lymphocyte, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 985

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-985

ORGAN AND ACCOUNTABLE SITE STATUS

		Proliferation	Plasma Cell, Mild
[Ectasia TGLs = 1-9]			
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Metaplasia	Respiratory, Mild
		Mineral	Minimal
* Pancreas	Acinus	Hyperplasia	Minimal
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	
	Pars Nervosa	Developmental Malformation	
Note: Multiple small islands of epithelium, some with squamous differentiation, at junction of pars nervosa and intermedia.			
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
* Thymus		Atrophy	Minimal
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 986

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-986

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Brain	* Esophagus	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	Skeletal Muscle
* Skin	* Spinal Cord, Cervical	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
		Hypertrophy	Minimal
* Epididymis		Exfoliated Germ Cell	Minimal
		Hypospermia	Mild
* Eye	Cornea, Epithelium	Hyperplasia	Moderate
	Cornea	Inflammation	Acute, Minimal
	Cornea	Neovascularization	Minimal
* Heart		Cardiomyopathy	Minimal
	Ventricl Rgt	Cardiomyopathy	Mild
* Kidney		Nephropathy	Chronicprogr, Moderate
* Liver		Clear Cell Focus	
		Mixed Cell Focus	
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Intermed	Cyst	
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 986

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-986

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
Testis	Interstitial Cell	Adenoma	
	Germ Cell	Degeneration	Mild
	[Adenoma TGLs = 1,3-16A]		
* Thymus		Atrophy	Minimal

Animal Note: TGLs 2,4,5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 987

TRT#: 5

SEX: Male

DAY ON TEST: 614

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-987

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Spinal Cord, Cervical
- Testis
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Spinal Cord, Thoracic
- * Trachea
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Parathyroid Gland
- * Spleen
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 Mild
- * Adrenal Medulla
 - Hyperplasia
 Minimal
- * Eye
 - Cornea
 - Neovascularization
 Mild
- * Kidney
 - Nephropathy
 Chronicprogr, Moderate
- * Lung
 - Alveolar Epith
 - Alveolus
 - Infiltration Cellular TGLs = 5-10]
 Marked
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 Lymphocyte, Mild
- * Mammary Gland
 - Hyperplasia
 Plasma Cell, Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 Minimal
- * Peripheral Nerve, Sciatic
 - Degeneration
 Mild
- * Peripheral Nerve, Tibial
 - Degeneration
 Moderate
- * Pituitary Gland
 - Pars Distalis
 - Cyst
- * Preputial Gland
 - Duct
 - Dilation
 - Inflammation
 Moderate
- * Prostate
 - Inflammation TGLs = 1-16]
 - Decreased Secretory Fluid TGLs = 3-16]
 Chronic Active, Mild
- * Seminal Vesicle
 - Decreased Secretory Fluid
 Mild
- * Seminal Vesicle
 - Decreased Secretory Fluid
 Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 987

TRT#: 5

SEX: Male

DAY ON TEST: 614

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-987

ORGAN AND ACCOUNTABLE SITE STATUS

[Decreased Secretory Fluid TGLs = 2-16]

Skeletal Muscle

Degeneration

Marked

* Skin

Cyst Epithelial Inclusion

Note: Cyst within tissue between mandibular bone and base of tongue.

[Cyst Epithelial Inclusion TGLs = 6-20]

* Spinal Cord, Lumbar

Nerve

Degeneration

Mild

* Stomach, Forestomach

Epithelium

Hyperplasia

Marked

Inflammation

Chronic Active, Mild

* Thymus

Atrophy

Moderate

[Atrophy TGLs = 4-6]

* Thyroid Gland

Follicle

Cyst

PRIMARY CAUSE OF DEATH - UNCERTAIN

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Animal Note: TGL 8 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 988

TRT#: 5

SEX: Male

DAY ON TEST: 722

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-988

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|-------------------------|---------------------------|
| * Adrenal Medulla | * Esophagus | * Harderian Gland | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Mammary Gland | * Skin | * Spinal Cord, Thoracic | * Stomach, Forestomach |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

OBSERVATIONS

- | | | | |
|--------------------------|--|--------------------------|-------------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Aorta | | Mineral | Minimal |
| * Bone | | Fibrous Osteodystrophy | Minimal |
| * Bone Marrow | | Hemorrhage | Mild |
| * Brain | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| * Epididymis | | Exfoliated Germ Cell | Mild |
| | | Hypospermia | Mild |
| | [Hypospermia TGLs = 9-16A] | | |
| * Eye | Cornea | Fibrosis | Mild |
| | Cornea, Epithelium | Hyperplasia | Moderate |
| | Cornea | Inflammation | Acute, Moderate |
| * Heart | | Cardiomyopathy | Moderate |
| | Ventricl Rgt | Cardiomyopathy | Moderate |
| * Intestine Large, Cecum | Artery | Inflammation | Chronic Active, Minimal |
| * Intestine Large, Colon | Artery | Inflammation | Chronic Active, Mild |
| * Kidney | Renal Tubule | Cyst | |
| | | Nephropathy | Chronicprogr, Marked |
| | [Cyst TGLs = 4,5-13,20] | | |
| | [Nephropathy TGLs = 6,7-13] | | |
| * Liver | Bile Duct | Cyst | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 13-10] | | |
| Lymph Node | Mediastinal | Congestion | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 988

TRT#: 5

SEX: Male

DAY ON TEST: 722

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-988

ORGAN AND ACCOUNTABLE SITE STATUS

[Congestion TGLs = 12-20]			
* Lymph Node, Mandibular	Lymph Sinus	Ectasia Hyperplasia Proliferation	Mild Lymphocyte, Minimal Plasma Cell, Mild
[Ectasia TGLs = 2-9]			
Mesentery	Artery	Inflammation	Chronic Active, Marked
	Artery	Mineral	Mild
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi Respirat Epith	Accumulation, Hyaline Droplet Hyperplasia Inflammation	Mild Mild Suppurative, Minimal
* Pancreas		Adenoma	
	Acinus	Hyperplasia	Minimal
	Artery	Inflammation	Chronic Active, Marked
	Artery	Mineral	Minimal
[Adenoma TGLs = 15-6]			
* Parathyroid Gland		Hyperplasia	Mild
[Hyperplasia TGLs = 14-8]			
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis Pars Distalis	Cyst Hyperplasia	 Marked
* Preputial Gland	Duct	Dilation Inflammation	Marked Chronic Active, Minimal
[Dilation TGLs = 1-16]			
* Prostate		Decreased Secretory Fluid	Mild
[Decreased Secretory Fluid TGLs = 10-16]			
* Salivary Glands	Parotid GI	Atrophy	Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Marked
[Decreased Secretory Fluid TGLs = 11-16]			
Skeletal Muscle		Degeneration	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 988

TRT#: 5

SEX: Male

DAY ON TEST: 722

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-988

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen	White Pulp	Atrophy	Mild
		Pigment	Mild
	[Atrophy TGLs = 16-12]		
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Moderate
	[Degeneration TGLs = 8-16A]		
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 17,18 = NCL (No Corresponding Lesion)

Animal Note: TGL 3 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 989

TRT#: 5

SEX: Male

DAY ON TEST: 537

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-989

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Epididymis | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nerve Trigeminal | * Pancreas | * Prostate | * Salivary Glands |
| * Seminal Vesicle | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Spinal Cord, Thoracic | * Stomach, Glandular | Testis | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Brain | | Hemorrhage | Moderate |
| | | Necrosis | Moderate |
| | [Hemorrhage TGLs = 3-2] | | |
| * Heart | Ventricl Rgt | Cardiomyopathy | Mild |
| * Islets, Pancreatic | | Carcinoma | |
| | [Carcinoma TGLs = 1-6] | | |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic Active, Mild |
| | [Infiltration Cellular TGLs = 2-10] | | |
| * Lymph Node, Mandibular | | Erythrophagocytosis | Mild |
| | | Proliferation | Plasma Cell, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Parathyroid Gland | | Hyperplasia | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 989

TRT#: 5

SEX: Male

DAY ON TEST: 537

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-989

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland		Inflammation	Chronic Active, Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Stomach, Forestomach		Ulcer	Mild

PRIMARY CAUSE OF DEATH - Brain Necrosis

CONTRIBUTORY CAUSE OF DEATH - Brain Hemorrhage

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 990

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-990

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Intestine Small, Jejunum
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Intestine Large, Cecum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Stomach, Glandular
- * Bone Marrow
- * Intestine Small, Duodenum
- * Mammary Gland
- Skeletal Muscle
- * Trachea
- * Esophagus
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Skin
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Minimal
 - Hypertrophy Minimal
- * Adrenal Medulla
 - Bilateral
 - [Pheochromocytoma Benign TGLs = 3,4-7]
 - Pheochromocytoma Benign
- * Brain
 - Glial Cell
 - Hyperplasia Marked
 - Mineral Minimal
 - Note: Increased glial cells within brainstem.
- * Epididymis
 - Exfoliated Germ Cell Minimal
- * Eye
 - Cornea
 - Cornea, Epithelium
 - Cornea
 - Cornea
 - Fibrosis Minimal
 - Hyperplasia Moderate
 - Inflammation Acute, Mild
 - Neovascularization Mild
- * Heart
 - Ventricl Rgt
 - [Cardiomyopathy TGLs = 8-20]
 - Cardiomyopathy Mild
 - Cardiomyopathy Mild
- * Intestine Large, Colon
 - Artery
 - Inflammation Chronic Active, Moderate
- * Intestine Large, Rectum
 - Artery
 - Inflammation Chronic Active, Minimal
- * Islets, Pancreatic
 - [Adenoma TGLs = 7-6]
 - Adenoma
- * Kidney
 - Renal Tubule
 - Cyst
 - [Cyst TGLs = 6-13]
 - [Nephropathy TGLs = 5-13]
 - Nephropathy Chronicprogr, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 990

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-990

ORGAN AND ACCOUNTABLE SITE STATUS

* Liver	Bile Duct	Hyperplasia	Mild
* Lung	Artery	Inflammation	Chronic Active, Moderate
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Mild
		Pigment	Mild
		Proliferation	Plasma Cell, Minimal
[Pigment TGLs = 1-9.1]			
Mesentery	Artery	Inflammation	Chronic Active, Moderate
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Adenoma	Moderate
	Artery	Hyperplasia	Chronic Active, Moderate
[Adenoma TGLs = 7-6]			
[Hyperplasia TGLs = 7-6,14]			
* Peripheral Nerve, Sciatic		Degeneration	Marked
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
[Hyperplasia TGLs = 10-4]			
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Mild
[Dilation TGLs = 2-16]			
* Salivary Glands	Artery	Inflammation	Chronic Active, Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Minimal
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Marked
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Moderate

Animal Note: TGL 9 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 991

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-991

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Epididymis | * Esophagus | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Mammary Gland | * Parathyroid Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | Skeletal Muscle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|---|----------------|-------------------------------|--------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Eye | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Mild |
| * Intestine Large, Rectum | | Cyst | |
| [Cyst TGLs = 3-15] | | | |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | | Clear Cell Focus | |
| | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Mild |
| | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Lymph Node, Mesenteric | | Erythrophagocytosis | Mild |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | Respirat Epith | Hyperplasia | Mild |
| | | Inflammation | Suppurative, Mild |
| * Pancreas | | Adenoma | Multiple |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 991

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-991

ORGAN AND ACCOUNTABLE SITE STATUS

	Acinus	Hyperplasia	Moderate
	[Adenoma TGLs = 2-6]		
	[Hyperplasia TGLs = 2-14]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
Note: Longitudinal section available for evaluation.			
* Pituitary Gland	Pars Intermed	Cyst	
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis		Edema	Minimal
* Thymus		Atrophy	Minimal

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 992

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-992

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Esophagus
- * Harderian Gland
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Liver
- * Mammary Gland
- * Nose
- * Prostate
- * Salivary Glands
- * Seminal Vesicle
- Skeletal Muscle
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

OBSERVATIONS

- * Brain
 - Mineral Minimal
- * Epididymis
 - Exfoliated Germ Cell Minimal
 - Hypospermia Minimal
- * Eye
 - Cornea Inflammation Acute, Minimal
 - Cornea Neovascularization Minimal
- * Heart
 - Cardiomyopathy Mild
- * Kidney
 - Ventricle Rgt Cardiomyopathy Minimal
 - Renal Tubule Cyst
 - Nephropathy Chronicprogr, Moderate
- [Cyst TGLs = 4-13]
- [Nephropathy TGLs = 5-13]
- * Lung
 - Foreign Body
 - Hemorrhage Minimal
 - Inflammation Chronic Active, Minimal
- Note: Pyogranulomatous inflammation associated with foreign material in airways.
- Lymph Node
 - Mediastinal Erythrophagocytosis Mild
- [Erythrophagocytosis TGLs = 6-6.1]
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Mild
 - Proliferation Plasma Cell, Mild
- * Lymph Node, Mesenteric
 - Erythrophagocytosis Minimal
- * Nerve Trigeminal
 - Degeneration Mild
- * Pancreas
 - Acinus Hyperplasia Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 992

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-992

ORGAN AND ACCOUNTABLE SITE STATUS

[Hyperplasia TGLs = 3-6.1,14]

* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Marked
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Minimal
* Skin		Hyperkeratosis	Minimal
	Epidermis	Hyperplasia	Minimal

[Hyperkeratosis TGLs = 1-20]

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Mild

[Degeneration TGLs = 2-16A]

* Thymus		Atrophy	Mild
		Cyst	
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGLs 7,8,9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 993

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-993

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Brain
- * Epididymis
- * Esophagus
- * Eye
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Lung
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Parathyroid Gland
- * Preputial Gland
- * Prostate
- * Salivary Glands
- * Seminal Vesicle
- * Stomach, Forestomach
- * Stomach, Glandular
- * Testis
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Harderian Gland
 - * Heart
 - * Kidney
 - * Liver
 - * Nerve Trigeminal
 - * Nose
 - * Pancreas
 - * Peripheral Nerve, Sciatic
 - * Peripheral Nerve, Tibial
 - * Pituitary Gland
 - * Skin
- [Hyperplasia TGLs = 3-6]
- [Adenoma TGLs = 4-4]

Ventricl Rgt

Olfactory Epi
Olfactory Epi
Acinus

Pars Distalis
Pars Distalis

Subcut Tiss

- Inflammation
- Granulomatous, Minimal
- Cardiomyopathy
- Mild
- Cardiomyopathy
- Minimal
- Nephropathy
- Chronicprogr, Moderate
- Clear Cell Focus
- Mixed Cell Focus
- Degeneration
- Mild
- Accumulation, Hyaline Droplet
- Moderate
- Metaplasia
- Respiratory, Minimal
- Hyperplasia
- Minimal
- Degeneration
- Moderate
- Degeneration
- Moderate
- Adenoma
- Cyst
- Degeneration
- Minimal
- Fibroma
- Keratoacanthoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 993

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-993

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroma TGLs = 2-21]

[Keratoacanthoma TGLs = 1-20]

* Spinal Cord, Cervical

Degeneration

Minimal

* Spinal Cord, Lumbar

Degeneration

Minimal

Nerve

Degeneration

Marked

* Spinal Cord, Thoracic

Degeneration

Mild

* Spleen

Pigment

Minimal

* Thymus

Atrophy

Marked

Cyst

Tissue NOS

Mediastinum

Inflammation

Chronic Active, Moderate

Note: Inflammation affecting large muscular arteries within mediastinal fat.

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 994

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-994

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lung | * Lymph Node, Mesenteric |
| * Mammary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

- | | |
|--------------------|---------------------|
| * Nerve Trigeminal | Trigeminal Ganglion |
|--------------------|---------------------|

OBSERVATIONS

- | | | | |
|-----------------------------|-------------------------------------|-------------------------------|--------------------------|
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Moderate |
| * Islets, Pancreatic | | Carcinoma | |
| | [Carcinoma TGLs = 5-6] | | |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 2,3-13] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| Lymph Node | Mediastinal | Erythrophagocytosis | Moderate |
| | [Erythrophagocytosis TGLs = 4-20] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Moderate |
| | | Proliferation | Plasma Cell, Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Hyperplasia | Moderate |
| | Artery | Inflammation | Chronic Active, Moderate |
| | [Hyperplasia TGLs = 5-6] | | |
| * Parathyroid Gland | | Hyperplasia | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 994

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-994

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Mild
* Skin		Keratoacanthoma	
	[Keratoacanthoma TGLs = 1-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen	Artery	Inflammation	Chronic Active, Mild
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 996

TRT#: 5

SEX: Male

DAY ON TEST: 505

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-996

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Epididymis |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Spinal Cord, Lumbar |
| * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | |

OBSERVATIONS

- | | | | |
|-------------------------------------|------------------------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Necrosis | Mild |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | Pineal Gland | Vacuolation, Cytoplasmic | Mild |
| Note: One olfactory bulb available. | | | |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricl Rgt | Cardiomyopathy | Mild |
| * Kidney | Urothelium | Hyperplasia | Mild |
| | | Nephropathy | Chronicprogr, Mild |
| * Liver | Hepatocyte | Vacuolation, Cytoplasmic | Mild |
| * Lung | | Congestion | Mild |
| | [Congestion TGLs = 1-10] | | |
| | Lymph Node | | |
| | [Congestion TGLs = 4,5-20] | | |
| * Nerve Trigeminal | | Degeneration | Marked |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Marked |
| * Peripheral Nerve, Tibial | | Degeneration | Marked |
| * Preputial Gland | | Inflammation | Chronic Active, Mild |
| * Prostate | | Inflammation | Acute, Marked |
| * Salivary Glands | Parotid GI | Atrophy | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 996

TRT#: 5

SEX: Male

DAY ON TEST: 505

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-996

ORGAN AND ACCOUNTABLE SITE STATUS

* Seminal Vesicle		Inflammation	Acute, Marked
* Spleen	White Pulp	Atrophy	Minimal
		Pigment	Mild
* Thymus		Atrophy	Marked
		Hemorrhage	Mild
	[Hemorrhage TGLs = 2-6]		
* Urinary Bladder	Urothelium	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Prostate Inflammation

CONTRIBUTORY CAUSE OF DEATH - Seminal Vesicle Inflammation

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 997

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-997

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Bone Marrow | * Epididymis | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lung |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Prostate |
| * Salivary Glands | * Seminal Vesicle | Skeletal Muscle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | Testis | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|-----------------------|
| * Brain | | Cyst | |
| | Pineal Gland | Mineral | Minimal |
| | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| * Heart | Ventricle Rgt | Cardiomyopathy | Mild |
| * Islets, Pancreatic | | Adenoma | |
| | | Hyperplasia | Mild |
| | [Adenoma TGLs = 3-6] | | |
| * Kidney | Pelvis | Inflammation | Suppurative, Mild |
| | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Mixed Cell Focus | |
| Lymph Node | Mediastinal | Erythrophagocytosis | Minimal |
| | [Erythrophagocytosis TGLs = 2-6,20] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Cyst | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 997

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-997

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland	Pars Intermed Pars Distalis Duct	Cyst Hyperplasia Dilation Inflammation	Mild Minimal Chronic Active, Minimal
[Dilation TGLs = 1-16]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Minimal
* Thyroid Gland	Bilateral, C Cell	Adenoma	

Experiment Number: 20105 - 59
Test Type: CHRONIC
Route: Whole Body Exposure
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
Time Report Requested: 11:58:55
First Dose M/F: 09/16/12 / 09/16/12
Lab: IIT

ANIMAL ID: 998

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-998

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Aorta	* Bone	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland
* Salivary Glands	* Seminal Vesicle	Skeletal Muscle	* Stomach, Glandular
Testis	* Thyroid Gland	* Trachea	Trigeminal Ganglion
* Urinary Bladder			

INSUFFICIENT TISSUE

* Thymus

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Mild
* Bone Marrow		Hypercellularity	Mild
* Brain	Pineal Gland	Mineral	Minimal
	Pineal Gland	Vacuolation, Cytoplasmic	Minimal
	Note: Olfactory bulbs unavailable for evaluation.		
* Eye	Retina	Atrophy	Minimal
	Cornea	Fibrosis	Minimal
	Cornea	Neovascularization	Minimal
* Heart	Ventricl Rgt	Cardiomyopathy	Moderate
		Cardiomyopathy	Minimal
	[Cardiomyopathy TGLs = 4,5-11,21,22]		
* Kidney		Nephropathy	Chronicprogr, Mild
* Liver	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
* Lymph Node, Mandibular	Lymph Sinus	Ectasia	Minimal
		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Mild
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 998

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-998

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Respirat Epith	Hyperplasia	Mild
	Acinus	Hyperplasia	Mild
	[Hyperplasia TGLs = 3-6]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
	Pars Intermed	Hyperplasia	Mild
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Prostate	Epithelium	Hyperplasia	Mild
* Skin	Subcut Tiss	Hemangiopericytoma	
	Subcut Tiss	Inflammation	Chronic Active, Marked
	[Hemangiopericytoma TGLs = 1-20]		
	[Inflammation TGLs = 2-21]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Inflammation	Chronic Active, Minimal

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 999

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-999

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Stomach, Forestomach
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Trachea
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Preputial Gland
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia TGLs = 12-7]
 - Vacuolation, Cytoplasmic
 - Marked
- * Brain
 - Mineral
 - Minimal
- * Epididymis
 - Hypospermia TGLs = 5-16A]
 - Hypospermia
 - Marked
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Moderate
 - [Cardiomyopathy TGLs = 15-11,20]
 - Cardiomyopathy
 - Moderate
- * Kidney
 - Renal Tubule
 - Cyst
 - Nephropathy
 - Chronicprogr, Marked
 - [Cyst TGLs = 11-13]
 - [Nephropathy TGLs = 9,10-13]
- * Liver
 - Bile Duct
 - Eosinophilic Focus
 - Hyperplasia
 - Mixed Cell Focus
 - Minimal
 - [Mixed Cell Focus TGLs = 13-12]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal
 - [Infiltration Cellular TGLs = 18-10]
- Lymph Node
 - Iliac
 - Erythrophagocytosis
 - Mild
 - [Erythrophagocytosis TGLs = 8-20]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Lymphocyte, Minimal
- * Mammary Gland
 - Atrophy
 - Plasma Cell, Minimal
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 999

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-999

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Minimal
* Pancreas		Adenoma	Multiple
	[Adenoma TGLs = 7-6,14]		
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Prostate		Decreased Secretory Fluid	Mild
	[Decreased Secretory Fluid TGLs = 16-16]		
* Salivary Glands	Parotid GI	Atrophy	Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 6-16]		
Skeletal Muscle		Degeneration	Mild
* Skin		Cyst Epithelial Inclusion	
	[Cyst Epithelial Inclusion TGLs = 1-20.1]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	Red Pulp	Atrophy	Moderate
		Pigment	Marked
	[Atrophy TGLs = 17-12]		
Testis	Germ Cell	Degeneration	Marked
	Artery	Inflammation	Chronic Active, Marked
	[Degeneration TGLs = 4-16A]		
* Thymus		Atrophy	Mild
	Artery	Inflammation	Chronic Active, Mild
	[Atrophy TGLs = 14-6]		
* Thyroid Gland	C Cell	Hyperplasia	Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 999

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-999

ORGAN AND ACCOUNTABLE SITE STATUS

Trigeminal Ganglion

Degeneration

Minimal

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Animal Note: TGL 3 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1000

TRT#: 5

SEX: Male

DAY ON TEST: 724

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1000

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Trachea
- * Esophagus
- * Islets, Pancreatic
- * Pituitary Gland
- * Urinary Bladder
- * Harderian Gland
- * Liver
- * Skin
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Thyroid Gland

MISSING

Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Medulla
 - [Pheochromocytoma Benign TGLs = 5-7]
- * Aorta
- * Bone
- * Bone Marrow
- * Brain
- * Epididymis
 - [Hypospermia TGLs = 8-16A]
- * Eye
 - Cornea, Epithelium
 - Cornea
 - Cornea
- * Heart
 - Ventricl Rgt
- * Kidney
 - Renal Tubule
 - [Cyst TGLs = 6-13]
 - [Nephropathy TGLs = 1,2-13]
- * Lung
- * Mammary Gland
- * Nerve Trigeminal

- Pheochromocytoma Benign
- Mineral
- Fibrous Osteodystrophy
- Hemorrhage
- Mineral
- Hypospermia
- Hyperplasia
- Inflammation
- Neovascularization
- Cardiomyopathy
- Cardiomyopathy
- Cyst
- Nephropathy
- Infiltration Cellular
- Atrophy
- Degeneration

- Multiple
- Minimal
- Minimal
- Moderate
- Mild
- Marked
- Minimal
- Acute, Mild
- Minimal
- Moderate
- Moderate
- Chronicprogr, Marked
- Histiocyte, Minimal
- Moderate
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1000

TRT#: 5

SEX: Male

DAY ON TEST: 724

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1000

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi Respirat Epith	Accumulation, Hyaline Droplet Hyperplasia Inflammation	Minimal Mild Suppurative, Mild
* Pancreas	Olfactory Epi Acinus Artery	Metaplasia Hyperplasia Inflammation	Respiratory, Mild Moderate Chronic Active, Minimal
* Parathyroid Gland		Hyperplasia	Mild
[Hyperplasia TGLs = 11-8]			
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation Inflammation	Minimal Chronic Active, Minimal
* Prostate		Inflammation	Acute, Moderate
* Salivary Glands	Parotid GI	Atrophy	Mild
* Seminal Vesicle		Decreased Secretory Fluid Inflammation	Marked Acute, Moderate
[Decreased Secretory Fluid TGLs = 9-16]			
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration Degeneration	Moderate Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp Red Pulp	Atrophy Atrophy Pigment	Mild Moderate Moderate
[Atrophy TGLs = 3-12]			
* Stomach, Forestomach		Mineral	Mild
* Stomach, Glandular		Mineral	Mild
Testis	Germ Cell Artery	Degeneration Inflammation	Marked Chronic Active, Moderate
[Degeneration TGLs = 7-16A]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1000

TRT#: 5

SEX: Male

DAY ON TEST: 724

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1000

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 10,12,13 = NCL (No Corresponding Lesion)

Animal Note: TGL 4 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1001

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1001

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Mammary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|-----------------------|------------------------|
| * Adrenal Cortex | | Hyperplasia | Moderate |
| | | Hypertrophy | Minimal |
| * Epididymis | | Hyospermia | Marked |
| | [Hyospermia TGLs = 3-16A] | | |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricle Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| | [Nephropathy TGLs = 5-13] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| | [Clear Cell Focus TGLs = 6-12,20] | | |
| | [Mixed Cell Focus TGLs = 6-12,20] | | |
| * Lung | | Infiltration Cellular | Histiocyte, Moderate |
| | Alveolus | | |
| | [Infiltration Cellular TGLs = 7-10] | | |
| * Lymph Node, Mandibular | | Ectasia | Marked |
| | Lymph Sinus | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| | [Ectasia TGLs = 9-9] | | |
| * Nerve Trigeminal | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1001

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1001

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
		Hyperplasia	Lymphocyte, Mild
	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Suppurative, Minimal
* Pancreas		Adenoma	Multiple
	Acinus	Atrophy	Minimal
		Carcinoma	
	Acinus	Hyperplasia	Mild
	[Adenoma TGLs = 4,8-6,20]		
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Mild
	Note: Multiple pyogranulomas in adjacent adipose tissue.		
* Skin		Inflammation	Chronic Active, Moderate
		Ulcer	Mild
	[Inflammation TGLs = 1-20]		
	[Ulcer TGLs = 1-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Moderate
	Seminif Tub	Dilation	Mild
	Artery	Inflammation	Chronic Active, Moderate
	[Degeneration TGLs = 2-16A]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1002

TRT#: 5

SEX: Male

DAY ON TEST: 677

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1002

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Prostate
- * Thyroid Gland
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- Skeletal Muscle
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Skin
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Spinal Cord, Cervical

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Congestion Minimal
 - Hyperplasia Moderate
 - Necrosis Minimal
 - Vacuolation, Cytoplasmic Moderate
 - [Congestion TGLs = 7-7]
 - [Hyperplasia TGLs = 6-7]
- * Epididymis
 - Exfoliated Germ Cell Minimal
 - Hypospermia Marked
 - [Hypospermia TGLs = 8-16A]
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy Minimal
 - Cardiomyopathy Mild
- * Islets, Pancreatic
 - Adenoma Multiple
 - Hyperplasia Minimal
- * Kidney
 - Inflammation Suppurative, Mild
 - Nephropathy Chronicprogr, Mild
 - [Inflammation TGLs = 11-13]
 - [Nephropathy TGLs = 10-13]
- * Liver
 - Hepatocyte
 - Hepatocyte
 - Necrosis Moderate
 - Vacuolation, Cytoplasmic Marked
 - [Necrosis TGLs = 3,4,5-12,20]
 - [Vacuolation, Cytoplasmic TGLs = 2-12,20]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1002

TRT#: 5

SEX: Male

DAY ON TEST: 677

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1002

ORGAN AND ACCOUNTABLE SITE STATUS

* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mesenteric		Depletion Cellular	Marked
		Erythrophagocytosis	Moderate
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas		Carcinoma	
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 12-4]			
* Preputial Gland	Duct	Dilation	Marked
		Inflammation	Suppurative, Moderate
[Dilation TGLs = 13-16]			
* Salivary Glands	Parotid GI	Atrophy	Mild
* Seminal Vesicle		Decreased Secretory Fluid	Marked
[Decreased Secretory Fluid TGLs = 14-16]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	White Pulp	Atrophy	Moderate
		Extramedullary Hematopoiesis	Mild
[Atrophy TGLs = 15-12]			
* Stomach, Forestomach		Edema	Moderate
		Erosion	Mild
	Epithelium	Hyperplasia	Mild
* Stomach, Glandular		Erosion	Minimal
		Hemorrhage	Mild
		Inflammation	Acute, Minimal
Testis	Germ Cell	Degeneration	Marked
[Degeneration TGLs = 16-16A]			
* Thymus		Atrophy	Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1002

TRT#: 5

SEX: Male

DAY ON TEST: 677

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1002

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Liver Hepatocyte Vacuolation, Cytoplasmic

Animal Note: TGLs 9,17,18 = NCL (No Corresponding lesion)

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1003

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1003

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Parathyroid Gland
- Skeletal Muscle
- * Thymus
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Prostate
- * Stomach, Forestomach
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Mammary Gland
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Pancreas
- * Seminal Vesicle
- Testis

OBSERVATIONS

- * Adrenal Cortex Accessory Adrenal Cortical Nodule
- Hypertrophy Mild
- * Brain Pineal Gland Mineral Minimal
- Pineal Gland Vacuolation, Cytoplasmic Minimal
- * Heart Cardiomyopathy Minimal
- * Kidney Nephropathy Chronicprogr, Minimal
- * Liver Clear Cell Focus
- Mixed Cell Focus
- [Clear Cell Focus TGLs = 3-12]
- * Nerve Trigeminal Degeneration Mild
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Mild
- * Peripheral Nerve, Sciatic Degeneration Moderate
- * Peripheral Nerve, Tibial Degeneration Moderate
- * Pituitary Gland Pars Distalis Hyperplasia Marked
- * Preputial Gland Inflammation Chronic Active, Mild
- Note: Inflammation within adjacent adipose tissue.
- * Skin Cyst Epithelial Inclusion
- [Cyst Epithelial Inclusion TGLs = 1-20]
- * Spinal Cord, Cervical Degeneration Minimal
- * Spinal Cord, Lumbar Nerve Degeneration Moderate
- * Spinal Cord, Thoracic Degeneration Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1003

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1003

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Moderate
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1004

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1004

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Skin
- * Trachea
- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Salivary Glands
- * Stomach, Glandular
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Parathyroid Gland
- * Seminal Vesicle
- Testis

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Brain
 - Note: Perivascular cuffs in midbrain.
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Cardiomyopathy
 - Adenoma
- * Islets, Pancreatic
 - [Adenoma TGLs = 2-6]
- * Kidney
 - Nephropathy
- * Liver
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Acinus
 - Hyperplasia
 - [Hyperplasia TGLs = 2-6]
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Preputial Gland
 - Duct
 - Dilation
 - Inflammation
- Skeletal Muscle
 - Degeneration
- * Spinal Cord, Cervical
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1004

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1004

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Adenoma	
[Adenoma TGLs = 1-8]			
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1005

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1005

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nerve Trigeminal | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Spleen | * Stomach, Forestomach | * Trachea | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|--------------------------|---|-----------------------------------|---------------------|
| * Adrenal Cortex | | Accessory Adrenal Cortical Nodule | |
| * Epididymis | | Hypospermia | Marked |
| | | Mesothelioma Malignant | |
| | [Hypospermia TGLs = 4-16A] | | |
| | [Mesothelioma Malignant TGLs = 5-16A] | | |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricle Rgt | Cardiomyopathy | Moderate |
| | [Cardiomyopathy TGLs = 9-11] | | |
| * Islets, Pancreatic | | Adenoma | |
| | | Carcinoma | |
| | [Adenoma TGLs = 7-6] | | |
| | [Carcinoma TGLs = 7-6] | | |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| | [Nephropathy TGLs = 6-13] | | |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| Lymph Node | Bronchial | Erythrophagocytosis | Mild |
| | Mediastinal | Erythrophagocytosis | Mild |
| | [Erythrophagocytosis TGLs = 10-20] | | |
| | [Erythrophagocytosis TGLs = 8-6] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1005

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1005

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Pancreas	Acinus	Adenoma Hyperplasia	Mild
[Adenoma TGLs = 7-6]			
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis Pars Distalis	Adenoma Cyst	
[Adenoma TGLs = 11-4]			
* Preputial Gland	Duct	Dilation	Marked
[Dilation TGLs = 2-16]			
Skeletal Muscle		Degeneration	Minimal
* Skin	Subcut Tiss	Myxosarcoma	
[Myxosarcoma TGLs = 1-20]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Stomach, Glandular		Ulcer	Minimal
Testis	Germ Cell	Degeneration	Moderate
[Degeneration TGLs = 3-16A]			
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1007

TRT#: 5

SEX: Male

DAY ON TEST: 661

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1007

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Epididymis
- * Esophagus
- * Intestine Large, Cecum
- * Lung
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Preputial Gland
- * Prostate
- * Salivary Glands
- * Seminal Vesicle
- * Skeletal Muscle
- * Spinal Cord, Cervical
- * Spinal Cord, Thoracic
- * Testis
- * Thyroid Gland
- * Trachea

AUTO PRECLUDES DIAG.

- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Pancreas
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adren Cortex
 - Note: One of pair available for evaluation.
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Brain
- * Eye
 - Antr Chamber
 - Cornea
 - Retrobulbar
 - Note: Retinal tissue too autolyzed for evaluation bilaterally.
 - [Inflammation TGLs = 1-5]
 - [Inflammation TGLs = 1-5]
- * Harderian Gland
- * Heart
 - Ventricl Rgt
- * Kidney
- * Liver
 - Hepatocyte
- * Lymph Node, Mandibular
- * Nerve Trigeminal
 - [Schwannoma Malignant TGLs = 5-7]

- Schwannoma Malignant
- Metastatic (Trigeminal Ganglion)
- Inflammation
- Acute, Marked
- Inflammation
- Acute, Moderate
- Schwannoma Malignant
- Metastatic (Trigeminal Ganglion)
- Schwannoma Malignant
- Metastatic (Trigeminal Ganglion)
- Cardiomyopathy
- Mild
- Cardiomyopathy
- Moderate
- Nephropathy
- Chronicprogr, Mild
- Vacuolation, Cytoplasmic
- Moderate
- Proliferation
- Plasma Cell, Moderate
- Schwannoma Malignant
- Metastatic (Trigeminal Ganglion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1007

TRT#: 5

SEX: Male

DAY ON TEST: 661

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1007

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet Schwannoma Malignant	Mild Metastatic (Trigeminal Ganglion)
* Parathyroid Gland		Hyperplasia	Focal, Mild
Note: Focal hyperplastic lesion with diffusely hyperplastic gland.			
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland		Schwannoma Malignant	Metastatic (Trigeminal Ganglion)
* Skin		Cyst Epithelial Inclusion	
Note: Cyst partially ruptured.			
[Cyst Epithelial Inclusion TGLs = 3-9]			
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
* Thymus		Atrophy	Moderate
Trigeminal Ganglion		Schwannoma Malignant	

PRIMARY CAUSE OF DEATH - Nerve Trigeminal Schwannoma Malignant Trigeminal Ganglion

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Animal Note: TGLs 2 and 5 likely from same mass.

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1008

TRT#: 5

SEX: Male

DAY ON TEST: 625

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1008

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Preputial Gland
- * Skin
- Testis
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Small, Duodenum
- * Mammary Gland
- * Prostate
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone
- * Eye
- * Islets, Pancreatic
- * Parathyroid Gland
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea
- * Bone Marrow
- * Intestine Large, Colon
- * Lung
- * Pituitary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Moderate
 - Minimal
 - Minimal
- * Brain
 - [Metaplasia TGLs = 1-20]
 - Meninges
 - Metaplasia
 - Osseous, Mild
- * Harderian Gland
 - Inflammation
 - Chronic Active, Minimal
- * Heart
 - Cardiomyopathy
 - Mild
- * Kidney
 - Ventricl Rgt
 - Cardiomyopathy
 - Minimal
 - Nephropathy
 - Chronicprogr, Mild
- * Liver
 - Mixed Cell Focus
- * Lymph Node, Mandibular
 - Hepatocyte
 - Vacuolation, Cytoplasmic
 - Minimal
 - Lymph Sinus
 - Ectasia
 - Moderate
 - Hyperplasia
 - Lymphocyte, Minimal
 - Proliferation
 - Plasma Cell, Mild
 - Degeneration
 - Minimal
- * Nerve Trigeminal
 - Degeneration
 - Minimal
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Mild
 - Olfactory Epi
 - Hyperplasia
 - Minimal
- * Pancreas
 - Acinus
 - Hyperplasia
 - Minimal
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1008

TRT#: 5

SEX: Male

DAY ON TEST: 625

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1008

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
Note: Longitudinal section available for evaluation.			
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - UNCERTAIN

Animal Note: TGLs 2,3,4,5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1009

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1009

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Skin
- * Thymus
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- * Stomach, Forestomach
- * Thyroid Gland
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Seminal Vesicle
- Testis
- Trigeminal Ganglion

INSUFFICIENT TISSUE

- * Adrenal Medulla

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Heart
 - Cardiomyopathy
 - Cardiomyopathy
 - Hyperplasia
- * Islets, Pancreatic
 - [Hyperplasia TGLs = 2-6]
- * Kidney
 - Nephropathy
- * Liver
 - Hepatodiaphragmatic Nodule
 - Hyperplasia
 - Mixed Cell Focus
- * Lung
 - [Hepatodiaphragmatic Nodule TGLs = 1-20]
 - Alveolus
- * Lymph Node, Mandibular
 - Infiltration Cellular
 - Hyperplasia
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Adenoma
 - [Adenoma TGLs = 2-6]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1009

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1009

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	
* Preputial Gland		Inflammation	Chronic Active, Mild
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1010

TRT#: 5

SEX: Male

DAY ON TEST: 501

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1010

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nerve Trigeminal | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Seminal Vesicle | Skeletal Muscle | * Spinal Cord, Cervical |
| * Spinal Cord, Thoracic | * Stomach, Glandular | Testis | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|--|---------------|-------------------------------|--------------------------|
| * Bone Marrow | | Hypercellularity | Moderate |
| * Heart | Ventricle Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| | | Mixed Cell Focus | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| Note: Level 3 largely damaged. | | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| Note: Longitudinal section available for evaluation. | | | |
| * Preputial Gland | | Inflammation | Chronic Active, Mild |
| [Inflammation TGLs = 2-16] | | | |
| * Prostate | Epithelium | Hyperplasia | Minimal |
| * Skin | Subcut Tiss | Fibroma | |
| [Fibroma TGLs = 1-20] | | | |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Minimal |
| * Spleen | | Extramedullary Hematopoiesis | Moderate |
| * Stomach, Forestomach | Epithelium | Hyperplasia | Minimal |
| | | Inflammation | Chronic Active, Moderate |
| * Thymus | | Atrophy | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1010

TRT#: 5

SEX: Male

DAY ON TEST: 501

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1010

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Skin Subcut Tiss Fibroma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1011

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1011

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Bone Marrow | * Epididymis |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Salivary Glands | * Seminal Vesicle |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|-----------------------------|-----------------------------------|-------------------------------|-------------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | Bilateral | Pheochromocytoma Benign | |
| * Brain | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricle Rgt | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| * Liver | | Mixed Cell Focus | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | Respirat Epith | Hyperplasia | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| | [Hyperplasia TGLs = 1-6] | | |
| * Parathyroid Gland | | Hyperplasia | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Intermed | Cyst | |
| | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Chronic Active, Minimal |
| * Prostate | | Adenoma | |
| Skeletal Muscle | | Degeneration | Mild |
| * Skin | | Keratoacanthoma | |
| | [Keratoacanthoma TGLs = 2,3-20] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1011

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1011

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Cyst	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1012

TRT#: 5

SEX: Male

DAY ON TEST: 579

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1012

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Prostate
* Salivary Glands	* Seminal Vesicle	Skeletal Muscle	* Spinal Cord, Cervical
* Spinal Cord, Thoracic	* Stomach, Forestomach	* Stomach, Glandular	Testis
* Thyroid Gland	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
		Hypertrophy	Mild
		Vacuolation, Cytoplasmic	Minimal
* Brain	Pineal Gland	Mineral	Minimal
	Pineal Gland	Vacuolation, Cytoplasmic	Mild
* Heart	Ventricl Rgt	Cardiomyopathy	Minimal
		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Proliferation	Plasma Cell, Moderate
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
		Foreign Body	
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Minimal
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Intermed	Cyst	
	Pars Distalis	Hyperplasia	Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1012

TRT#: 5

SEX: Male

DAY ON TEST: 579

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1012

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland		Inflammation	Chronic Active, Mild
* Skin	Subcut Tiss	Fibroma	
	Subcut Tiss	Fibrosarcoma	
	[Fibroma TGLs = 3,4-21,22]		
	[Fibrosarcoma TGLs = 1-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Pigment	Minimal
* Thymus		Atrophy	Minimal

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibrosarcoma

Animal Note: TGLs 2,5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1013

TRT#: 5

SEX: Male

DAY ON TEST: 717

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1013

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Skin
- * Thyroid Gland
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Stomach, Forestomach
- * Epididymis
- * Intestine Large, Cecum
- * Islets, Pancreatic
- * Stomach, Glandular

MISSING

- * Mammary Gland

AUTO PRECLUDES DIAG.

- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Capsule
 - Hypertrophy
 - Moderate
- * Adrenal Medulla
 - [Pheochromocytoma Benign TGLs = 1-7]
 - Lymphoma Malignant
 - Pheochromocytoma Benign
- * Bone Marrow
 - Hypercellularity
 - Mild
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Moderate
 - Cardiomyopathy
 - Marked
 - Lymphoma Malignant
- * Kidney
 - [Cardiomyopathy TGLs = 7-11]
 - Lymphoma Malignant
 - Lymphoma Malignant
 - Nephropathy
 - Chronicprogr, Mild
- * Liver
 - Bile Duct
 - Hyperplasia
 - Minimal
- * Lung
 - [Lymphoma Malignant TGLs = 8-10]
 - Lymphoma Malignant
 - Lymphoma Malignant
- Lymph Node
 - Lumbar
 - Lymphoma Malignant
 - Renal
 - Lymphoma Malignant
 - Mediastinal
 - Lymphoma Malignant
- [Lymphoma Malignant TGLs = 13-22]
- [Lymphoma Malignant TGLs = 12-21]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1013

TRT#: 5

SEX: Male

DAY ON TEST: 717

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1013

ORGAN AND ACCOUNTABLE SITE STATUS

	[Lymphoma Malignant TGLs = 6-20]		
* Lymph Node, Mandibular		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 2-9]		
* Lymph Node, Mesenteric		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 9-15]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Mild
	[Hyperplasia TGLs = 10-6]		
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Marked
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Mild
	[Dilation TGLs = 14,15-16]		
* Prostate		Lymphoma Malignant	
* Salivary Glands		Lymphoma Malignant	
* Seminal Vesicle		Lymphoma Malignant	
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Lymphoma Malignant	
		Pigment	Mild
	[Lymphoma Malignant TGLs = 11-12]		
Testis	Artery	Inflammation	Chronic Active, Mild
* Thymus		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 5-6.1]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1013

TRT#: 5

SEX: Male

DAY ON TEST: 717

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1013

ORGAN AND ACCOUNTABLE SITE STATUS

Trigeminal Ganglion

Degeneration

Minimal

PRIMARY CAUSE OF DEATH - Spleen Lymphoma Malignant

Animal Note: TGLs 3,4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1014

TRT#: 5

SEX: Male

DAY ON TEST: 649

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1014

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Intestine Large, Colon
- * Pituitary Gland
- * Thyroid Gland
- * Esophagus
- * Intestine Small, Ileum
- * Skin
- * Trachea
- * Harderian Gland
- * Islets, Pancreatic
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Intestine Large, Cecum
- * Mammary Gland
- * Spinal Cord, Thoracic
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Small, Duodenum
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric

OBSERVATIONS

- * Adrenal Medulla
 - * Aorta
 - * Bone
 - * Bone Marrow
 - * Brain
 - * Epididymis
 - * Eye
 - * Heart
 - * Intestine Large, Rectum
 - * Kidney
 - * Liver
 - * Lung
 - * Lymph Node, Mandibular
- [Nephropathy TGLs = 2-13]
- [Congestion TGLs = 3-10]

- Hyperplasia
- Dilation
- Mineral
- Fibrous Osteodystrophy
- Hypercellularity
- Glioma Malignant
- Mineral
- Vacuolation, Cytoplasmic
- Exfoliated Germ Cell
- Inflammation
- Cardiomyopathy
- Cardiomyopathy
- Mineral
- Inflammation
- Cyst
- Nephropathy
- Degeneration
- Hyperplasia
- Congestion
- Mineral
- Proliferation
- Mild
- Minimal
- Mild
- Minimal
- Mild
- Moderate
- Minimal
- Acute, Minimal
- Marked
- Moderate
- Mild
- Chronic Active, Mild
- Chronicprogr, Marked
- Cystic, Minimal
- Minimal
- Mild
- Mild
- Plasma Cell, Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1014

TRT#: 5

SEX: Male

DAY ON TEST: 649

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1014

ORGAN AND ACCOUNTABLE SITE STATUS

Mesentery	Artery	Mineral	Moderate
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Marked
* Parathyroid Gland		Hyperplasia	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Mild
* Prostate	Epithelium	Hyperplasia	Mild
* Salivary Glands	Parotid GI	Inflammation	Acute, Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Mild
[Decreased Secretory Fluid TGLs = 1-16]			
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Mild
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Mild
		Pigment	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Moderate
[Degeneration TGLs = 4-16A]			
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1015

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1015

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- * Trachea
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Prostate
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- Skeletal Muscle
- Testis

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - * Adrenal Medulla
 - Hyperplasia
 - * Eye
 - Retina
 - Atrophy
 - * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Cardiomyopathy
 - * Islets, Pancreatic
 - Adenoma
 - * Kidney
 - Nephropathy
 - * Liver
 - Clear Cell Focus
 - * Lung
 - Bile Duct
 - Hyperplasia
 - Inflammation
 - * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - * Nerve Trigeminal
 - Degeneration
 - * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - * Peripheral Nerve, Sciatic
 - Degeneration
 - * Peripheral Nerve, Tibial
 - Degeneration
 - * Pituitary Gland
 - Pars Distalis
 - Hyperplasia
 - * Preputial Gland
 - Inflammation
- Note: One of pair available for evaluation.
- * Salivary Glands
 - Sublingul GI
 - Inflammation
 - * Spinal Cord, Lumbar
 - Nerve
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1015

TRT#: 5

SEX: Male

DAY ON TEST: 732

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1015

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Adenoma	
Tooth		Odontoma	

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1016

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1016

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- Skeletal Muscle
- Testis
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Preputial Gland
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Atrophy
 - Hypertrophy
 - Note: Nearly all of cortex affected unilaterally.
 - [Atrophy TGLs = 2-7]
- * Adrenal Medulla
 - Pheochromocytoma Benign
 - Note: One of pair available for evaluation.
- * Eye
 - Retina
 - Atrophy
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Cardiomyopathy
- * Kidney
 - Nephropathy
 - [Nephropathy TGLs = 3-13]
- * Liver
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
 - [Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Pars Distalis
 - Adenoma
 - Cyst

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1016

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1016

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 6,7-4]

* Prostate

Adenoma

* Spinal Cord, Cervical

Degeneration

Minimal

* Spinal Cord, Lumbar

Nerve

Degeneration

Moderate

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

Extramedullary Hematopoiesis

Mild

Pigment

Minimal

* Thymus

Atrophy

Mild

Thymoma Benign

* Thyroid Gland

C Cell

Carcinoma

[Carcinoma TGLs = 4-8]

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1017

TRT#: 5

SEX: Male

DAY ON TEST: 636

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1017

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland | * Nerve Trigeminal |
| * Pancreas | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

OBSERVATIONS

- | | | | |
|--------------------------|----------------------------------|--------------------------|------------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Mild |
| | | Vacuolation, Cytoplasmic | Minimal |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Eye | Cornea, Epithelium | Hyperplasia | Minimal |
| | Cornea | Inflammation | Acute, Mild |
| | Cornea | Neovascularization | Minimal |
| * Heart | Ventricl Rgt | Cardiomyopathy | Moderate |
| | | Cardiomyopathy | Minimal |
| | [Cardiomyopathy TGLs = 3-11.1] | | |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| | [Nephropathy TGLs = 4-13] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | | Congestion | Moderate |
| | Epithlm Alvlus | Hyperplasia | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Congestion TGLs = 2-10] | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1017

TRT#: 5

SEX: Male

DAY ON TEST: 636

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1017

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
Note: Approximately two-thirds of Level 3 available for evaluation.			
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Marked

PRIMARY CAUSE OF DEATH - Heart Ventricle Rgt Cardiomyopathy

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1018

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1018

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Aorta	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	Skeletal Muscle	* Skin
* Spinal Cord, Cervical	* Stomach, Forestomach	* Stomach, Glandular	Testis
* Thyroid Gland	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Minimal
* Brain	Pineal Gland	Mineral	Minimal
	Pineal Gland	Vacuolation, Cytoplasmic	Minimal
* Eye	Retina	Atrophy	Minimal
* Heart		Cardiomyopathy	Minimal
	Ventricl Rgt	Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Mild
		Proliferation	Plasma Cell, Minimal
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1018

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1018

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1019

TRT#: 5

SEX: Male

DAY ON TEST: 527

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1019

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Brain
- * Epididymis
- * Esophagus
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Pancreas
- * Parathyroid Gland
- * Pituitary Gland
- * Preputial Gland
- * Prostate
- * Salivary Glands
- * Seminal Vesicle
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Spinal Cord, Thoracic
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thymus
- * Thyroid Gland
- * Trachea
- * Trigeminal Ganglion
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Cardiomyopathy
 - Mild
- * Kidney
 - Nephropathy
 - Minimal
- * Liver
 - Periductal
 - Cholangiofibrosis
 - Chronicprogr, Minimal
 - Marked
 - [Cholangiofibrosis TGLs = 1-20]
- * Lung
 - Alveolus
 - Congestion
 - Infiltration Cellular
 - Mild
 - Histiocyte, Minimal
 - [Congestion TGLs = 4-10]
- * Nerve Trigeminal
 - Degeneration
 - Minimal
- * Nose
 - Inflammation
 - Chronic Active, Mild
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Minimal
- * Peripheral Nerve, Tibial
 - Degeneration
 - Minimal
- * Pituitary Gl
 - Note: Pars distalis available for evaluation.
- * Spinal Cord, Lumbar
 - Nerve
 - Degeneration
 - Mild
- * Spleen
 - Pigment
 - Mild
- * Testis
 - Germ Cell
 - Degeneration
 - Minimal

PRIMARY CAUSE OF DEATH - Liver Periductal Cholangiofibrosis

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1019

TRT#: 5

SEX: Male

DAY ON TEST: 527

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1019

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: TGLs 2,3,5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1020

TRT#: 5

SEX: Male

DAY ON TEST: 614

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1020

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Salivary Glands
- Testis
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Preputial Gland
- * Spinal Cord, Thoracic
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Prostate
- * Stomach, Glandular
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Heart
- * Kidney
- [Nephropathy TGLs = 4-13]
- * Liver
- * Lung
- * Lymph Node, Mandibular
- [Proliferation TGLs = 3-9]
- * Mammary Gland
- [Fibroadenoma TGLs = 2-21]
- * Nose
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Seminal Vesicle
- [Decreased Secretory Fluid TGLs = 5-16]
- Skeletal Muscle
- Ventricle Rgt
- Alveolus
- Olfactory Epi
- Pars Distalis
- Hyperplasia
- Hypertrophy
- Hypercellularity
- Cardiomyopathy
- Nephropathy
- Mixed Cell Focus
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Fibroadenoma
- Accumulation, Hyaline Droplet
- Hyperplasia
- Degeneration
- Degeneration
- Hyperplasia
- Decreased Secretory Fluid
- Degeneration
- Mild
- Minimal
- Minimal
- Minimal
- Chronicprogr, Mild
- Histiocyte, Minimal
- Lymphocyte, Moderate
- Plasma Cell, Marked
- Moderate
- Mild
- Mild
- Mild
- Minimal
- Moderate
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1020

TRT#: 5

SEX: Male

DAY ON TEST: 614

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1020

ORGAN AND ACCOUNTABLE SITE STATUS

* Skin		Cyst Epithelial Inclusion	
	[Cyst Epithelial Inclusion TGLs = 1-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Stomach, Forestomach		Edema	Minimal
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1021

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1021

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- Trigeminal Ganglion
- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- Skeletal Muscle
- Testis
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Lung
- * Preputial Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Adenoma
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Eye
 - Retina
 - Atrophy
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Cardiomyopathy
 - [Cardiomyopathy TGLs = 4-11]
- * Islets, Pancreatic
 - Hyperplasia
- * Kidney
 - Nephropathy
- * Liver
 - Mixed Cell Focus
 - TGLs = 2-12]
- Lymph Node
 - Bronchial
 - Erythrophagocytosis
 - [Erythrophagocytosis TGLs = 3-21]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Acinus
 - Hyperplasia
- * Peripheral Nerve, Sciatic
 - Degeneration

Note: Longitudinal section available for evaluation.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1021

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1021

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Prostate	Epithelium	Hyperplasia	Mild
* Skin		Cyst Epithelial Inclusion	
	[Cyst Epithelial Inclusion TGLs = 6-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
* Thymus		Atrophy	Mild

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Animal Note: TGL 1 = NCL (No Corresponding Lesion) Tissue submitted was consistent with liver.

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1022

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1022

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- * Thyroid Gland
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Salivary Glands
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
- * Brain
- * Heart
- * Kidney
- * Liver
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Nerve Trigeminal
- * Nose
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Preputial Gland
- Pineal Gland
- Ventricl Rgt
- Bile Duct
- Lymph Sinus
- Olfactory Epi
- Pars Distalis
- Pars Distalis
- Duct
- Hyperplasia
- Hypertrophy
- Vacuolation, Cytoplasmic
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Hyperplasia
- Mixed Cell Focus
- Ectasia
- Hyperplasia
- Proliferation
- Erythrophagocytosis
- Degeneration
- Accumulation, Hyaline Droplet
- Hyperplasia
- Degeneration
- Degeneration
- Cyst
- Hyperplasia
- Dilation
- Inflammation
- Minimal
- Minimal
- Minimal
- Mild
- Moderate
- Moderate
- Chronicprogr, Moderate
- Minimal
- Mild
- Lymphocyte, Minimal
- Plasma Cell, Minimal
- Mild
- Minimal
- Moderate
- Mild
- Moderate
- Moderate
- Mild
- Mild
- Chronic Active, Moderate

[Dilation TGLs = 2-16]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1022

TRT#: 5

SEX: Male

DAY ON TEST: 731

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1022

ORGAN AND ACCOUNTABLE SITE STATUS

Skeletal Muscle		Degeneration	Minimal
* Skin		Keratoacanthoma	
	[Keratoacanthoma TGLs = 1-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Cyst	
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1023

TRT#: 5

SEX: Male

DAY ON TEST: 594

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1023

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Thoracic
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex Necrosis Mild
- * Adrenal Cortex Vacuolation, Cytoplasmic Mild
- * Adrenal Medulla Hyperplasia Minimal
- * Aorta Mineral Minimal
- * Bone Fibrous Osteodystrophy Minimal
- * Bone Marrow Hypercellularity Minimal
- * Brain Necrosis Mild
- * Epididymis Exfoliated Germ Cell Minimal
- * Epididymis Hypospermia Moderate
- * Esophagus Artery Inflammation Chronic Active, Mild
- * Eye Retina Atrophy Minimal
- * Eye Cornea, Epithelium Hyperplasia Minimal
- * Eye Cornea Inflammation Acute, Minimal
- * Harderian Gland Atrophy Minimal
- * Heart Artery Inflammation Chronic Active, Minimal
- * Intestine Large, Cecum Artery Inflammation Chronic Active, Minimal
- * Intestine Large, Colon Artery Inflammation Chronic Active, Minimal
- * Kidney Nephropathy Chronicprogr, Marked
- * Kidney [Nephropathy TGLs = 2,3-13]
- * Liver Bile Duct Hyperplasia Mild
- * Liver Hepatocyte Necrosis Mild
- * Lung Inflammation Granulomatous, Minimal
- * Lymph Node, Mandibular Artery Inflammation Chronic Active, Minimal
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Minimal
- * Lymph Node, Mandibular Proliferation Plasma Cell, Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1023

TRT#: 5

SEX: Male

DAY ON TEST: 594

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1023

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland		Hyperplasia	Minimal
Mesentery	Artery	Inflammation	Chronic Active, Minimal
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
	Respirat Epith	Hyperplasia	Mild
* Pancreas	Acinus	Hyperplasia	Minimal
	Artery	Inflammation	Chronic Active, Minimal
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
Note: Longitudinal section available for evaluation.			
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland	Duct	Dilation	Mild
* Prostate	Epithelium	Hyperplasia	Moderate
		Inflammation	Chronic Active, Mild
* Salivary Glands	Parotid GI	Atrophy	Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Marked
		Inflammation	Chronic Active, Mild
[Decreased Secretory Fluid TGLs = 1-16]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Hyperplasia	Lymphocyte, Minimal
	Artery	Inflammation	Chronic Active, Moderate
		Pigment	Mild
[Hyperplasia TGLs = 5-12]			
* Stomach, Forestomach		Edema	Mild
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild
		Thrombus	Mild
Trigeminal Ganglion		Degeneration	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1023

TRT#: 5

SEX: Male

DAY ON TEST: 594

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1023

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1024

TRT#: 5

SEX: Male

DAY ON TEST: 526

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1024

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------|--------------------------|--------------------|-------------------------|
| * Aorta | * Brain | * Epididymis | * Esophagus |
| * Harderian Gland | * Lymph Node, Mesenteric | * Nerve Trigeminal | * Pancreas |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Spinal Cord, Lumbar | * Spinal Cord, Thoracic | * Thymus | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | | |

MISSING

- | | |
|--------------------------|-----------------|
| * Lymph Node, Mandibular | * Mammary Gland |
|--------------------------|-----------------|

AUTO PRECLUDES DIAG.

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Spleen |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|-----------------------------|--------------------------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Bone | | Fibrous Osteodystrophy | Minimal |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Eye | Cornea, Epithelium | Hyperplasia | Mild |
| | Cornea | Inflammation | Acute, Mild |
| * Heart | | Cardiomyopathy | Mild |
| | [Cardiomyopathy TGLs = 5-11] | | |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | Hepatocyte | Necrosis | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Parathyroid Gland | | Hyperplasia | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1024

TRT#: 5

SEX: Male

DAY ON TEST: 526

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1024

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial GI

Note: One of pair available for evaluation.

* Stomach, Forestomach

Artery

Inflammation

Chronic Active, Mild

* Stomach, Glandular

Artery

Inflammation

Chronic Active, Mild

Testis

Artery

Inflammation

Chronic Active, Moderate

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Animal Note: TGLs 1,2,3,4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1131

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1131

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Pituitary Gland
- * Skin
- * Thyroid Gland
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Prostate
- * Spinal Cord, Cervical
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hyperplasia Mild
 - Hypertrophy Moderate
- * Adrenal Medulla
 - Pheochromocytoma Benign
- * Brain
 - [Pheochromocytoma Benign TGLs = 1-7]
 - Pineal Gland
 - Pineal Gland
 - Mineral Minimal
 - Vacuolation, Cytoplasmic Minimal
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy Mild
 - Cardiomyopathy Mild
- * Islets, Pancreatic
 - [Adenoma TGLs = 2-6]
 - Adenoma
- * Kidney
 - Nephropathy Chronicprogr, Moderate
- * Liver
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Mild
 - Proliferation Plasma Cell, Mild
- * Lymph Node, Mesenteric
 - [Hemangiosarcoma TGLs = 3,4-15]
 - Hemangiosarcoma
- * Nerve Trigeminal
 - Degeneration Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet Mild
- * Pancreas
 - [Adenoma TGLs = 2-6]
 - Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1131

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1131

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Marked
* Peripheral Nerve, Tibial		Degeneration	Marked
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Minimal
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Mild
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1133

TRT#: 7

SEX: Male

DAY ON TEST: 384

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1133

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Bone Marrow | * Epididymis | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Liver | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| Penis | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Spinal Cord, Lumbar | * Spinal Cord, Thoracic | * Stomach, Forestomach |
| * Stomach, Glandular | Testis | * Thyroid Gland | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|--|------------------------------|-------------------------------|-------------------------|
| * Brain | | Compression | Mild |
| Note: Small amount of one olfactory bulb present | | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | Bilateral, Renal Tubule | Adenoma | |
| | | Nephropathy | Chronicprogr, Mild |
| | [Adenoma TGLs = 1,2-20,21] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Mild |
| | [Dilation TGLs = 3-20] | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 5-4] | | |
| * Preputial Gland | | Inflammation | Chronic Active, Mild |
| * Prostate | | Inflammation | Chronic Active, Minimal |
| * Seminal Vesicle | | Decreased Secretory Fluid | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1133

TRT#: 7

SEX: Male

DAY ON TEST: 384

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1133

ORGAN AND ACCOUNTABLE SITE STATUS

	[Decreased Secretory Fluid TGLs = 8-16]		
* Spleen	White Pulp	Atrophy Pigment	Minimal Mild
	[Atrophy TGLs = 6-12]		
* Thymus		Atrophy	Mild
	[Atrophy TGLs = 7-6]		

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59
Test Type: CHRONIC
Route: Whole Body Exposure
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
Time Report Requested: 11:58:55
First Dose M/F: 09/16/12 / 09/16/12
Lab: IIT

ANIMAL ID: 1134

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1134

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Harderian Gland | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Mammary Gland | * Nose | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|---|-----------------------------------|--|------------------------|
| * Adrenal Cortex | | Accessory Adrenal Cortical Nodule
Hyperplasia | Minimal |
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Bone Marrow | | Hypercellularity
Lymphoma Malignant | Marked |
| * Epididymis | | Exfoliated Germ Cell
Hypospermia | Minimal
Moderate |
| * Eye | Cornea | Fibrosis | Minimal |
| | Cornea, Epithelium | Hyperplasia | Minimal |
| | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Minimal |
| | [Neovascularization TGLs = 1-5] | | |
| * Heart | Ventricl Rgt | Cardiomyopathy
Cardiomyopathy | Minimal
Mild |
| * Intestine Large, Cecum | | Edema | Minimal |
| | Epithelium | Erosion | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Extramedullary Hematopoiesis
Hepatodiaphragmatic Nodule
Lymphoma Malignant | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1134

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1134

ORGAN AND ACCOUNTABLE SITE STATUS

	[Hepatodiaphragmatic Nodule	TGLs = 4-20]		
* Lung			Lymphoma Malignant	
	[Lymphoma Malignant	TGLs = 7-10]		
Lymph Node	Mediastinal		Erythrophagocytosis	Mild
	Lumbar		Erythrophagocytosis	Mild
	Mediastinal		Lymphoma Malignant	
	[Erythrophagocytosis	TGLs = 6-20]		
	[Erythrophagocytosis	TGLs = 8,9-21]		
	[Lymphoma Malignant	TGLs = 5-20]		
* Lymph Node, Mandibular			Lymphoma Malignant	
* Lymph Node, Mesenteric			Lymphoma Malignant	
* Nerve Trigeminal			Degeneration	Minimal
* Pancreas	Acinus		Atrophy	Minimal
* Parathyroid Gland			Hyperplasia	Minimal
* Peripheral Nerve, Sciatic			Degeneration	Mild
* Peripheral Nerve, Tibial			Degeneration	Mild
* Pituitary Gland	Pars Intermed		Cyst	
	Pars Distalis		Hyperplasia	Mild
* Preputial Gland			Inflammation	Chronic Active, Minimal
Skeletal Muscle			Degeneration	Minimal
* Spinal Cord, Cervical			Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve		Degeneration	Moderate
			Degeneration	Minimal
* Spinal Cord, Thoracic			Degeneration	Moderate
* Spleen			Extramedullary Hematopoiesis	Mild
			Lymphoma Malignant	
	[Lymphoma Malignant	TGLs = 3-12]		
Testis	Germ Cell		Degeneration	Moderate
			Edema	Moderate
	[Degeneration	TGLs = 2-16A]		
	[Edema	TGLs = 2-16A]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1134

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1134

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Moderate

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1135

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1135

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Pituitary Gland
* Prostate	* Seminal Vesicle	Skeletal Muscle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	Testis	* Thyroid Gland
* Trachea	Trigeminal Ganglion	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Minimal
* Brain		Glioma Malignant	
* Heart		Cardiomyopathy	Minimal
* Kidney	Ventricle Rgt	Cardiomyopathy	Minimal
	Renal Tubule	Cyst	
		Nephropathy	Chronicprogr, Mild
* Liver		Clear Cell Focus	
* Lymph Node, Mandibular	Lymph Sinus	Ectasia	Mild
		Hyperplasia	Lymphocyte, Mild
		Inflammation	Suppurative, Minimal
		Proliferation	Plasma Cell, Mild
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Mild
		[Dilation TGLs = 1-16]	
* Salivary Glands	Parotid GI	Atrophy	Mild
	Parotid GI	Inflammation	Acute, Mild
* Spinal Cord, Cervical		Degeneration	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1135

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1135

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1136

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1136

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mandibular	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	Testis
* Thyroid Gland	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
		Hypertrophy	Minimal
* Eye	Retina	Atrophy	Minimal
	Cornea	Fibrosis	Mild
	Cornea, Epithelium	Hyperplasia	Minimal
	Cornea	Inflammation	Acute, Minimal
	Cornea	Neovascularization	Minimal
* Heart		Cardiomyopathy	Minimal
	Ventricl Rgt	Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Moderate
* Liver		Clear Cell Focus	
		Mixed Cell Focus	
* Lymph Node, Mesenteric		Erythrophagocytosis	Minimal
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1136

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1136

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

Extramedullary Hematopoiesis

Mild

Pigment

Mild

* Thymus

Atrophy

Minimal

Cyst

Tissue NOS

Mediastinum

Chemodectoma Benign

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1137

TRT#: 7

SEX: Male

DAY ON TEST: 716

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1137

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Seminal Vesicle
- Testis
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Skin
- * Trachea
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Spinal Cord, Cervical
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - [Adenoma TGLs = 3-7]
 - [Angiectasis TGLs = 4-7]
 - * Adrenal Medulla
 - [Pheochromocytoma Benign TGLs = 3-7]
 - * Brain
 - Pineal Gland
 - Pineal Gland
 - * Epididymis
 - * Heart
 - * Kidney
 - [Nephropathy TGLs = 8-13]
 - * Liver
 - Bile Duct
 - Bile Duct
 - * Mammary Gland
 - Duct
 - * Nerve Trigeminal
 - * Nose
 - Olfactory Epi
 - * Parathyroid Gland
 - * Peripheral Nerve, Sciatic
 - * Peripheral Nerve, Tibial
 - * Pituitary Gland
 - Pars Distalis
- Adenoma
Angiectasis
- Pheochromocytoma Benign
- Glioma Malignant
Mineral
Vacuolation, Cytoplasmic
Exfoliated Germ Cell
Cardiomyopathy
Nephropathy
- Fibrosis
Hyperplasia
Dilation
Degeneration
Accumulation, Hyaline Droplet
Hyperplasia
Degeneration
Degeneration
Adenoma
- Minimal
Minimal
Minimal
Mild
Chronicprogr, Moderate
Minimal
Minimal
Minimal
Mild
Minimal
Minimal
Mild
Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1137

TRT#: 7

SEX: Male

DAY ON TEST: 716

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1137

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 9-4]

* Preputial Gland		Inflammation	Chronic Active, Minimal
* Prostate	Epithelium	Hyperplasia	Mild
		Infiltration Cellular	Mononuclear CI, Mild
* Salivary Glands	Parotid GI	Atrophy	Moderate
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
		Pigment	Moderate

[Atrophy TGLs = 7-12]

* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Marked
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	Follicular Cel	Congestion	Mild
		Hypertrophy	Minimal

[Congestion TGLs = 5-8]

PRIMARY CAUSE OF DEATH - Brain Glioma Malignant

Animal Note: TGLs 1,2 = NCL (No Corresponding Lesion)

Animal Note: TGL 10 = NST (No Section Taken)

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1138

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1138

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Prostate
- * Spinal Cord, Cervical
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Skin
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Medulla
- * Brain
- * Heart
- * Kidney
[Nephropathy TGLs = 5-13]
- * Liver
- * Lung
[Infiltration Cellular TGLs = 7,8-10]
- * Lymph Node, Mandibular
[Ectasia TGLs = 6-9]
- * Nerve Trigeminal
- * Nose
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Preputial Gland
[Dilation TGLs = 1,2-16]
- Skeletal Muscle
- Pineal Gland
- Ventricl Rgt
- Bile Duct
- Alveolus
- Lymph Sinus
- Olfactory Epi
- Duct
- Hyperplasia
- Vacuolation, Cytoplasmic
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Clear Cell Focus
- Eosinophilic Focus
- Hyperplasia
- Mixed Cell Focus
- Infiltration Cellular
- Ectasia
- Degeneration
- Accumulation, Hyaline Droplet
- Degeneration
- Degeneration
- Dilation
- Degeneration
- Mild
- Minimal
- Minimal
- Minimal
- Chronicprogr, Moderate
- Minimal
- Minimal
- Minimal
- Histiocyte, Minimal
- Minimal
- Mild
- Moderate
- Moderate
- Moderate
- Mild
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1138

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1138

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Minimal
* Thymus		Atrophy	Moderate
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGLs 3,4,9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59
Test Type: CHRONIC
Route: Whole Body Exposure
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
Time Report Requested: 11:58:55
First Dose M/F: 09/16/12 / 09/16/12
Lab: IIT

ANIMAL ID: 1139

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1139

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Aorta	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	Testis	* Thyroid Gland	* Trachea
Trigeminal Ganglion	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Minimal
* Adrenal Medulla		Hyperplasia	Mild
* Brain		Compression	Mild
[Compression TGLs = 7-2]			
Coagulating Gland		Inflammation	Chronic Active, Moderate
* Eye	Cornea	Neovascularization	Minimal
* Heart		Cardiomyopathy	Mild
	Ventricl Rgt	Cardiomyopathy	Minimal
* Kidney	Urothelium	Hyperplasia	Minimal
	Pelvis	Inflammation	Chronic Active, Minimal
		Nephropathy	Chronicprogr, Mild
* Liver	Bile Duct	Hepatodiaphragmatic Nodule	
[Hepatodiaphragmatic Nodule TGLs = 5-20]		Hyperplasia	Mild
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Moderate
		Proliferation	Plasma Cell, Mild
* Mammary Gland	Duct	Dilation	Minimal
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1139

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1139

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 6-4]			
* Preputial Gland	Duct	Dilation Inflammation	Moderate Chronic Active, Moderate
[Dilation TGLs = 2,3-16,16.1]			
* Prostate		Inflammation	Chronic Active, Marked
[Inflammation TGLs = 4-16,16.1]			
Skeletal Muscle		Degeneration	Minimal
* Skin	Subcut Tiss	Lipoma	
[Lipoma TGLs = 1-20]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
* Thymus		Atrophy	Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1140

TRT#: 7

SEX: Male

DAY ON TEST: 500

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1140

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Epididymis
- * Esophagus
- * Eye
- * Harderian Gland
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Islets, Pancreatic
- * Lung
- * Lymph Node, Mesenteric
- * Pancreas
- * Parathyroid Gland
- * Prostate
- * Seminal Vesicle
- Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- * Stomach, Glandular
- Testis
- * Thyroid Gland
- * Trachea
- Trigeminal Ganglion
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

OBSERVATIONS

- * Brain
 - Compression
 - Mild
 - Note: One olfactory bulb available for evaluation.
- * Heart
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Bilateral, Renal Tubule
 - Carcinoma
 - Nephropathy
 - Chronicprogr, Mild
 - [Carcinoma TGLs = 4,5,6,7,8-13,20,21,22,23]
- * Liver
 - Infiltration Cellular
 - Mixed Cell, Minimal
 - Kupffer Cell
 - Pigment
 - Minimal
 - Lymph Node
 - Proliferation
 - Plasma Cell, Moderate
 - [Proliferation TGLs = 3-21]
- * Lymph Node, Mandibular
 - Proliferation
 - Plasma Cell, Moderate
- * Mammary Gland
 - Duct
 - Dilation
 - Moderate
 - [Dilation TGLs = 1-9,20]
- * Nerve Trigeminal
 - Degeneration
 - Minimal
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Mild
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Minimal
- * Peripheral Nerve, Tibial
 - Degeneration
 - Mild
- * Pituitary Gland
 - Pars Distalis
 - Adenoma
 - [Adenoma TGLs = 12-4]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1140

TRT#: 7

SEX: Male

DAY ON TEST: 500

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1140

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland [Inflammation TGLs = 11-16]		Inflammation	Chronic Active, Mild
* Salivary Glands	Parotid GI Duct, Parotid GI	Atrophy Dilation	Mild Mild
* Spleen		Extramedullary Hematopoiesis Pigment	Mild Mild
* Stomach, Forestomach	Epithelium	Hyperplasia Inflammation	Mild Chronic Active, Mild
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGLs 2,9,10 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1141

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1141

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- Testis
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- Skeletal Muscle
- * Trachea
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Skin
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
 - [Compression TGLs = 4-2]
- * Eye
- * Heart
- * Kidney
- Lacrimal Gland
 - [Metaplasia TGLs = 3-20]
- * Liver
 - [Mixed Cell Focus TGLs = 1-12]
- * Lymph Node, Mandibular
- * Mammary Gland
- * Nerve Trigeminal
- * Nose
- * Pancreas
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- Accessory Adrenal Cortical Nodule
- Hyperplasia
- Mineral
- Compression
- Atrophy
- Cardiomyopathy
- Nephropathy
- Metaplasia
- Hyperplasia
- Mixed Cell Focus
- Hyperplasia
- Proliferation
- Dilation
- Degeneration
- Accumulation, Hyaline Droplet
- Adenoma
- Degeneration
- Degeneration
- Mild
- Minimal
- Minimal
- Mild
- Minimal
- Minimal
- Mild
- Moderate
- Moderate
- Mild
- Minimal
- Chronicprogr, Mild
- Harderian GI
- Minimal
- Minimal
- Mild
- Mild
- Minimal
- Minimal
- Mild
- Moderate
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1141

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1141

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland [Adenoma TGLs = 5-4]	Pars Distalis	Adenoma	
* Preputial Gland		Inflammation	Chronic Active, Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Stomach, Forestomach		Sarcoma	
* Thymus		Atrophy	Moderate
* Thyroid Gland [Adenoma TGLs = 2-8]	C Cell	Adenoma	

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59
Test Type: CHRONIC
Route: Whole Body Exposure
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
Time Report Requested: 11:58:55
First Dose M/F: 09/16/12 / 09/16/12
Lab: IIT

ANIMAL ID: 1143

TRT#: 7

SEX: Male

DAY ON TEST: 621

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1143

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Aorta	* Bone	* Bone Marrow	* Esophagus
* Harderian Gland	* Heart	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lung	* Lymph Node, Mesenteric	* Pancreas
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spinal Cord, Cervical	* Spinal Cord, Thoracic	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Minimal
* Adrenal Medulla		Hyperplasia	Minimal
* Brain		Compression	Mild
* Epididymis		Exfoliated Germ Cell	Minimal
* Eye	Artery	Inflammation	Chronic Active, Mild
	Cornea	Inflammation	Acute, Minimal
	Cornea	Neovascularization	Minimal
* Intestine Large, Cecum		Edema	Minimal
		Erosion	Minimal
* Kidney		Nephropathy	Chronicprogr, Moderate
	[Nephropathy TGLs = 3-13]		
* Lymph Node, Mandibular		Proliferation	Plasma Cell, Mild
* Mammary Gland	Duct	Dilation	Moderate
	[Dilation TGLs = 4-9,20]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 5-4]		
* Prostate	Epithelium	Hyperplasia	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1143

TRT#: 7

SEX: Male

DAY ON TEST: 621

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1143

ORGAN AND ACCOUNTABLE SITE STATUS

Inflammation Chronic Active, Minimal

[Inflammation TGLs = 1-16.1]

Skeletal Muscle

Degeneration

Mild

* Spinal Cord, Lumbar

Nerve

Degeneration

Mild

* Spleen

Pigment

Moderate

Testis

Germ Cell

Degeneration

Mild

[Degeneration TGLs = 2-16A]

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1144

TRT#: 7

SEX: Male

DAY ON TEST: 638

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1144

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-------------------|---------------------------|------------------------|----------------------|
| * Adrenal Cortex | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Rectum | * Islets, Pancreatic | * Pancreas |
| * Prostate | * Salivary Glands | * Seminal Vesicle | Skeletal Muscle |
| * Skin | * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | Trigeminal Ganglion |

MISSING

- | | | |
|-----------------|--------------------|---------------------|
| * Mammary Gland | * Nerve Trigeminal | * Parathyroid Gland |
|-----------------|--------------------|---------------------|

AUTO PRECLUDES DIAG.

- | | | | |
|----------------------------|--------------------------|-----------------------------|--------------------------|
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|-----------------------------|----------------------------|-------------------------------|--------------------------|
| * Adrenal Medulla | | Hyperplasia | Marked |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricle Rgt | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | | Congestion | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Congestion TGLs = 1-10] | | |
| * Lymph Node, Mandibular | | Erythrophagocytosis | Mild |
| * Lymph Node, Mesenteric | | Erythrophagocytosis | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Preputial Gland | Duct | Dilation | Mild |
| | | Inflammation | Chronic Active, Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1144

TRT#: 7

SEX: Male

DAY ON TEST: 638

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1144

ORGAN AND ACCOUNTABLE SITE STATUS

[Inflammation TGLs = 2-16]

* Spinal Cord, Cervical

Degeneration

Minimal

* Spinal Cord, Lumbar

Nerve

Degeneration

Mild

* Spleen

Extramedullary Hematopoiesis

Minimal

Pigment

Mild

Testis

Germ Cell

Degeneration

Minimal

PRIMARY CAUSE OF DEATH

- UNCERTAIN

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1145

TRT#: 7

SEX: Male

DAY ON TEST: 472

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1145

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Epididymis | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nerve Trigeminal | * Pancreas | * Peripheral Nerve, Sciatic |
| * Prostate | * Salivary Glands | * Seminal Vesicle | Skeletal Muscle |
| * Spinal Cord, Cervical | * Spinal Cord, Lumbar | * Spinal Cord, Thoracic | * Stomach, Forestomach |
| * Stomach, Glandular | Testis | * Thyroid Gland | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|--|---------------------------------------|-------------------------------|--------------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Minimal |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | | | |
| Note: One olfactory bulb available for evaluation. | | | |
| * Heart | Ventricle Rgt | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Infiltration Cellular | Mixed Cell, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 3-10] | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Chronic Active, Moderate |
| | [Inflammation TGLs = 2-16] | | |
| * Skin | Subcut Tiss | Fibrosarcoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1145

TRT#: 7

SEX: Male

DAY ON TEST: 472

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1145

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibrosarcoma TGLs = 1-20]

* Spleen

Extramedullary Hematopoiesis

Moderate

* Thymus

Atrophy

Mild

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibrosarcoma

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1146

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1146

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- * Spinal Cord, Cervical
- Testis
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- * Trachea
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
- * Eye
 - Retina
 - Atrophy
- * Heart
 - Cardiomyopathy
- * Islets, Pancreatic
 - Adenoma
- * Kidney
 - [Adenoma TGLs = 3-20]
 - [Nephropathy TGLs = 2-13]
- * Liver
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Parathyroid Gland
 - Hyperplasia
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Adenoma
- * Preputial Gland
 - Duct
 - Dilation
- Skeletal Muscle
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1146

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1146

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spleen		Pigment	Mild
* Thymus		Atrophy	Moderate
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGLs 1,4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1149

TRT#: 7

SEX: Male

DAY ON TEST: 582

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1149

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Small, Duodenum
- * Lung
- * Parathyroid Gland
- * Skin
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Spinal Cord, Cervical
- Testis
- * Bone Marrow
- * Harderian Gland
- * Islets, Pancreatic
- * Nerve Trigeminal
- * Preputial Gland
- * Spinal Cord, Thoracic
- * Thyroid Gland
- * Brain
- * Intestine Large, Rectum
- * Liver
- * Pancreas
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion

MISSING

- * Mammary Gland

AUTO PRECLUDES DIAG.

- * Adrenal Cortex
- * Intestine Small, Ileum
- * Eye
- * Nose
- * Intestine Large, Cecum
- * Trachea
- * Intestine Large, Colon

OBSERVATIONS

- * Bone
- * Heart
- [Cardiomyopathy TGLs = 3-11]
- * Kidney
- [Erythrophagocytosis TGLs = 4-6,20]
- * Lymph Node, Mandibular
- [Hyperplasia TGLs = 1-9]
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Prostate
- * Seminal Vesicle
- Increased Bone
- Cardiomyopathy
- Ventricl Rgt
- Endocardium
- Cardiomyopathy
- Schwannoma Malignant
- Nephropathy
- Erythrophagocytosis
- Hyperplasia
- Proliferation
- Degeneration
- Degeneration
- Inflammation
- Decreased Secretory Fluid
- Minimal
- Minimal
- Moderate
- Chronicprogr, Minimal
- Moderate
- Lymphocyte, Minimal
- Plasma Cell, Minimal
- Minimal
- Minimal
- Acute, Moderate
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1149

TRT#: 7

SEX: Male

DAY ON TEST: 582

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1149

ORGAN AND ACCOUNTABLE SITE STATUS

[Decreased Secretory Fluid TGLs = 2-16]

Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen	White Pulp	Atrophy	Mild
		Pigment	Minimal
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - UNCERTAIN

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1150

TRT#: 7

SEX: Male

DAY ON TEST: 247

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1150

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Pancreas
- * Pituitary Gland
- * Skin
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Rectum
- * Liver
- * Parathyroid Gland
- * Prostate
- * Spinal Cord, Cervical
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Peripheral Nerve, Sciatic
- * Seminal Vesicle
- * Spinal Cord, Lumbar
- * Thyroid Gland
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Peripheral Nerve, Tibial
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Trachea

MISSING

- * Mammary Gland

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

OBSERVATIONS

- * Bone Marrow
- * Eye
- * Harderian Gland
- * Heart
- * Kidney
- * Lung
- [Congestion TGLs = 1-10]
- * Lymph Node, Mandibular
- * Nerve Tibial
- Note: Longitudinal section available for evaluation.
- * Nose
- * Preputial Gland
- Note: One of pair available for evaluation.
- * Salivary Glands
- Lens
- Ventricle Rgt
- Hypercellularity
- Cataract
- Inflammation
- Cardiomyopathy
- Hemorrhage
- Nephropathy
- Congestion
- Hyperplasia
- Accumulation, Hyaline Droplet
- Inflammation
- Atrophy
- Minimal
- Minimal
- Chronic Active, Minimal
- Minimal
- Minimal
- Chronicprogr, Mild
- Moderate
- Lymphocyte, Mild
- Mild
- Chronic Active, Mild
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1150

TRT#: 7

SEX: Male

DAY ON TEST: 247

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1150

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

White Pulp

Atrophy

Mild

Testis

Germ Cell

Degeneration

Minimal

* Thymus

Atrophy

Mild

[Atrophy TGLs = 2-6]

PRIMARY CAUSE OF DEATH

- UNCERTAIN

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1151

TRT#: 7

SEX: Male

DAY ON TEST: 694

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1151

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Islets, Pancreatic
- * Nerve Trigeminal
- * Seminal Vesicle
- Testis
- * Bone
- * Intestine Large, Cecum
- * Lung
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Epididymis
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- * Preputial Gland
- * Spinal Cord, Thoracic
- Trigeminal Ganglion
- * Esophagus
- * Intestine Large, Rectum
- * Mammary Gland
- * Salivary Glands
- * Stomach, Glandular

AUTO PRECLUDES DIAG.

- * Eye
- * Trachea
- * Intestine Small, Duodenum
- * Urinary Bladder
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Necrosis
- * Heart
 - Cardiomyopathy
- * Kidney
 - Ventricl Rgt
 - Cardiomyopathy
 - Nephropathy
- * Liver
 - Hepatocellular Adenoma
- Lymph Node
 - Pancreatic
 - Erythrophagocytosis
- [Erythrophagocytosis TGLs = 6-20]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Adenoma
- Acinus
 - Atrophy
- [Adenoma TGLs = 7-6]
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1151

TRT#: 7

SEX: Male

DAY ON TEST: 694

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1151

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland [Necrosis TGLs = 3-4]	Pars Distalis	Necrosis	Marked
* Prostate [Inflammation TGLs = 1-16]		Inflammation	Acute, Marked
Skeletal Muscle		Degeneration	Mild
* Skin [Basal Cell Adenoma TGLs = 2-20]		Basal Cell Adenoma	
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Inflammation	Chronic Active, Minimal
		Ulcer	Mild
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Necrosis

Animal Note: TGLs 4,5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1152

TRT#: 7

SEX: Male

DAY ON TEST: 702

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1152

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- Testis
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Spinal Cord, Cervical
- * Trachea

MISSING

- * Mammary Gland
- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Bone Marrow
 - Hypercellularity
- * Heart
 - Cardiomyopathy
- * Kidney
 - Nephropathy
- * Liver
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
 - Alveolus
 - Infiltration Cellular
- * Lung
 - [Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- Note: Approximately one-half of Level 3 available for evaluation.
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Intermed
 - Cyst
- * Preputial Gland
 - Inflammation
- * Seminal Vesicle
 - Decreased Secretory Fluid
- [Decreased Secretory Fluid TGLs = 2-16]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1152

TRT#: 7

SEX: Male

DAY ON TEST: 702

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1152

ORGAN AND ACCOUNTABLE SITE STATUS

Skeletal Muscle		Degeneration	Minimal
* Skin	Hair Follicle	Dilation	Mild
	Subcut Tiss	Fibroma	
	[Fibroma TGLs = 1-20,21]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
	[Extramedullary Hematopoiesis TGLs = 3-12]		
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibroma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1154

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1154

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|----------------------------|--------------------------|---------------------------|
| * Aorta | * Bone | * Bone Marrow | * Esophagus |
| * Eye | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nerve Trigeminal | * Pancreas | * Parathyroid Gland |
| * Prostate | * Salivary Glands | Skeletal Muscle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | | |

AUTO PRECLUDES DIAG.

- * Intestine Small, Ileum

OBSERVATIONS

- | | | | |
|---------------------------------------|---------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | | Compression | Moderate |
| [Compression TGLs = 4-1,2] | | | |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| * Harderian Gland | | Degeneration | Cystic, Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricle Rgt | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Moderate |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| [Infiltration Cellular TGLs = 3-10] | | | |
| Lymph Node | Pancreatic | Erythrophagocytosis | Mild |
| [Erythrophagocytosis TGLs = 1,2-20] | | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1154

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1154

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 5-4]			
* Preputial Gland		Inflammation	Chronic Active, Moderate
* Seminal Vesicle		Decreased Secretory Fluid	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Pigment	Moderate
Testis	Germ Cell	Degeneration	Mild
	Artery	Inflammation	Chronic Active, Minimal
[Degeneration TGLs = 7-16A]			
* Thymus		Atrophy	Minimal

Animal Note: TGLs 8,9 = NCL (No Corresponding Lesion)

Animal Note: TGL 6 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1155

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1155

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Brain
- * Epididymis
- * Esophagus
- * Harderian Gland
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Parathyroid Gland
- * Salivary Glands
- * Seminal Vesicle
- * Skin
- * Spinal Cord, Cervical
- * Stomach, Forestomach
- * Stomach, Glandular
- * Testis
- * Trachea
- * Urinary Bladder
- * Trigeminal Ganglion

OBSERVATIONS

- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Eye
 - Cornea Inflammation Acute, Minimal
 - Cornea Neovascularization Minimal
- * Heart
 - Ventricl Rgt Cardiomyopathy Mild
 - Endocardium Schwannoma Malignant
- * Kidney
 - Nephropathy Chronicprogr, Moderate
- * Liver
 - Bile Duct Hyperplasia Mild
 - Mixed Cell Focus
- * Lung
 - Alveolus Infiltration Cellular Histocyte, Minimal
 - [Infiltration Cellular TGLs = 7-10,20]
- * Lymph Node, Mandibular
 - Proliferation Plasma Cell, Mild
 - [Proliferation TGLs = 1-9]
- * Nerve Trigeminal
 - Degeneration Mild
- * Nose
 - Olfactory Epi Accumulation, Hyaline Droplet Moderate
- * Pancreas
 - Acinus Hyperplasia Mild
- * Peripheral Nerve, Sciatic
 - Degeneration Moderate
- * Peripheral Nerve, Tibial
 - Degeneration Moderate
- * Pituitary Gland
 - Pars Distalis Cyst
 - Pars Distalis Hyperplasia Mild
- * Preputial Gland
 - Duct Dilation Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1155

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1155

ORGAN AND ACCOUNTABLE SITE STATUS

* Prostate	Epithelium	Inflammation	Chronic Active, Minimal
Skeletal Muscle		Hyperplasia	Marked
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Degeneration	Mild
		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Animal Note: TGLs 2,3,4,5,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1156

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1156

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Aorta | * Bone | * Epididymis | * Esophagus |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Seminal Vesicle | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Stomach, Glandular | Testis | * Thymus | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

MISSING

- * Peripheral Nerve, Tibial

OBSERVATIONS

- | | | | |
|---|--------------|-------------------------|------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| Note: One of pair available for evaluation. | | | |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | | Mineral | Minimal |
| * Eye | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Minimal |
| * Harderian Gland | | Degeneration | Cystic, Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Adenoma | |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1156

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1156

ORGAN AND ACCOUNTABLE SITE STATUS

Note: Longitudinal section available for evaluation.

* Preputial Gland	Duct	Dilation	Mild
* Prostate	Epithelium	Hyperplasia	Moderate
		Inflammation	Chronic Active, Moderate
Skeletal Muscle		Degeneration	Minimal
* Skin		Cyst Epithelial Inclusion	
	[Cyst Epithelial Inclusion TGLs = 1-20]		
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1157

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1157

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Prostate
- * Skin
- * Thyroid Gland
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Cervical
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Brain
- * Eye
- * Heart
- * Kidney
- * Liver
- [Vacuolation, Cytoplasmic TGLs = 1-12]
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Nose
- * Pancreas
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Preputial Gland
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- * Spleen
- Meninges
- Retina
- Ventricl Rgt
- Hepatocyte
- Olfactory Epi
- Acinus
- Pars Distalis
- Pars Distalis
- Nerve
- Hypertrophy
- Granular Cell Tumor Benign
- Atrophy
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Mixed Cell Focus
- Vacuolation, Cytoplasmic
- Proliferation
- Degeneration
- Accumulation, Hyaline Droplet
- Hyperplasia
- Degeneration
- Degeneration
- Adenoma
- Cyst
- Inflammation
- Degeneration
- Degeneration
- Extramedullary Hematopoiesis
- Minimal
- Mild
- Moderate
- Mild
- Chronicprogr, Mild
- Mild
- Plasma Cell, Minimal
- Mild
- Moderate
- Mild
- Moderate
- Moderate
- Chronic Active, Mild
- Moderate
- Minimal
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1157

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1157

ORGAN AND ACCOUNTABLE SITE STATUS

Testis

Germ Cell

Degeneration

Minimal

* Thymus

Atrophy

Moderate

Animal Note: TGL 2 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1158

TRT#: 7

SEX: Male

DAY ON TEST: 619

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1158

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Bone Marrow
- * Brain
- * Esophagus
- * Harderian Gland
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Liver
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Nose
- * Pituitary Gland
- * Preputial Gland
- * Seminal Vesicle
- * Skin
- * Spinal Cord, Thoracic
- * Stomach, Forestomach
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

OBSERVATIONS

- * Aorta Mineral Moderate
- * Bone Fibrous Osteodystrophy Mild
- * Epididymis Exfoliated Germ Cell Moderate
- * Eye
 - Lens Cataract Mild
 - Cornea Inflammation Acute, Moderate
 - Antr Chamber Inflammation Acute, Minimal
 - Cornea Ulcer Moderate
- * Heart [Inflammation TGLs = 3-5]
 - Cardiomyopathy Moderate
- * Intestine Large, Cecum
 - Ventricl Rgt Cardiomyopathy Minimal
 - Edema Mild
 - Erosion Mild
 - Inflammation Acute, Mild
 - Artery Inflammation Chronic Active, Mild
 - Epithelium Regeneration Moderate
- * Intestine Large, Colon [Inflammation TGLs = 4,5-15]
 - Erosion Minimal
 - Artery Inflammation Chronic Active, Minimal
 - Epithelium Regeneration Minimal
- * Kidney [Nephropathy TGLs = 1,2-13]
 - Nephropathy Chronicprogr, Marked
- * Lung
 - Artery Inflammation Chronic Active, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1158

TRT#: 7

SEX: Male

DAY ON TEST: 619

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1158

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Inflammation	Chronic Active, Mild
* Pancreas	Artery	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Marked
* Parathyroid Gland		Mineral	Moderate
* Peripheral Nerve, Sciatic		Hyperplasia	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild
* Prostate	Epithelium	Degeneration	Mild
* Salivary Glands	Parotid GI	Hyperplasia	Minimal
Skeletal Muscle		Atrophy	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen	White Pulp	Degeneration	Moderate
		Atrophy	Mild
* Stomach, Glandular		Pigment	Minimal
		Erosion	Mild
		Mineral	Moderate
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Marked
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Animal Note: TGL 7 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1159

TRT#: 7

SEX: Male

DAY ON TEST: 719

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1159

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- Skeletal Muscle
- Testis
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Prostate
- * Stomach, Forestomach
- * Trachea
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Salivary Glands
- * Stomach, Glandular
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Eye
- * Heart
- * Kidney
- * Liver
- Note: Intestinal metaplasia of intrahepatic bile ducts within region of fibrosis.
- * Lung
- [Congestion TGLs = 3-10]
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Nose
- * Pancreas
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Preputial Gland
- * Seminal Vesicle
- [Decreased Secretory Fluid TGLs = 5-16]
- Hyperplasia
- Vacuolation, Cytoplasmic
- Hypercellularity
- Atrophy
- Cardiomyopathy
- Nephropathy
- Cholangiofibrosis
- Mixed Cell Focus
- Congestion
- Hyperplasia
- Proliferation
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Degeneration
- Inflammation
- Decreased Secretory Fluid
- Mild
- Minimal
- Moderate
- Minimal
- Mild
- Mild
- Chronicprogr, Mild
- Mild
- Minimal
- Moderate
- Minimal
- Moderate
- Moderate
- Minimal
- Minimal
- Moderate
- Moderate
- Chronic Active, Minimal
- Moderate
- Minimal
- Moderate
- Lymphocyte, Mild
- Plasma Cell, Moderate
- Mild
- Minimal
- Minimal
- Moderate
- Moderate
- Chronic Active, Minimal
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1159

TRT#: 7

SEX: Male

DAY ON TEST: 719

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1159

ORGAN AND ACCOUNTABLE SITE STATUS

* Skin	Subcut Tiss	Fibroma	
[Fibroma TGLs = 1-20]			
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
[Extramedullary Hematopoiesis TGLs = 4-12]			
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibroma

Animal Note: TGL 2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1160

TRT#: 7

SEX: Male

DAY ON TEST: 657

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1160

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Small, Duodenum
- * Liver
- * Prostate
- * Spinal Cord, Thoracic
- Trigeminal Ganglion
- * Bone Marrow
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- Skeletal Muscle
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Intestine Small, Jejunum
- * Mammary Gland
- * Skin
- * Thyroid Gland
- * Esophagus
- * Islets, Pancreatic
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Bone
- * Epididymis
- [Hypospermia TGLs = 6-16A]
- * Eye
- * Harderian Gland
- Note: Hyperplasia of myoepithelial cell population.
- * Heart
- * Intestine Large, Cecum
- [Edema TGLs = 8-15]
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Kidney
- Vacuolation, Cytoplasmic
- Pheochromocytoma Benign
- Fibrous Osteodystrophy
- Exfoliated Germ Cell
- Hypospermia
- Hyperplasia
- Inflammation
- Degeneration
- Schwannoma Malignant
- Cardiomyopathy
- Cardiomyopathy
- Edema
- Erosion
- Inflammation
- Regeneration
- Edema
- Inflammation
- Regeneration
- Edema
- Cyst
- Minimal
- Minimal
- Marked
- Mild
- Acute, Moderate
- Cystic, Mild
- Mild
- Mild
- Moderate
- Moderate
- Acute, Minimal
- Mild
- Minimal
- Chronic Active, Minimal
- Minimal
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1160

TRT#: 7

SEX: Male

DAY ON TEST: 657

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1160

ORGAN AND ACCOUNTABLE SITE STATUS

Nephropathy Chronicprogr, Marked

[Cyst TGLs = 2-20]

[Nephropathy TGLs = 3,4-13]

* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Lymph Sinus, Renal	Ectasia	Moderate
	Renal	Erythrophagocytosis	Marked

[Ectasia TGLs = 12-20]

[Erythrophagocytosis TGLs = 13-20]

* Lymph Node, Mesenteric		Erythrophagocytosis	Minimal
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[Erythrophagocytosis TGLs = 14-15]

Mesentery	Artery	Inflammation	Chronic Active, Moderate
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Moderate

[Inflammation TGLs = 11-16.1]

* Salivary Glands	Parotid GI	Atrophy	Minimal
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen	White Pulp	Atrophy	Moderate
	Red Pulp	Atrophy	Moderate
		Pigment	Mild

[Atrophy TGLs = 10-12]

* Stomach, Glandular		Mineral	Minimal
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Marked

[Degeneration TGLs = 5-16A]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1160

TRT#: 7

SEX: Male

DAY ON TEST: 657

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1160

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 1,7 = NST (No Section Taken)

Animal Note: TGLs 9, 15 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1161

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1161

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- Skeletal Muscle
- Testis
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Skin
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Mild
 - Hypertrophy Minimal
 - Vacuolation, Cytoplasmic Minimal
- * Brain
 - Mineral Minimal
 - Note: Olfactory bulbs unavailable for evaluation.
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy Mild
 - Cardiomyopathy Minimal
 - [Cardiomyopathy TGLs = 4-11,20]
- * Kidney
 - Nephropathy Chronicprogr, Mild
- * Liver
 - Bile Duct
 - Hyperplasia Minimal
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular Histiocyte, Minimal
 - Lymph Node
 - Mediastinal
 - Erythrophagocytosis Mild
 - [Erythrophagocytosis TGLs = 2,3-20]
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Mild
 - Proliferation Plasma Cell, Mild
- * Nerve Trigeminal
 - Degeneration Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet Moderate
 - Oral Mucosa
 - Hyperplasia Moderate
 - Note: Hyperplasia affecting epithelium lining empty tooth socket in level 3 nasal section.
- * Pancreas
 - Acinus
 - Atrophy Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1161

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1161

ORGAN AND ACCOUNTABLE SITE STATUS

[Hyperplasia TGLs = 1-6]	Acinus	Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Cyst	
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Thymoma Malignant	

Animal Note: TGL 5 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1162

TRT#: 7

SEX: Male

DAY ON TEST: 631

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1162

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Spinal Cord, Thoracic
- Trigeminal Ganglion
- * Bone
- * Esophagus
- * Parathyroid Gland
- Skeletal Muscle
- * Stomach, Forestomach
- * Bone Marrow
- * Harderian Gland
- * Prostate
- * Skin
- Testis
- * Brain
- * Intestine Large, Rectum
- * Salivary Glands
- * Spinal Cord, Cervical
- * Trachea

MISSING

- * Mammary Gland

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Small, Ileum
- * Stomach, Glandular
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Thyroid Gland
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Urinary Bladder
- * Intestine Small, Duodenum
- * Pancreas

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Brain
- Note: Olfactory bulbs unavailable for evaluation.
- * Heart
- Ventricl Rgt
- [Cardiomyopathy TGLs = 4-11]
- * Kidney
- * Liver
- * Lung
- [Congestion TGLs = 3-10]
- * Lymph Node, Mandibular
- [Proliferation TGLs = 1-9]
- * Nerve Trigeminal
- * Nose
- * Peripheral Nerve, Sciatic
- Hypertrophy
- Pheochromocytoma Benign
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Mixed Cell Focus
- Congestion
- Proliferation
- Degeneration
- Accumulation, Hyaline Droplet
- Degeneration
- Minimal
- Mild
- Mild
- Chronicprogr, Minimal
- Mild
- Plasma Cell, Mild
- Minimal
- Mild
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1162

TRT#: 7

SEX: Male

DAY ON TEST: 631

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1162

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 5-4]			
* Preputial Gland		Inflammation	Chronic Active, Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Pigment	Mild
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - UNCERTAIN

Animal Note: TGLs 2,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1163

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1163

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- Skeletal Muscle
- Testis
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Prostate
- * Skin
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Adrenal Medulla
 - Hyperplasia
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Cardiomyopathy
- * Kidney
 - Nephropathy
- * Liver
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
- [Mixed Cell Focus TGLs = 1-12]
- * Lymph Node, Mandibular
 - Lymph Sinus
 - Ectasia
 - Hyperplasia
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Atrophy
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Hyperplasia
- [Hyperplasia TGLs = 5-4]
- * Preputial Gland
 - Duct
 - Dilation
 - Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1163

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1163

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Mild
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGLs 2,3,4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1164

TRT#: 7

SEX: Male

DAY ON TEST: 489

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1164

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-------------------------|------------------------|--------------------------|---------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Harderian Gland | * Intestine Large, Rectum |
| * Islets, Pancreatic | * Liver | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nerve Trigeminal | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Spinal Cord, Lumbar |
| * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

MISSING

- * Thymus

AUTO PRECLUDES DIAG.

- | | | | |
|--------------------------|----------------------------|--------------------------|-----------------------------|
| * Eye | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | | |

INSUFFICIENT TISSUE

- * Adrenal Medulla

OBSERVATIONS

- | | | | |
|---|---------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| Note: One of pair available for evaluation. | | | |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricle Rgt | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | | Congestion | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| [Congestion TGLs = 1-10] | | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1164

TRT#: 7

SEX: Male

DAY ON TEST: 489

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1164

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial

Degeneration

Minimal

* Spleen

Pigment

Mild

PRIMARY CAUSE OF DEATH

- UNCERTAIN

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1165

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1165

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Epididymis
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Thyroid Gland
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- * Trachea
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pituitary Gland
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Medulla
 - [Pheochromocytoma Benign TGLs = 3,4-7]
- * Brain
 - Pineal Gland
- * Eye
 - Retina
- * Harderian Gland
- * Heart
 - Ventricl Rgt
- * Kidney
 - [Nephropathy TGLs = 2-13]
- * Liver
 - Bile Duct
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 6-10]
- * Lymph Node, Mandibular
 - Lymph Sinus
- * Nerve Trigeminal
- * Nose
 - Olfactory Epi
- * Pancreas
 - [Adenoma TGLs = 5-6]

- Hyperplasia
- Pheochromocytoma Benign
- Moderate
- Vacuolation, Cytoplasmic
- Mild
- Atrophy
- Minimal
- Hyperplasia
- Mild
- Cardiomyopathy
- Mild
- Cardiomyopathy
- Mild
- Nephropathy
- Chronicprogr, Marked
- Hyperplasia
- Minimal
- Mixed Cell Focus
- Infiltration Cellular
- Histiocyte, Mild
- Ectasia
- Mild
- Hyperplasia
- Lymphocyte, Minimal
- Proliferation
- Plasma Cell, Minimal
- Degeneration
- Minimal
- Accumulation, Hyaline Droplet
- Minimal
- Adenoma
- Inflammation
- Chronic Active, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1165

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1165

ORGAN AND ACCOUNTABLE SITE STATUS

[Inflammation TGLs = 5-14]			
* Parathyroid Gland		Hyperplasia	Minimal
[Hyperplasia TGLs = 7-8]			
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Preputial Gland	Duct	Dilation	Mild
Skeletal Muscle		Degeneration	Minimal
* Skin		Cyst Epithelial Inclusion	
[Cyst Epithelial Inclusion TGLs = 1-20]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1166

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1166

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Aorta	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Nerve Trigeminal	* Parathyroid Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Trachea
Trigeminal Ganglion	* Urinary Bladder		

MISSING

- * Thymus

OBSERVATIONS

* Adrenal Cortex		Degeneration	Cystic, Mild
* Adrenal Medulla		Pheochromocytoma Benign	
* Brain	Glial Cell	Hyperplasia	Marked
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Moderate
* Liver		Clear Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular	Lymph Sinus	Ectasia	Minimal
		Erythrophagocytosis	Mild
		Proliferation	Plasma Cell, Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Mild
	Artery	Inflammation	Chronic Active, Minimal
	[Hyperplasia TGLs = 4-6,6.1,14]		
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 5-4]		
* Preputial Gland	Duct	Dilation	Minimal
* Prostate		Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1166

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1166

ORGAN AND ACCOUNTABLE SITE STATUS

Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Mild
* Thyroid Gland	C Cell	Adenoma	
Tissue NOS	Mediastinum	Inflammation	Chronic Active, Mild

Animal Note: TGLs 1,2,3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1167

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1167

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Seminal Vesicle
- * Stomach, Glandular
- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- Skeletal Muscle
- Testis
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Prostate
- * Skin
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - * Adren Medulla
 - Note: One of pair available for evaluation.
 - * Eye
 - Cornea, Epithelium
 - Cornea
 - Cornea
 - * Heart
 - Ventricl Rgt
 - * Islets, Pancreatic
 - * Kidney
 - * Liver
 - * Lung
 - Alveolus
 - * Lymph Node, Mandibular
 - [Proliferation TGLs = 4-9]
 - * Nose
 - Olfactory Epi
 - Respirat Epith
 - Olfactory Epi
 - * Pancreas
 - Acinus
 - * Peripheral Nerve, Sciatic
- Hyperplasia
 - Hypertrophy
 - Minimal
 - Minimal
 - Acute, Minimal
 - Minimal
 - Cardiomyopathy
 - Cardiomyopathy
 - Hyperplasia
 - Nephropathy
 - Mixed Cell Focus
 - Infiltration Cellular
 - Hyperplasia
 - Proliferation
 - Minimal
 - Chronicprogr, Mild
 - Histiocyte, Minimal
 - Lymphocyte, Mild
 - Plasma Cell, Mild
 - Mild
 - Mild
 - Suppurative, Minimal
 - Respiratory, Mild
 - Minimal
 - Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1167

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1167

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	
	Pars Intermed	Hyperplasia	Mild
[Adenoma TGLs = 8-4]			
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Moderate
[Dilation TGLs = 1,2-16]			
[Inflammation TGLs = 3-16]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1168

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1168

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Skin
- * Thyroid Gland
- * Bone
- * Intestine Large, Colon
- * Prostate
- * Spinal Cord, Cervical
- * Trachea
- * Epididymis
- * Intestine Large, Rectum
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Esophagus
- * Intestine Small, Duodenum
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Bone Marrow
- * Brain
- * Eye
- * Harderian Gland
- * Heart
- * Intestine Small, Jejunum
- [Adenocarcinoma TGLs = 2-14]
- * Islets, Pancreatic
- * Kidney
- [Sarcoma TGLs = 1,3-13]
- * Liver
- [Carcinoma TGLs = 6-21]
- * Lung
- [Infiltration Cellular TGLs = 9-10]
- [Sarcoma TGLs = 9-10]
- Pineal Gland
- Cornea
- Cornea, Epithelium
- Cornea
- Cornea
- Ventricl Rgt
- Serosa
- Alveolus
- Hyperplasia
- Hyperplasia
- Hypercellularity
- Vacuolation, Cytoplasmic
- Fibrosis
- Hyperplasia
- Inflammation
- Neovascularization
- Hyperplasia
- Cardiomyopathy
- Cardiomyopathy
- Adenocarcinoma
- Adenoma
- Nephropathy
- Sarcoma
- Carcinoma
- Mixed Cell Focus
- Infiltration Cellular
- Sarcoma
- Mild
- Mild
- Moderate
- Minimal
- Minimal
- Minimal
- Acute, Minimal
- Mild
- Minimal
- Mild
- Mild
- Chronicprogr, Mild
- Metastatic (Intestine Small, Jejunum)
- Histiocyte, Minimal
- Metastatic (Kidney)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1168

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1168

ORGAN AND ACCOUNTABLE SITE STATUS

Lymph Node	Lymph Sinus, Mediastinal	Ectasia	Mild
	Mediastinal	Erythrophagocytosis	Mild
	[Ectasia TGLs = 7-22]		
	[Erythrophagocytosis TGLs = 8-22]		
* Lymph Node, Mandibular	Lymph Sinus	Ectasia	Minimal
* Lymph Node, Mesenteric		Carcinoma	Metastatic (Intestine Small, Jejunum)
* Mammary Gland		Hyperplasia	Minimal
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas		Carcinoma	Metastatic (Intestine Small, Jejunum)
	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Minimal
	[Carcinoma TGLs = 4-6]		
	[Hyperplasia TGLs = 4-6,14]		
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland	Duct	Dilation	Mild
Skeletal Muscle	Diaphragm	Carcinoma	Metastatic (Intestine Small, Jejunum)
		Degeneration	Minimal
	[Carcinoma TGLs = 5-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	Capsule	Carcinoma	Metastatic (Intestine Small, Jejunum)
		Extramedullary Hematopoiesis	Moderate
	Artery	Inflammation	Chronic Active, Mild
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1169

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1169

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skin
- * Thyroid Gland
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Adrenal Medulla
 - Hyperplasia
- * Bone Marrow
 - Hypercellularity
- * Epididymis
 - Exfoliated Germ Cell
 - Hypospermia
- * Eye
 - [Hypospermia TGLs = 5-16A]
 - Cornea, Epithelium
 - Hyperplasia
 - Cornea
 - Inflammation
 - Cornea
 - Neovascularization
- * Heart
 - Ventricle Rgt
 - Cardiomyopathy
 - Cardiomyopathy
- * Kidney
 - [Nephropathy TGLs = 2-13]
 - Nephropathy
- * Liver
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
- * Lymph Node, Mandibular
 - [Proliferation TGLs = 1-9.1]
 - Hyperplasia
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Adenoma
 - Acinus
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1169

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1169

ORGAN AND ACCOUNTABLE SITE STATUS

	Artery	Inflammation	Chronic Active, Mild
	[Adenoma TGLs = 8-6]		
	[Hyperplasia TGLs = 8-6,14]		
* Parathyroid Gland		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
	[Hyperplasia TGLs = 9-4]		
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Minimal
* Prostate		Decreased Secretory Fluid	Mild
	[Decreased Secretory Fluid TGLs = 7-16]		
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 6-16]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Interstit Cell	Adenoma	
	[Adenoma TGLs = 3-16A]		
* Thymus		Atrophy	Mild
* Trachea	Artery	Inflammation	Chronic Active, Moderate
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL4 = NCL (No Correlating Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1170

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1170

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lung | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|-----------------------------|--------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Eye | Cornea, Epithelium | Hyperplasia | Mild |
| | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Minimal |
| * Heart | Ventricl Rgt | Cardiomyopathy | Mild |
| | | Cardiomyopathy | Mild |
| * Islets, Pancreatic | | Adenoma | |
| | | Hyperplasia | Moderate |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Moderate |
| | | Proliferation | Plasma Cell, Moderate |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| | | Foreign Body | |
| | Respirat Epith | Hyperplasia | Minimal |
| | | Inflammation | Suppurative, Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1170

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1170

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Cyst	
[Cyst TGLs = 2-4]			
* Preputial Gland	Duct	Dilation	Mild
[Dilation TGLs = 1-16]			
* Prostate	Epithelium	Hyperplasia	Minimal
		Inflammation	Chronic Active, Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Minimal
	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1171

TRT#: 7

SEX: Male

DAY ON TEST: 670

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1171

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Spinal Cord, Cervical
- * Bone Marrow
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Glandular
- * Esophagus
- * Intestine Small, Duodenum
- * Lung
- Skeletal Muscle
- * Trachea
- * Harderian Gland
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skin
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Medulla
 - * Aorta
 - * Bone
 - * Brain
 - [Compression TGLs = 7-2]
 - * Epididymis
 - * Eye
 - Cornea, Epithelium
 - Cornea
 - Cornea
 - Cornea
 - * Heart
 - Ventricle Rgt
 - Myocardium
 - Artery
 - * Intestine Large, Cecum
 - * Kidney
 - [Nephropathy TGLs = 2,3-13]
 - * Liver
 - Bile Duct
 - * Lymph Node, Mandibular
 - * Mammary Gland
 - [Dilation TGLs = 4-9]
- | | | |
|--|------------------------|----------------------|
| | Hyperplasia | Minimal |
| | Mineral | Minimal |
| | Fibrous Osteodystrophy | Mild |
| | Compression | Minimal |
| | Exfoliated Germ Cell | Moderate |
| | Hyperplasia | Moderate |
| | Inflammation | Acute, Moderate |
| | Neovascularization | Minimal |
| | Ulcer | Mild |
| | Cardiomyopathy | Moderate |
| | Cardiomyopathy | Minimal |
| | Mineral | Minimal |
| | Mineral | Mild |
| | Inflammation | Chronic Active, Mild |
| | Inflammation | Suppurative, Mild |
| | Nephropathy | Chronicprogr, Marked |
| | Hyperplasia | Mild |
| | Mixed Cell Focus | |
| | Hyperplasia | Lymphocyte, Mild |
| | Proliferation | Plasma Cell, Marked |
| | Dilation | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1171

TRT#: 7

SEX: Male

DAY ON TEST: 670

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1171

ORGAN AND ACCOUNTABLE SITE STATUS

Mesentery	Artery	Mineral	Minimal
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
		Inflammation	Suppurative, Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 1-4]			
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Minimal
[Dilation TGLs = 9,10-16]			
* Prostate		Inflammation	Acute, Moderate
* Salivary Glands	Parotid GI	Atrophy	Mild
	Duct, Parotid GI	Dilation	Mild
* Seminal Vesicle		Inflammation	Acute, Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	Red Pulp	Atrophy	Mild
		Hyperplasia	Plasma Cell, Mild
		Pigment	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Urinary Bladder		Inflammation	Suppurative, Moderate

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 5,6,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1172

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1172

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nerve Trigeminal | * Parathyroid Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|---|---------------------------------------|-------------------------------|--------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Eye | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Carcinoma | |
| | [Carcinoma TGLs = 2-20] | | |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 4-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| Mesentery | Artery | Inflammation | Chronic Active, Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| | Respirat Epith | Hyperplasia | Minimal |
| | | Inflammation | Suppurative, Minimal |
| * Pancreas | Acinus | Hyperplasia | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1172

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1172

ORGAN AND ACCOUNTABLE SITE STATUS

[Hyperplasia TGLs = 3-6]

* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Intermed	Cyst	
	Pars Distalis	Hyperplasia	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Moderate
		Cyst	
		Ectopic Parathyroid Gland	
* Thyroid Gland	C Cell	Hyperplasia	Mild

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1174

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1174

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Aorta | * Bone | * Brain | * Epididymis |
| * Esophagus | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Lung | * Mammary Gland | * Parathyroid Gland | * Prostate |
| * Salivary Glands | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|--------------------------|----------------------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| * Adrenal Medulla | | Hyperplasia | Marked |
| * Bone Marrow | | Fibrosis | Mild |
| * Eye | Cornea | Fibrosis | Minimal |
| | Cornea, Epithelium | Hyperplasia | Minimal |
| | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Mild |
| * Islets, Pancreatic | | Carcinoma | |
| | [Carcinoma TGLs = 3-6] | | |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Lymph Node, Mesenteric | | Erythrophagocytosis | Minimal |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | Septum | Developmental Malformation | |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| | [Hyperplasia TGLs = 3-6] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1174

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1174

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Minimal
	[Dilation TGLs = 1,2-16]		
* Seminal Vesicle		Degeneration	Minimal
Skeletal Muscle		Degeneration	Minimal
* Skin		Cyst Epithelial Inclusion	
	Note: Multifocal epithelial hyperplasia within epithelial inclusion cyst.		
	[Cyst Epithelial Inclusion TGLs = 5-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
	Artery	Inflammation	Chronic Active, Mild
* Thyroid Gland	C Cell	Adenoma	
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1175

TRT#: 7

SEX: Male

DAY ON TEST: 714

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1175

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Skin
- * Trachea
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Preputial Gland
- * Stomach, Glandular
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Prostate
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 Cystic, Mild
Mild
Minimal
- * Brain
 - Compression
 Mild
- * Epididymis
 - Exfoliated Germ Cell
 - Hypospermia
 Minimal
Marked
- * Heart
 - Cardiomyopathy
 Minimal
- * Kidney
 - Nephropathy
 Chronicprogr, Marked
- [Nephropathy TGLs = 1,2-13]
 - Hepatocyte
 Vacuolation, Cytoplasmic
 - [Vacuolation, Cytoplasmic TGLs = 7,8-12]
 Moderate
- * Liver
 - Hyperplasia
 - Proliferation
 Lymphocyte, Moderate
Plasma Cell, Moderate
- * Lymph Node, Mandibular
 - Degeneration
 Moderate
- * Nerve Trigeminal
 - Hyperplasia
 Minimal
- * Nose
 - Respirat Epith
 Note: Approximately one-third of level 3 available for evaluation.
- * Parathyroid Gland
 - Hyperplasia
 [Hyperplasia TGLs = 12-8]
 Moderate
- * Peripheral Nerve, Sciatic
 - Degeneration
 Mild
- * Peripheral Nerve, Tibial
 - Degeneration
 Mild
- * Pituitary Gland
 - Pars Distalis
 Adenoma
- [Adenoma TGLs = 10-4]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1175

TRT#: 7

SEX: Male

DAY ON TEST: 714

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1175

ORGAN AND ACCOUNTABLE SITE STATUS

* Salivary Glands	Parotid GI	Atrophy	Mild
	Duct, Parotid GI	Dilation	Mild
* Seminal Vesicle		Decreased Secretory Fluid	Marked
	[Decreased Secretory Fluid TGLs = 11-16]		
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		Inflammation	Chronic Active, Moderate
Testis	Interstit Cell	Adenoma	
	Germ Cell	Degeneration	Marked
	Artery	Inflammation	Chronic Active, Moderate
	[Adenoma TGLs = 4-16A]		
	[Degeneration TGLs = 3-16A]		
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 9 = NST (No Section Taken)

Animal Note: TGL 6 = NCL (No Correlating Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1176

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1176

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung |
| * Lymph Node, Mesenteric | * Mammary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|-----------------------------|----------------------------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| | | Vacuolation, Cytoplasmic | Minimal |
| * Eye | Cornea | Inflammation | Acute, Minimal |
| | Cornea | Neovascularization | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricl Rgt | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Mixed Cell Focus | |
| | [Mixed Cell Focus TGLs = 3-12] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Moderate |
| | [Hyperplasia TGLs = 2-6,14] | | |
| * Parathyroid Gland | | Hyperplasia | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Distalis | Cyst | |
| * Preputial Gland | Duct | Dilation | Minimal |
| Skeletal Muscle | | Degeneration | Mild |
| * Skin | | Cyst Epithelial Inclusion | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1176

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1176

ORGAN AND ACCOUNTABLE SITE STATUS

Note: Portion of epithelium within epithelial inclusion cyst is hyperplastic.

[Cyst Epithelial Inclusion TGLs = 1-20]

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Pigment	Minimal
* Thymus		Atrophy	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1177

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1177

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- Testis

OBSERVATIONS

- * Adrenal Cortex
- * Eye
- * Heart
- * Kidney
- * Liver
- * Lung
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Nose
- * Pancreas
- [Adenoma TGLs = 2-6]
- [Hyperplasia TGLs = 2-6,14,20]
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Preputial Gland
- Skeletal Muscle
- * Skin
- Cornea
- Alveolus
- Olfactory Epi
- Acinus
- Pars Distalis
- Hyperplasia
- Hypertrophy
- Inflammation
- Cardiomyopathy
- Nephropathy
- Mixed Cell Focus
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Degeneration
- Accumulation, Hyaline Droplet
- Adenoma
- Hyperplasia
- Hyperplasia
- Degeneration
- Degeneration
- Hyperplasia
- Inflammation
- Degeneration
- Keratoacanthoma
- Minimal
- Minimal
- Acute, Minimal
- Mild
- Chronicprogr, Mild
- Histiocyte, Minimal
- Lymphocyte, Mild
- Plasma Cell, Mild
- Minimal
- Minimal
- Marked
- Minimal
- Moderate
- Moderate
- Mild
- Chronic Active, Mild
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1177

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1177

ORGAN AND ACCOUNTABLE SITE STATUS

[Keratoacanthoma TGLs = 1-20]

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Pigment	Minimal
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Carcinoma	
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1178

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1178

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- * Skin
- Testis
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- * Trachea
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- Skeletal Muscle
- * Stomach, Glandular
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Mild
 - Hypertrophy Minimal
- * Adrenal Medulla
 - Hyperplasia Mild
- * Eye
 - Retina
 - Atrophy Minimal
 - Cornea, Epithelium
 - Degeneration Minimal
 - Cornea, Epithelium
 - Hyperplasia Minimal
 - Cornea
 - Neovascularization Minimal
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy Mild
 - Cardiomyopathy Mild
- * Kidney
 - [Cardiomyopathy TGLs = 5-20]
 - Renal Tubule
 - Adenoma
 - Renal Tubule
 - Cyst
 - Nephropathy Chronicprogr, Moderate
 - [Cyst TGLs = 1-13]
- * Liver
 - Bile Duct
 - Hyperplasia Minimal
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular Histiocyte, Minimal
 - [Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular
 - Lymph Sinus
 - Ectasia Minimal
 - Hyperplasia Lymphocyte, Mild
 - Proliferation Plasma Cell, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1178

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1178

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric [Hyperplasia TGLs = 2-15]		Hyperplasia	Lymphocyte, Marked
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas [Hyperplasia TGLs = 3-6]	Acinus	Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1179

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1179

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Preputial Gland
- * Stomach, Glandular
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Salivary Glands
- Testis
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Seminal Vesicle
- * Trachea

OBSERVATIONS

- * Adrenal Medulla
 - [Hyperplasia TGLs = 5-7]
 - [Pheochromocytoma Benign TGLs = 4-7]
 - * Aorta
 - * Heart
 - Ventricl Rgt
 - * Islets, Pancreatic
 - Note: Carcinoma located adjacent to section of duodenum.
 - * Kidney
 - [Nephropathy TGLs = 3-13]
 - * Liver
 - Bile Duct
 - * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 6-10]
 - * Lymph Node, Mandibular
 - * Nerve Trigeminal
 - * Nose
 - Olfactory Epi
 - * Parathyroid Gland
 - * Peripheral Nerve, Sciatic
 - * Peripheral Nerve, Tibial
- | | | |
|--|-------------------------------|------------------------|
| | Hyperplasia | Moderate |
| | Pheochromocytoma Benign | |
| | Mineral | Minimal |
| | Cardiomyopathy | Minimal |
| | Cardiomyopathy | Minimal |
| | Carcinoma | |
| | Nephropathy | Chronicprogr, Moderate |
| | Hyperplasia | Minimal |
| | Mixed Cell Focus | |
| | Infiltration Cellular | Histiocyte, Minimal |
| | Hyperplasia | Lymphocyte, Moderate |
| | Proliferation | Plasma Cell, Mild |
| | Degeneration | Mild |
| | Accumulation, Hyaline Droplet | Minimal |
| | Hyperplasia | Focal, Mild |
| | Degeneration | Marked |
| | Degeneration | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1179

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1179

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Adenoma	
* Prostate		Inflammation	Chronic Active, Mild
Skeletal Muscle		Degeneration	Moderate
[Degeneration TGLs = 8-11]			
* Skin	Subcut Tiss	Fibroma	
	Subcut Tiss	Hibernoma	
[Fibroma TGLs = 1-20]			
[Hibernoma TGLs = 7-21]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1180

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1180

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- Skeletal Muscle
- * Stomach, Glandular
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Pancreas
- * Skin
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Cervical
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia

Note: One of pair available for evaluation.
- * Heart
 - Cardiomyopathy
 - Cardiomyopathy

Ventricle Rgt

[Cardiomyopathy TGLs = 5-11,20]
- * Islets, Pancreatic
 - Hyperplasia
- * Kidney
 - Nephropathy

[Nephropathy TGLs = 1-13]
- * Liver
- * Lung
 - Clear Cell Focus
 - Infiltration Cellular

Alveolus

[Infiltration Cellular TGLs = 3-10]
- * Nose
 - Accumulation, Hyaline Droplet
- * Parathyroid Gland
 - Hyperplasia
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Cyst
 - Pars Distalis
- * Preputial Gland
 - Hyperplasia
 - Dilation
 - Pars Distalis
 - Duct

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1180

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1180

ORGAN AND ACCOUNTABLE SITE STATUS

* Prostate	Epithelium	Inflammation	Chronic Active, Minimal
* Spinal Cord, Lumbar		Hyperplasia	Minimal
		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Carcinoma	
[Carcinoma TGLs = 4-8]			

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1181

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1181

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Seminal Vesicle
- * Thymus
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Preputial Gland
- * Skin
- * Thyroid Gland
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Prostate
- * Stomach, Forestomach
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex [Angiectasis TGLs = 2,3-7] Angiectasis Minimal
- * Adrenal Medulla Hyperplasia Minimal
- * Heart Ventricl Rgt Cardiomyopathy Mild
- * Islets, Pancreatic [Carcinoma TGLs = 6-6] Carcinoma Minimal
- * Kidney Nephropathy Chronicprogr, Moderate
- * Liver Clear Cell Focus
- * Lung Alveolus [Infiltration Cellular TGLs = 4-10] Infiltration Cellular Histiocyte, Minimal
- * Mammary Gland [Fibroadenoma TGLs = 1-20] Fibroadenoma
- * Nerve Trigeminal Degeneration Minimal
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Minimal
- * Pancreas Acinus [Hyperplasia TGLs = 6-6,14] Hyperplasia Moderate
- * Peripheral Nerve, Sciatic Degeneration Moderate
- * Peripheral Nerve, Tibial Degeneration Moderate
- * Pituitary Gland Pars Distalis [Hyperplasia TGLs = 5-4] Hyperplasia Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1181

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1181

ORGAN AND ACCOUNTABLE SITE STATUS

Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1182

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1182

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- Skeletal Muscle
- * Thyroid Gland
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Nerve Trigeminal
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- [Pheochromocytoma Benign TGLs = 3,4-7]
- * Bone Marrow
- * Epididymis
- * Eye
- * Heart
- * Kidney
- [Cyst TGLs = 2-20]
- * Liver
- * Lymph Node, Mandibular
- * Nose
- * Pancreas
- * Parathyroid Gland
- Hyperplasia
- Pheochromocytoma Benign
- Hypercellularity
- Exfoliated Germ Cell
- Hypospermia
- Hyperplasia
- Inflammation
- Cardiomyopathy
- Cardiomyopathy
- Hyperplasia
- Cyst
- Nephropathy
- Mixed Cell Focus
- Ectasia
- Hyperplasia
- Proliferation
- Accumulation, Hyaline Droplet
- Hyperplasia
- Inflammation
- Adenoma
- Mild
- Minimal
- Minimal
- Minimal
- Minimal
- Acute, Minimal
- Mild
- Moderate
- Schwann Cell, Mild
- Chronicprogr, Moderate
- Mild
- Lymphocyte, Mild
- Plasma Cell, Mild
- Minimal
- Mild
- Chronic Active, Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1182

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1182

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Intermed	Cyst	
* Preputial Gland	Duct	Dilation	Marked
	Duct	Hyperplasia	Mild
	[Dilation TGLs = 1-16]		
* Prostate		Inflammation	Chronic Active, Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Mild
* Thymus		Atrophy	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1183

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1183

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricle Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 9-10] | | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Mild |
| | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| | | [Ectasia TGLs = 1-9] | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | Respirat Epith | Hyperplasia | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1183

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1183

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Intermed	Hyperplasia	Minimal
	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland	Duct	Dilation	Mild
	[Dilation TGLs = 3-16]		
* Prostate		Adenoma	
	Epithelium	Hyperplasia	Moderate
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Congestion	Mild
		Extramedullary Hematopoiesis	Minimal
	[Congestion TGLs = 8-12]		
Testis	Interstit Cell	Hyperplasia	Minimal
* Thymus		Atrophy	Mild
		Ectopic Thyroid	
* Thyroid Gland	C Cell	Hyperplasia	Moderate
Tissue NOS	Fat	Necrosis	Mild
	[Necrosis TGLs = 4-20]		

Animal Note: TGLs 5,7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1184

TRT#: 7

SEX: Male

DAY ON TEST: 595

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1184

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Brain
- * Liver
- * Nerve Trigeminal
- Skeletal Muscle
- * Stomach, Forestomach
- * Esophagus
- * Lung
- * Prostate
- * Skin
- * Thyroid Gland
- * Harderian Gland
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Islets, Pancreatic
- * Mammary Gland
- * Seminal Vesicle
- * Spinal Cord, Thoracic

MISSING

- * Parathyroid Gland

AUTO PRECLUDES DIAG.

- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex: Hyperplasia, Mild
- * Adrenal Medulla: Hypertrophy, Mild
- * Aorta: Hyperplasia, Mild
- * Bone: Mineral, Mild
- * Bone Marrow: Fibrous Osteodystrophy, Mild
- * Epididymis: Hypercellularity, Mild
- * Eye: Exfoliated Germ Cell, Moderate
- * Eye: Cornea, Epithelium: Hyperplasia, Minimal
- * Eye: Cornea: Inflammation, Acute, Moderate
- * Eye: Antr Chamber: Inflammation, Acute, Mild
- * Heart: Cardiomyopathy, Moderate
- * Heart: Ventricl Rgt: Cardiomyopathy, Moderate
- * Heart: Artery: Inflammation, Chronic Active, Minimal
- * Heart: Artery: Mineral, Minimal
- * Intestine Large, Cecum: Inflammation, Chronic Active, Minimal
- * Intestine Large, Colon: Inflammation, Chronic Active, Mild
- * Intestine Large, Rectum: Inflammation, Chronic Active, Minimal
- * Kidney: Mineral, Mild
- * Kidney: Nephropathy, Chronicprogr, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1187

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1187

ORGAN AND ACCOUNTABLE SITE STATUS

* Liver		Eosinophilic Focus	
* Lung	Artery	Inflammation	Chronic Active, Minimal
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Minimal
* Lymph Node, Mesenteric		Hyperplasia	Lymphocyte, Moderate
* Mammary Gland	Duct	Dilation	Minimal
Mesentery	Artery	Inflammation	Chronic Active, Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Hyperplasia	Minimal
	Artery	Inflammation	Chronic Active, Minimal
	[Hyperplasia TGLs = 5-6,14]		
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Marked
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 10-4]		
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Mild
Skeletal Muscle		Degeneration	Mild
* Skin		Keratoacanthoma	
	[Keratoacanthoma TGLs = 11-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Mild
* Thyroid Gland	Follicle	Cyst	
	Note: Cyst is hemorrhagic.		
	[Cyst TGLs = 7-8]		

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1188

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1188

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Epididymis |
| * Esophagus | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas |
| * Pituitary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hyperplasia | Moderate |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Cerebellum | Atrophy | Minimal |
| * Eye | Retina | Atrophy | Minimal |
| * Heart | Ventricle Rgt | Cardiomyopathy | Minimal |
| | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 5-10] | | |
| * Lymph Node, Mandibular | | Erythrophagocytosis | Minimal |
| | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| | [Erythrophagocytosis TGLs = 1-9.1] | | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |

Note: Longitudinal section available for evaluation.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1188

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1188

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Preputial Gland	Duct	Dilation	Marked
	[Dilation TGLs = 2-16]		
* Skin		Cyst Epithelial Inclusion	
	Note: Epithelial cyst is inflamed.		
	[Cyst Epithelial Inclusion TGLs = 3,4-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1189

TRT#: 7

SEX: Male

DAY ON TEST: 397

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1189

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Epididymis
- * Esophagus
- * Harderian Gland
- * Intestine Large, Rectum
- * Liver
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Mammary Gland
- * Nerve Trigeminal
- * Pancreas
- * Parathyroid Gland
- * Peripheral Nerve, Tibial
- * Prostate
- * Salivary Glands
- * Seminal Vesicle
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Spinal Cord, Thoracic
- * Stomach, Forestomach
- * Stomach, Glandular
- * Testis
- * Thyroid Gland
- * Trachea
- * Trigeminal Ganglion
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic

OBSERVATIONS

- * Brain
 - Pineal Gland
 - Infiltration Cellular
 - Mononuclear CI, Minimal
 - Necrosis
 - Minimal
 - Pineal Gland
 - Vacuolation, Cytoplasmic
 - Minimal
 - Ventricl Rgt
 - Cardiomyopathy
 - Mild
 - Nephropathy
 - Chronicprogr, Minimal
 - Congestion
 - Mild
 - Infiltration Cellular
 - Histiocyte, Minimal
 - Alveolus
 - [Congestion TGLs = 1-10]
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Mild
 - Degeneration
 - Minimal
 - Pars Distalis
 - Cyst
 - Inflammation
 - Chronic Active, Moderate
- * Heart
- * Kidney
- * Lung
- * Nose
- * Peripheral Nerve, Sciatic
- * Pituitary Gland
- * Preputial Gland
- * Sem Ves
 - Note: One of pair present
- * Spinal Cord, Lumbar
 - Nerve
 - Degeneration
 - Minimal
 - Pigment
 - Mild
 - Congestion
 - Mild
 - [Congestion TGLs = 2-6]
- * Spleen
- * Thymus

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1189

TRT#: 7

SEX: Male

DAY ON TEST: 397

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1189

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - UNCERTAIN

Animal Note: TGL 3 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1190

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1190

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pituitary Gland
- * Skin
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Salivary Glands
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- Skeletal Muscle
- Trigeminal Ganglion

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Atrophy
 - Carcinoma
 - Moderate
 - [Atrophy TGLs = 2-7]
 - [Carcinoma TGLs = 3,4-7]
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Brain
 - Cerebellum
 - Atrophy
 - Minimal
- * Heart
 - Ventricl Rgt
 - Carcinoma
 - Metastatic (Adrenal Cortex)
 - Cardiomyopathy
 - Mild
 - Cardiomyopathy
 - Mild
 - Adenoma
- * Islets, Pancreatic
 - [Adenoma TGLs = 5-6]
- * Kidney
 - Nephropathy
 - Chronicprogr, Mild
- * Liver
 - Eosinophilic Focus
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
 - TGLs = 6-10]
 - Histiocyte, Mild
- * Lymph Node, Mesenteric
 - Erythrophagocytosis
 - Minimal
- * Nerve Trigeminal
 - Degeneration
 - Moderate
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1190

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1190

ORGAN AND ACCOUNTABLE SITE STATUS

Foreign Body

Respirat Epith

Hyperplasia

Mild

Inflammation

Suppurative, Minimal

* Pancreas

Acinus

Hyperplasia

Marked

[Hyperplasia TGLs = 5-14]

* Peripheral Nerve, Sciatic

Degeneration

Moderate

* Peripheral Nerve, Tibial

Degeneration

Moderate

* Preputial Gland

Duct

Dilation

Mild

* Seminal Vesicle

Decreased Secretory Fluid

Mild

[Decreased Secretory Fluid TGLs = 1-16]

* Spinal Cord, Cervical

Degeneration

Minimal

* Spinal Cord, Lumbar

Nerve

Degeneration

Moderate

* Spinal Cord, Thoracic

Degeneration

Mild

* Spleen

Extramedullary Hematopoiesis

Mild

Pigment

Minimal

* Stomach, Forestomach

Epithelium

Hyperplasia

Minimal

Testis

Seminif Tub

Dilation

Minimal

Interstit Cell

Hyperplasia

Minimal

* Thymus

Atrophy

Mild

Ectopic Parathyroid Gland

* Thyroid Gland

C Cell

Hyperplasia

Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1191

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1191

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Aorta | * Bone | * Epididymis | * Esophagus |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lung | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Seminal Vesicle | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Stomach, Glandular | Testis | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|-----------------------------|----------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Bone Marrow | | Hypercellularity | Mild |
| * Brain | | Compression | Minimal |
| | [Compression TGLs = 4-2] | | |
| * Eye | Cornea, Epithelium | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricl Rgt | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Moderate |
| | [Dilation TGLs = 1-20,9] | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | Respirat Epith | Hyperplasia | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 5-4] | | |
| * Preputial Gland | Duct | Dilation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1191

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1191

ORGAN AND ACCOUNTABLE SITE STATUS

* Prostate		Inflammation	Chronic Active, Minimal
* Spinal Cord, Lumbar	Nerve	Inflammation	Acute, Minimal
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Degeneration	Mild
* Stomach, Forestomach		Extramedullary Hematopoiesis	Mild
[Squamous Cell Carcinoma	TGLs = 3-14]	Squamous Cell Carcinoma	
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Adenoma	
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 2 = NCL (No Corresponding Lesion); pancreatic masses consistent with normal pancreatic lymph nodes

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1193

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1193

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- Testis
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
- * Brain
 - Mineral
- * Eye
 - Atrophy
- * Heart
 - Cardiomyopathy
- * Kidney
 - Ventricl Rgt
 - Cardiomyopathy
 - Nephropathy
- * Liver
 - Eosinophilic Focus
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Adenoma
 - Atrophy
- [Adenoma TGLs = 2-6.1]
 - Acinus
 - Atrophy
- * Parathyroid Gland
 - Hyperplasia
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1193

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1193

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Intermed	Cyst	
	Pars Nervosa	Developmental Malformation	
Note: Remnants of Rathke's Pouch in pars nervosa.			
	[Developmental Malformation TGLs = 3-4]		
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Minimal
	[Dilation TGLs = 4-16]		
* Prostate	Epithelium	Hyperplasia	Marked
Skeletal Muscle		Degeneration	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Moderate
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1194

TRT#: 7

SEX: Male

DAY ON TEST: 544

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1194

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla

* Epididymis

* Intestine Large, Cecum

* Pancreas

* Spinal Cord, Cervical

* Trachea

* Aorta

* Esophagus

* Intestine Large, Colon

* Parathyroid Gland

* Spinal Cord, Thoracic

Trigeminal Ganglion

* Bone

* Eye

* Intestine Small, Ileum

* Pituitary Gland

* Stomach, Glandular

* Urinary Bladder

* Bone Marrow

* Harderian Gland

* Lymph Node, Mandibular

* Skin

Testis

MISSING

* Lymph Node, Mesenteric

AUTO PRECLUDES DIAG.

* Intestine Large, Rectum

* Intestine Small, Duodenum

* Intestine Small, Jejunum

* Thyroid Gland

INSUFFICIENT TISSUE

* Peripheral Nerve, Tibial

OBSERVATIONS

* Adrenal Cortex

* Brain

Note: Olfactory bulbs not available for evaluation.

* Heart

* Islets, Pancreatic

* Kidney

* Liver

* Lung

[Congestion TGLs = 6-10]

* Mammary Gland

* Nerve Tibial

Note: Sagittal section only available.

* Nerve Trigeminal

* Nose

Pineal Gland

Ventricl Rgt

Hepatocyte

Alveolus

Olfactory Epi

Hypertrophy

Vacuolation, Cytoplasmic

Cardiomyopathy

Cardiomyopathy

Carcinoma

Nephropathy

Necrosis

Congestion

Infiltration Cellular

Fibroadenoma

Degeneration

Accumulation, Hyaline Droplet

Mild

Marked

Mild

Mild

Chronicprogr, Mild

Minimal

Marked

Histiocyte, Minimal

Mild

Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1194

TRT#: 7

SEX: Male

DAY ON TEST: 544

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1194

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Inflammation	Suppurative, Mild
* Preputial Gland		Degeneration	Moderate
* Prostate	Epithelium	Inflammation	Chronic Active, Moderate
* Salivary Glands	Parotid GI	Hyperplasia	Moderate
* Seminal Vesicle		Atrophy	Mild
		Decreased Secretory Fluid	Mild
	[Decreased Secretory Fluid TGLs = 1-16]		
Skeletal Muscle		Degeneration	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Mild
		Pigment	Moderate
	[Atrophy TGLs = 5-12]		
* Stomach, Forestomach		Edema	Moderate
	Epithelium	Hyperplasia	Moderate
		Necrosis	Marked
* Thymus		Atrophy	Moderate
		Hemorrhage	Marked

PRIMARY CAUSE OF DEATH - Stomach, Forestomach Necrosis

Animal Note: TGL 4 = NCL (No Corresponding Lesion) Tissue not available for evaluation.

Animal Note: TGLs 2,3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1195

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1195

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Seminal Vesicle
- * Thyroid Gland
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Nerve Trigeminal
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

MISSING

- * Parathyroid Gland

INSUFFICIENT TISSUE

- * Adrenal Medulla

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Minimal
 - Hypertrophy Minimal
 - Vacuolation, Cytoplasmic Minimal
- [Vacuolation, Cytoplasmic TGLs = 2-7]
- * Eye
 - Retina Atrophy Minimal
 - Cornea, Epithelium Hyperplasia Mild
 - Cornea Inflammation Acute, Minimal
 - Cornea Neovascularization Minimal
- * Heart
 - Ventricl Rgt Cardiomyopathy Minimal
 - Cardiomyopathy Mild
- * Islets, Pancreatic
 - Hyperplasia Minimal
- * Kidney
 - Nephropathy Chronicprogr, Moderate
- [Nephropathy TGLs = 3-13]
- * Liver
 - Mixed Cell Focus
- * Lung
 - Alveolus Infiltration Cellular Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Mild
 - Proliferation Plasma Cell, Mild
- * Mammary Gland
 - Duct Dilatation Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1195

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1195

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Mild
[Hyperplasia TGLs = 4-14]			
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 7-4]			
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Mild
* Prostate		Adenoma	
[Adenoma TGLs = 1-16]			
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal
* Thyroid GI			

Note: One of pair available for evaluation.

Animal Note: TGL 5,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1196

TRT#: 7

SEX: Male

DAY ON TEST: 597

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1196

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Aorta	* Bone	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	Skeletal Muscle	* Spinal Cord, Cervical
* Spinal Cord, Thoracic	* Stomach, Forestomach	* Stomach, Glandular	Testis
* Thyroid Gland	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Mild
		Vacuolation, Cytoplasmic	Minimal
* Adrenal Medulla		Hyperplasia	Moderate
* Bone Marrow		Hypercellularity	Moderate
* Heart		Cardiomyopathy	Minimal
	Ventricl Rgt	Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Mild
* Liver		Infiltration Cellular	Mixed Cell, Mild
		Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Mild
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
		Foreign Body	
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
Note: Longitudinal section available for evaluation.			
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Minimal
* Skin	Subcut Tiss	Sarcoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1196

TRT#: 7

SEX: Male

DAY ON TEST: 597

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1196

ORGAN AND ACCOUNTABLE SITE STATUS

[Sarcoma TGLs = 1-20]

* Spinal Cord, Lumbar

* Spleen

* Thymus

Degeneration

Extramedullary Hematopoiesis

Atrophy

Minimal

Moderate

Mild

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Sarcoma

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1197

TRT#: 7

SEX: Male

DAY ON TEST: 534

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1197

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Colon
- * Mammary Gland
- * Peripheral Nerve, Tibial
- Skeletal Muscle
- * Stomach, Forestomach
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Nerve Trigeminal
- * Prostate
- * Skin
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Small, Jejunum
- * Pancreas
- * Salivary Glands
- * Spinal Cord, Cervical
- Testis
- * Brain
- * Intestine Large, Cecum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Seminal Vesicle
- * Spinal Cord, Thoracic
- * Thyroid Gland

MISSING

Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Brain
- Note: Olfactory bulbs unavailable for evaluation.
- * Heart
- * Islets, Pancreatic
- * Kidney
- * Liver
- * Lung
- * Lymph Node, Mandibular
- Hyperplasia
- Hypercellularity
- Mild
- Mild
- Ventricl Rgt
- Cardiomyopathy
- Cardiomyopathy
- Hyperplasia
- Nephropathy
- Extramedullary Hematopoiesis
- Hyperplasia
- Congestion
- Infiltration Cellular
- Mild
- Minimal
- Minimal
- Chronicprogr, Mild
- Minimal
- Minimal
- Mild
- Histiocyte, Mild
- [Congestion TGLs = 4-10]
- [Infiltration Cellular TGLs = 3-10]
- Congestion
- Hyperplasia
- Mild
- Lymphocyte, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1197

TRT#: 7

SEX: Male

DAY ON TEST: 534

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1197

ORGAN AND ACCOUNTABLE SITE STATUS

Proliferation

Plasma Cell, Mild

[Congestion TGLs = 2-9]

[Hyperplasia TGLs = 1-9]

* Nose Olfactory Epi

Accumulation, Hyaline Droplet

Moderate

Oral Mucosa

Squamous Cell Carcinoma

* Peripheral Nerve, Sciatic

Degeneration

Minimal

* Pituitary Gland

Pars Nervosa

Infiltration Cellular

Mixed Cell, Mild

Note: Increased glial cell population within neurohypophysis.

* Preputial Gland

Duct

Dilation

Moderate

* Spinal Cord, Lumbar

Nerve

Inflammation

Chronic Active, Moderate

* Spleen

Degeneration

Mild

Extramedullary Hematopoiesis

Moderate

Pigment

Minimal

* Thymus

Atrophy

Minimal

PRIMARY CAUSE OF DEATH

- Oral Mucosa Squamous Cell Carcinoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1198

TRT#: 7

SEX: Male

DAY ON TEST: 719

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1198

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Thyroid Gland
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Pancreas
- * Trachea
- * Esophagus
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Spinal Cord, Cervical
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Small, Ileum

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Mild
		Vacuolation, Cytoplasmic	Minimal
* Adrenal Medulla		Hyperplasia	Minimal
* Bone Marrow		Hypercellularity	Marked
* Epididymis		Exfoliated Germ Cell	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Hyperplasia	Minimal
		Nephropathy	Chronicprogr, Marked
	[Nephropathy TGLs = 4-13]		
* Liver	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Mild
		Proliferation	Plasma Cell, Mild
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1198

TRT#: 7

SEX: Male

DAY ON TEST: 719

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1198

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland	Duct	Dilation	Minimal
[Dilation TGLs = 6-16]			
* Prostate		Decreased Secretory Fluid	Mild
[Decreased Secretory Fluid TGLs = 10-16]			
* Salivary Glands	Parotid GI	Atrophy	Mild
* Seminal Vesicle		Decreased Secretory Fluid	Moderate
[Decreased Secretory Fluid TGLs = 5-16]			
Skeletal Muscle		Degeneration	Mild
* Skin	Subcut Tiss	Fibrosarcoma	
[Fibrosarcoma TGLs = 1-20]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Stomach, Forestomach		Edema	Moderate
	Epithelium	Hyperplasia	Moderate
		Inflammation	Chronic Active, Mild
		Ulcer	Mild
Testis	Germ Cell	Degeneration	Minimal
* Thymus		Atrophy	Marked
		Cyst	

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 3,7,8,9,11 = NCL (No Corresponding Lesion)

Animal Note: TGL 2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1199

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1199

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|---------------------------|--------------------------|----------------------------|
| * Aorta | * Bone | * Brain | * Epididymis |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Mammary Gland | * Parathyroid Gland |
| * Pituitary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Stomach, Glandular | Testis | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|-----------------------------|-------------------------------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Vacuolation, Cytoplasmic | Minimal |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Bone Marrow | | Hypercellularity | Mild |
| * Heart | Ventricl Rgt | Cardiomyopathy | Minimal |
| | | Cardiomyopathy | Minimal |
| * Intestine Small, Duodenum | | Adenocarcinoma | |
| | [Adenocarcinoma TGLs = 4-21] | | |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Mixed Cell Focus | |
| Lymph Node | Mediastinal | Erythrophagocytosis | Moderate |
| | [Erythrophagocytosis TGLs = 6-20] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Lymph Node, Mesenteric | Lymph Sinus | Ectasia | Marked |
| | [Ectasia TGLs = 5-22] | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Pancreas | | Adenoma | Multiple |
| | [Adenoma TGLs = 3-6] | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1199

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1199

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland	Duct	Dilation Inflammation	Minimal Chronic Active, Mild
[Dilation TGLs = 2-16]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Adenoma	

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1200

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1200

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Prostate
- * Skin
- Testis
- * Urinary Bladder
- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Salivary Glands
- * Spinal Cord, Cervical
- * Thymus
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Seminal Vesicle
- * Stomach, Forestomach
- * Thyroid Gland
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- Skeletal Muscle
- * Stomach, Glandular
- * Trachea

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Heart
- * Kidney
- * Liver
- [Mixed Cell Focus TGLs = 1-12]
- * Lung
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Nose
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- Ventricl Rgt
- Bile Duct
- Hepatocyte
- Alveolus
- Lymph Sinus
- Olfactory Epi
- Respirat Epith
- Pars Distalis
- Pars Distalis
- Hyperplasia
- Hypertrophy
- Cardiomyopathy
- Nephropathy
- Clear Cell Focus
- Hyperplasia
- Mixed Cell Focus
- Vacuolation, Cytoplasmic
- Infiltration Cellular
- Ectasia
- Degeneration
- Accumulation, Hyaline Droplet
- Hyperplasia
- Degeneration
- Degeneration
- Cyst
- Hyperplasia
- Mild
- Minimal
- Mild
- Chronicprogr, Minimal
- Minimal
- Minimal
- Histiocyte, Minimal
- Mild
- Mild
- Minimal
- Mild
- Mild
- Mild
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1200

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1200

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland		Inflammation	Chronic Active, Minimal
	Duct	Mineral	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1201

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1201

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Prostate
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Skin
- Testis

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Eye
- * Heart
- * Kidney
- * Liver
- [Mixed Cell Focus TGLs = 3-12]
- * Lung
- * Lymph Node, Mandibular
- * Nose
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Preputial Gland
- [Dilation TGLs = 1-16]
- Skeletal Muscle
- * Spinal Cord, Lumbar
- Retina
- Alveolus
- Lymph Sinus
- Olfactory Epi
- Duct
- Nerve
- Hyperplasia
- Hypertrophy
- Atrophy
- Cardiomyopathy
- Nephropathy
- Eosinophilic Focus
- Mixed Cell Focus
- Infiltration Cellular
- Ectasia
- Accumulation, Hyaline Droplet
- Hyperplasia
- Degeneration
- Degeneration
- Dilation
- Inflammation
- Degeneration
- Degeneration
- Minimal
- Minimal
- Minimal
- Minimal
- Chronicprogr, Mild
- Histiocyte, Minimal
- Mild
- Mild
- Minimal
- Minimal
- Moderate
- Mild
- Minimal
- Chronic Active, Minimal
- Minimal
- Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1201

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1201

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Thoracic

Degeneration

Moderate

* Spleen

Extramedullary Hematopoiesis

Mild

Pigment

Minimal

* Thymus

Atrophy

Mild

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1202

TRT#: 7

SEX: Male

DAY ON TEST: 596

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1202

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear	TGLs = 2-12]		
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1203

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1203

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Prostate |
| * Seminal Vesicle | Skeletal Muscle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | Testis | * Trachea | * Urinary Bladder |

MISSING

Trigeminal Ganglion

INSUFFICIENT TISSUE

* Thymus

OBSERVATIONS

- | | | | |
|---|--------------------|--------------------------|--------------------|
| * Adrenal Cortex | | Hyperplasia | Moderate |
| | | Vacuolation, Cytoplasmic | Mild |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Eye | Retina | Atrophy | Minimal |
| | Cornea, Epithelium | Hyperplasia | Minimal |
| | Cornea | Inflammation | Acute, Minimal |
| * Heart | Ventricl Rgt | Cardiomyopathy | Minimal |
| | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| Lymph Node | Mediastinal | Erythrophagocytosis | Moderate |
| [Erythrophagocytosis TGLs = 2-20] | | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1203

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1203

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
		Inflammation	Suppurative, Minimal
	Olfactory Epi	Metaplasia	Respiratory, Minimal
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Minimal
[Dilation TGLs = 1-16]			
* Salivary Glands	Parotid GI	Atrophy	Marked
	Duct, Parotid GI	Dilation	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thyroid Gland	C Cell	Adenoma	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1205

TRT#: 7

SEX: Male

DAY ON TEST: 688

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1205

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Liver
- * Prostate
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Mammary Gland
- * Seminal Vesicle
- Testis
- * Brain
- * Intestine Large, Rectum
- * Pituitary Gland
- Skeletal Muscle
- * Trachea

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Small, Ileum
- * Stomach, Glandular
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Thyroid Gland
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Intestine Small, Duodenum
- * Pancreas

INSUFFICIENT TISSUE

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - * Bone Marrow
 - * Heart
 - * Kidney
 - * Lung
 - Note: Plant-based material present consistent with aspiration pneumonia.
 - * Lymph Node, Mandibular
 - [Congestion TGLs = 1-9]
 - * Nerve Trigeminal
 - * Nose
 - Note: Nasal epithelium too autolyzed for evaluation.
 - * Peripheral Nerve, Sciatic
 - * Peripheral Nerve, Tibial
- | | | |
|--------------|---------------------------|-----------------------|
| | Hypertrophy | Mild |
| | Hypercellularity | Minimal |
| | Cardiomyopathy | Mild |
| Ventricl Rgt | Cardiomyopathy | Moderate |
| | Nephropathy | Chronicprogr, Mild |
| | Foreign Body Inflammation | Suppurative, Moderate |
| | Congestion | Mild |
| | Degeneration | Mild |
| | Foreign Body Inflammation | Suppurative, Minimal |
| | Degeneration | Mild |
| | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1205

TRT#: 7

SEX: Male

DAY ON TEST: 688

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1205

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland		Inflammation	Chronic Active, Mild
* Skin	Subcut Tiss	Inflammation	Chronic Active, Marked
Note: Pyogranuloma formation. [Inflammation TGLs = 3-20]			
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
		Pigment	Marked
* Thymus		Atrophy	Mild

PRIMARY CAUSE OF DEATH - Lung Inflammation

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1206

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1206

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Prostate
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Seminal Vesicle
- Testis
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Preputial Gland
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Brain
- * Heart
- * Kidney
- [Nephropathy TGLs = 2-13]
- * Liver
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Nose
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Skin
- [Cyst Epithelial Inclusion TGLs = 1-9]
- * Spinal Cord, Cervical
- * Spinal Cord, Lumbar
- Pineal Gland
- Ventricl Rgt
- Myocardium
- Bile Duct
- Olfactory Epi
- Pars Distalis
- Pars Distalis
- Nerve
- Hypertrophy
- Vacuolation, Cytoplasmic
- Cardiomyopathy
- Cardiomyopathy
- Schwannoma Malignant
- Nephropathy
- Hyperplasia
- Mixed Cell Focus
- Hyperplasia
- Degeneration
- Accumulation, Hyaline Droplet
- Hyperplasia
- Degeneration
- Degeneration
- Cyst
- Hyperplasia
- Cyst Epithelial Inclusion
- Degeneration
- Degeneration
- Minimal
- Minimal
- Moderate
- Mild
- Chronicprogr, Marked
- Minimal
- Lymphocyte, Moderate
- Moderate
- Mild
- Mild
- Marked
- Marked
- Moderate
- Moderate
- Minimal
- Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1206

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1206

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Thoracic

Degeneration

Mild

* Spleen

Extramedullary Hematopoiesis

Minimal

Pigment

Minimal

* Thymus

Atrophy

Mild

* Thyroid Gland

C Cell

Hyperplasia

Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1207

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1207

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Seminal Vesicle
- * Stomach, Glandular
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Parathyroid Gland
- Skeletal Muscle
- Testis
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Prostate
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Eye
- * Heart
- * Kidney
- * Liver
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Nose
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Preputial Gland
- Cornea
- Cornea, Epithelium
- Cornea
- Cornea
- Ventricl Rgt
- Olfactory Epi
- Respirat Epith
- Pars Intermed
- Duct
- Hypertrophy
- Hyperplasia
- Fibrosis
- Hyperplasia
- Inflammation
- Neovascularization
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Clear Cell Focus
- Hyperplasia
- Proliferation
- Degeneration
- Accumulation, Hyaline Droplet
- Hyperplasia
- Inflammation
- Degeneration
- Degeneration
- Cyst
- Dilation
- Moderate
- Moderate
- Minimal
- Minimal
- Acute, Minimal
- Minimal
- Mild
- Minimal
- Chronicprogr, Marked
- Lymphocyte, Mild
- Plasma Cell, Mild
- Moderate
- Minimal
- Minimal
- Suppurative, Minimal
- Marked
- Moderate
- Marked

[Dilation TGLs = 1-16]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1207

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1207

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1208

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1208

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Pancreas | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular |
| Testis | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|---|---------------|--------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| | | Vacuolation, Cytoplasmic | Minimal |
| * Bone Marrow | | Hypercellularity | Mild |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Epididymis | | Exfoliated Germ Cell | Minimal |
| * Heart | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Minimal |
| | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Parathyroid Gland | | Hyperplasia | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Marked |
| * Preputial Gland | Duct | Dilation | Mild |
| | | Inflammation | Chronic Active, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1208

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1208

ORGAN AND ACCOUNTABLE SITE STATUS

Skeletal Muscle		Degeneration	Mild
* Skin	Subcut Tiss	Inflammation	Chronic Active, Marked
[Inflammation TGLs = 1-20]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Moderate

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1209

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1209

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- Skeletal Muscle
- Testis
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Glandular
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Aorta
- * Heart
- * Islets, Pancreatic
- [Adenoma TGLs = 8-21]
- * Kidney
- [Nephropathy TGLs = 4-13]
- * Liver
- * Lung
- [Infiltration Cellular TGLs = 6-10]
- * Lymph Node, Mandibular
- [Hyperplasia TGLs = 2-9]
- * Nose
- * Pancreas
- [Adenoma TGLs = 7-6]
- Ventricl Rgt
- Endocardium
- Renal Tubule
- Alveolus
- Acinus
- Hypertrophy
- Mineral
- Cardiomyopathy
- Cardiomyopathy
- Hyperplasia
- Adenoma
- Cyst
- Nephropathy
- Mixed Cell Focus
- Infiltration Cellular
- Inflammation
- Hyperplasia
- Proliferation
- Accumulation, Hyaline Droplet
- Adenoma
- Hyperplasia
- Minimal
- Minimal
- Moderate
- Minimal
- Schwann Cell, Mild
- Chronicprogr, Marked
- Histiocyte, Moderate
- Chronic Active, Minimal
- Lymphocyte, Moderate
- Plasma Cell, Moderate
- Minimal
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1209

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1209

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Marked
* Preputial Gland		Inflammation	Chronic Active, Mild
* Prostate	Epithelium	Hyperplasia	Moderate
* Skin		Cyst Epithelial Inclusion	
	[Cyst Epithelial Inclusion TGLs = 1-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Cyst	

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1210

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1210

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Aorta	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	Skeletal Muscle
* Spinal Cord, Cervical	* Stomach, Forestomach	* Stomach, Glandular	Testis
* Thyroid Gland	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Eye	Cornea, Epithelium	Hyperplasia	Minimal
	Cornea	Inflammation	Acute, Minimal
* Heart	Ventricl Rgt	Cardiomyopathy	Moderate
		Cardiomyopathy	Mild
* Kidney		Nephropathy	Chronicprogr, Mild
* Liver	[Mixed Cell Focus TGLs = 3-12]	Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	[Infiltration Cellular TGLs = 2-10]	Inflammation	Chronic Active, Minimal
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Mild
		Proliferation	Plasma Cell, Mild
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
	Respirat Epith	Hyperplasia	Minimal
* Pancreas	Acinus	Atrophy	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Prostate		Inflammation	Chronic Active, Minimal
* Skin	Subcut Tiss	Fibroma	
	[Fibroma TGLs = 4-9]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1210

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1210

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Pigment	Minimal
* Thymus		Lymphoma Malignant	
Tissue NOS	Fat	Necrosis	Mild
[Necrosis TGLs = 1-20]			

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1211

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1211

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Nerve Trigeminal	* Pituitary Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	Skeletal Muscle
* Skin	* Spinal Cord, Cervical	* Stomach, Forestomach	* Stomach, Glandular
Testis	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
		Hypertrophy	Minimal
* Heart		Cardiomyopathy	Minimal
	Ventricle Rgt	Cardiomyopathy	Mild
* Kidney		Nephropathy	Chronicprogr, Mild
* Liver		Mixed Cell Focus	
	[Mixed Cell Focus TGLs = 7-12]		
* Lung		Infiltration Cellular	Histiocyte, Mild
	[Infiltration Cellular TGLs = 6-10]		
* Lymph Node, Mandibular		Ectasia	Marked
	Lymph Sinus	Hyperplasia	Lymphocyte, Mild
		Inflammation	Chronic Active, Marked
		Proliferation	Plasma Cell, Minimal
	[Ectasia TGLs = 2-9]		
	[Inflammation TGLs = 1-20]		
* Nose		Accumulation, Hyaline Droplet	Minimal
* Pancreas		Adenoma	
	Acinus	Atrophy	Minimal
* Parathyroid Gland		Cyst	
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1211

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1211

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland	Inflammation	Chronic Active, Minimal
* Spinal Cord, Lumbar	Degeneration	Mild
* Spinal Cord, Thoracic	Degeneration	Mild
* Spleen	Extramedullary Hematopoiesis	Minimal
	Pigment	Minimal
* Thymus	Atrophy	Mild
	Ectopic Parathyroid Gland	
* Thyroid Gland	Bilateral, C Cell	Adenoma

Animal Note: TGLs 3,4,5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1213

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1213

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Nerve Trigeminal
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Parathyroid Gland
- * Skin
- Testis
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Cervical
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Brain
- * Heart
- * Kidney
- * Liver
- [Clear Cell Focus TGLs = 7-12]
- * Lung
- [Infiltration Cellular TGLs = 5-10]
- * Nose
- * Pancreas
- [Hyperplasia TGLs = 4-6,14,20]
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- [Hyperplasia TGLs = 6-4]
- * Preputial Gland
- [Dilation TGLs = 1,2-16]
- Meninges
- Ventricl Rgt
- Alveolus
- Olfactory Epi
- Acinus
- Pars Distalis
- Pars Distalis
- Duct
- Hyperplasia
- Hyperplasia
- Granular Cell Tumor Benign
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Clear Cell Focus
- Mixed Cell Focus
- Infiltration Cellular
- Accumulation, Hyaline Droplet
- Hyperplasia
- Degeneration
- Degeneration
- Cyst
- Hyperplasia
- Dilation
- Moderate
- Mild
- Minimal
- Mild
- Chronicprogr, Mild
- Histiocyte, Mild
- Mild
- Moderate
- Moderate
- Mild
- Moderate
- Marked
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1213

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1213

ORGAN AND ACCOUNTABLE SITE STATUS

* Prostate		Inflammation	Chronic Active, Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild
Tissue NOS	Fat	Necrosis	Mild
[Necrosis TGLs = 3-20]			

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1214

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1214

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Thyroid Gland
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Prostate
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - [Hypertrophy TGLs = 4-7]
 - * Adrenal Medulla
 - Hyperplasia
 - * Eye
 - Retina
 - Atrophy
 - * Heart
 - Cardiomyopathy
 - * Kidney
 - Nephropathy
 - [Nephropathy TGLs = 2,3-13]
 - * Liver
 - Clear Cell Focus
 - Mixed Cell Focus
 - [Mixed Cell Focus TGLs = 6-12]
 - * Lung
 - Epithlm Alvlus
 - Alveolus
 - [Infiltration Cellular TGLs = 8-10]
 - * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - * Mammary Gland
 - Hyperplasia
 - Mesentery
 - Inflammation
 - * Nerve Trigeminal
 - Degeneration
 - * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - * Pancreas
 - Acinus
 - Artery
 - Hyperplasia
 - Inflammation
- Mild
Moderate
Minimal
Mild
Chronicprogr, Marked
Mild
Moderate
Histiocyte, Minimal
Lymphocyte, Minimal
Plasma Cell, Mild
Minimal
Chronic Active, Minimal
Minimal
Mild
Marked
Chronic Active, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1214

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1214

ORGAN AND ACCOUNTABLE SITE STATUS

[Hyperplasia TGLs = 5-6]

* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Preputial Gland	Duct	Dilation	Moderate

[Dilation TGLs = 9-16]

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Artery	Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Minimal

Animal Note: TGLs 1,7,10 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1215

TRT#: 7

SEX: Male

DAY ON TEST: 443

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1215

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nerve Trigeminal | * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Sciatic |
| * Pituitary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Spinal Cord, Cervical | * Spinal Cord, Lumbar | * Spinal Cord, Thoracic |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--|-------------------------|-------------------------------|----------------------|
| * Bone Marrow | | Hypercellularity | Minimal |
| * Heart | Ventricle Rgt | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Chronic progr, Mild |
| * Liver | | Infiltration Cellular | Mixed Cell, Minimal |
| | | Mixed Cell Focus | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| Note: Approximately one-half of Level 3 not present in section | | | |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Preputial Gland | | Inflammation | Chronic Active, Mild |
| * Skin | Subcut Tiss | Fibroma | |
| | [Fibroma TGLs = 1-20] | | |
| * Spleen | | Extramedullary Hematopoiesis | Minimal |
| Testis | Germ Cell | Degeneration | Minimal |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH

- Skin Subcut Tiss Fibroma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1217

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1217

ORGAN AND ACCOUNTABLE SITE STATUS

* Liver	Bile Duct	Hyperplasia	Mild
		Infiltration Cellular	Mixed Cell, Minimal
Lymph Node	Iliac, Lymph Sinus	Ectasia	Mild
	Iliac	Hyperplasia	Lymphocyte, Mild
	Lumbar	Hyperplasia	Lymphocyte, Mild
	Renal	Hyperplasia	Lymphocyte, Moderate
	Iliac	Proliferation	Plasma Cell, Mild
	Lumbar	Proliferation	Plasma Cell, Moderate
	Renal	Proliferation	Plasma Cell, Mild
	[Ectasia TGLs = 10-20]		
	[Hyperplasia TGLs = 12-22]		
	[Proliferation TGLs = 10-20]		
	[Proliferation TGLs = 11-21.1]		
* Lymph Node, Mandibular	Lymph Sinus	Ectasia	Marked
	[Ectasia TGLs = 1-9]		
* Mammary Gland	Duct	Dilation	Minimal
Mesentery	Artery	Inflammation	Chronic Active, Minimal
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Adenoma	Multiple
		Atrophy	Minimal
	[Adenoma TGLs = 13-6]		
* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Marked
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
		Schwannoma Malignant	Metastatic (Harderian Gland)
	[Adenoma TGLs = 19-4]		
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Minimal
	[Dilation TGLs = 2-16.1]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1217

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1217

ORGAN AND ACCOUNTABLE SITE STATUS

* Prostate		Inflammation	Chronic Active, Marked
[Inflammation TGLs = 5,6-16.1]			
* Salivary Glands	Parotid GI	Atrophy	Mild
* Seminal Vesicle		Inflammation	Chronic Active, Marked
[Inflammation TGLs = 7-16.1]			
Skeletal Muscle		Degeneration	Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
* Stomach, Forestomach		Fibrosis	Minimal
	Epithelium	Hyperplasia	Moderate
		Inflammation	Chronic Active, Mild
* Stomach, Glandular		Mineral	Moderate
Testis	Germ Cell	Degeneration	Marked
	Artery	Inflammation	Chronic Active, Marked
		Mesothelioma Malignant	
[Degeneration TGLs = 3-16A]			
* Thymus		Atrophy	Moderate
* Urinary Bladder	Urothelium	Hyperplasia	Minimal

Animal Note: TGL 8 = NST (No Section Taken)

Animal Note: TGLs 14,16 = NCL (No Corresponding Lesion)

Animal Note: TGL 15 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1218

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1218

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lung |
| * Lymph Node, Mesenteric | * Parathyroid Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Stomach, Forestomach | * Stomach, Glandular | Testis | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

MISSING

- * Mammary Gland

OBSERVATIONS

- | | | | |
|-----------------------------|---------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Hyperplasia | Mild |
| [Hyperplasia TGLs = 3-20] | | | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Moderate |
| | | Infiltration Cellular | Histiocyte, Mild |
| | | Proliferation | Plasma Cell, Minimal |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | | Adenoma | |
| | Acinus | Hyperplasia | Marked |
| [Adenoma TGLs = 3-6] | | | |
| [Hyperplasia TGLs = 3-14] | | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1218

TRT#: 7

SEX: Male

DAY ON TEST: 732

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1218

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland [Inflammation TGLs = 1,2-16]		Inflammation	Chronic Active, Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Mild
		Ectopic Thyroid	

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1219

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1219

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung |
| * Parathyroid Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular |
| Testis | * Thyroid Gland | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|---|---------------|-----------------------------------|----------------------|
| * Adrenal Cortex | | Accessory Adrenal Cortical Nodule | |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | | | |
| Note: Scant olfactory bulb material available for evaluation. | | | |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricle Rgt | Cardiomyopathy | Minimal |
| | Artery | Inflammation | Chronic Active, Mild |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Minimal |
| * Lymph Node, Mesenteric | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Minimal |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | | Adenoma | |
| | Acinus | Hyperplasia | Marked |
| [Adenoma TGLs = 1-6] | | | |
| [Hyperplasia TGLs = 1-6] | | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1219

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1219

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 2-4]			
* Preputial Gland	Duct	Dilation	Mild
		Inflammation	Chronic Active, Minimal
* Skin		Cyst Epithelial Inclusion	
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Hyperplasia	Plasma Cell, Mild
		Pigment	Mild
* Thymus		Atrophy	Moderate
		Cyst	

Animal Note: TGL 3 = NCL (No Correlating Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1220

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1220

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- Testis
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- Skeletal Muscle
- * Thyroid Gland
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Lung
- * Prostate
- * Stomach, Forestomach
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Adrenal Medulla
 - Hyperplasia
- * Heart
 - Ventricle Rgt
 - Cardiomyopathy
- * Islets, Pancreatic
 - Adenoma
- * Kidney
 - [Adenoma TGLs = 3-6]
 - Renal Tubule
 - Hyperplasia
 - Nephropathy
 - [Nephropathy TGLs = 4-13]
- * Liver
 - Clear Cell Focus
 - Eosinophilic Focus
- * Lymph Node, Mandibular
 - Bile Duct
 - Hyperplasia
 - Hyperplasia
 - Pigment
 - Proliferation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Adenoma
 - Acinus
 - Hyperplasia
 - Artery
 - Inflammation
 - [Adenoma TGLs = 3-6]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1220

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1220

ORGAN AND ACCOUNTABLE SITE STATUS

[Hyperplasia TGLs = 3-14]

* Peripheral Nerve, Sciatic

Degeneration

Moderate

* Peripheral Nerve, Tibial

Degeneration

Moderate

* Pituitary Gland

Pars Distalis

Hyperplasia

Minimal

* Preputial Gland

Squamous Cell Carcinoma

[Squamous Cell Carcinoma TGLs = 1-16]

* Skin

Cyst Epithelial Inclusion

Subcut Tiss

Lipoma

[Cyst Epithelial Inclusion TGLs = 2-20]

[Lipoma TGLs = 6-21]

* Spinal Cord, Cervical

Degeneration

Minimal

* Spinal Cord, Lumbar

Nerve

Degeneration

Moderate

* Spinal Cord, Thoracic

Degeneration

Mild

* Spleen

Extramedullary Hematopoiesis

Mild

* Thymus

Pigment

Minimal

Atrophy

Minimal

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1222

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1222

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nerve Trigeminal | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | Skeletal Muscle |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|-----------------------------|---|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Heart | Ventricl Rgt | Cardiomyopathy | Minimal |
| | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Hepatocellular Adenoma | |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Acinus | Hyperplasia | Moderate |
| | [Hyperplasia TGLs = 5-6] | | |
| * Parathyroid Gland | | Hyperplasia | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Moderate |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| | Note: Pars distalis available for evaluation. | | |
| * Skin | Subcut Tiss | Fibrosis | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1222

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1222

ORGAN AND ACCOUNTABLE SITE STATUS

Epidermis

Hyperplasia
Inflammation

Mild
Chronic Active, Minimal

[Fibrosis TGLs = 1-21.1]

[Hyperplasia TGLs = 1,2-21.1,20]

[Inflammation TGLs = 1,2-21.1,20]

* Spinal Cord, Lumbar

Nerve

Degeneration

Mild

* Spinal Cord, Thoracic

Degeneration

Moderate

* Spleen

Extramedullary Hematopoiesis

Minimal

Pigment

Mild

Testis

Edema

Mild

[Edema TGLs = 3-16A]

* Thymus

Atrophy

Moderate

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1223

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1223

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Prostate
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Seminal Vesicle
- * Stomach, Glandular
- * Urinary Bladder
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Thyroid Gland
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Spinal Cord, Cervical
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 Mild
Minimal
Minimal
- * Adrenal Medulla
 - Hyperplasia
 Mild
- * Bone Marrow
 - Hypercellularity
 Minimal
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Cardiomyopathy
 Mild
Minimal
- * Kidney
 - Nephropathy
 Chronicprogr, Mild
- * Liver
 - Bile Duct
 - Extramedullary Hematopoiesis
 - Hyperplasia
 - Mixed Cell Focus
 Minimal
Minimal
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 2-10]
 Infiltration Cellular
 - Infiltration Cellular
 Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 Lymphocyte, Minimal
Plasma Cell, Minimal
- * Nerve Trigeminal
 - Degeneration
 Moderate
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 Mild
- * Pancreas
 - Acinus
 - Hyperplasia
 Minimal
- * Parathyroid Gland
 - Hyperplasia TGLs = 1-8]
 Hyperplasia
 - Hyperplasia
 Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1223

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1223

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Mild
* Salivary Glands	Parotid GI	Atrophy	Minimal
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
Testis	Germ Cell	Degeneration	Minimal
* Thymus		Atrophy	Moderate
		Cyst	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1224

TRT#: 7

SEX: Male

DAY ON TEST: 674

DOSE: 6.0W/kg(GSM)chr

DISP: Accidentally Killed

HISTO: 12-5224-1224

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Harderian Gland
- * Islets, Pancreatic
- * Parathyroid Gland
- * Seminal Vesicle
- Testis
- * Urinary Bladder
- * Aorta
- * Epididymis
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Skin
- * Thyroid Gland
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Mammary Gland
- * Prostate
- * Stomach, Forestomach
- * Trachea
- * Bone Marrow
- * Eye
- * Intestine Small, Duodenum
- * Nose
- * Salivary Glands
- * Stomach, Glandular
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
- * Heart
- * Kidney
- [Nephropathy TGLs = 4-13]
- * Liver
- * Lung
- [Congestion TGLs = 9-10]
- * Lymph Node, Mandibular
- [Proliferation TGLs = 2-9]
- * Nerve Trigeminal
- * Pancreas
- [Adenoma TGLs = 7-6,14]
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Preputial Gland
- [Dilation TGLs = 5,6-16]
- Hypertrophy
- Vacuolation, Cytoplasmic
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Mixed Cell Focus
- Congestion
- Proliferation
- Degeneration
- Adenoma
- Degeneration
- Degeneration
- Dilation
- Inflammation
- Minimal
- Mild
- Minimal
- Mild
- Chronicprogr, Moderate
- Mild
- Plasma Cell, Mild
- Mild
- Multiple
- Marked
- Marked
- Moderate
- Chronic Active, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1224

TRT#: 7

SEX: Male

DAY ON TEST: 674

DOSE: 6.0W/kg(GSM)chr

DISP: Accidentally Killed

HISTO: 12-5224-1224

ORGAN AND ACCOUNTABLE SITE STATUS

Skeletal Muscle		Degeneration	Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Moderate
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - UNCERTAIN

Animal Note: Animal found dead in flooded cage.

Animal Note: TGL 1 = NST (No Section Taken)

Animal Note: TGLs 3,8,10 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1225

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1225

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Aorta	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Eye	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Seminal Vesicle
Skeletal Muscle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
Testis	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
		Hypertrophy	Minimal
		Vacuolation, Cytoplasmic	Minimal
* Adrenal Medulla		Pheochromocytoma Benign	
* Brain		Cyst	
	Meninges	Granular Cell Tumor Benign	
* Harderian Gland		Hypertrophy	Mild
* Heart		Cardiomyopathy	Minimal
	Ventricl Rgt	Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Mild
* Liver		Mixed Cell Focus	
* Lymph Node, Mandibular	Lymph Sinus	Ectasia	Minimal
		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Mild
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	
* Preputial Gland	Duct	Dilation	Marked
		Inflammation	Chronic Active, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1225

TRT#: 7

SEX: Male

DAY ON TEST: 731

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1225

ORGAN AND ACCOUNTABLE SITE STATUS

[Dilation TGLs = 1,2-16]

* Prostate		Inflammation	Chronic Active, Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Carcinoma	
	C Cell	Hyperplasia	Mild

[Carcinoma TGLs = 4-8]

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1226

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1226

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Moderate

* Thyroid Gland

Follicular Cel

Carcinoma

C Cell

Hyperplasia

Mild

[Carcinoma TGLs = 2-8]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1227

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1227

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Epididymis |
| * Esophagus | * Eye | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Lung | * Nerve Trigeminal | * Pancreas | * Parathyroid Gland |
| * Prostate | * Seminal Vesicle | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | Testis |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|-----------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| | | Vacuolation, Cytoplasmic | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| * Harderian Gland | | Hyperplasia | Minimal |
| * Heart | Ventricl Rgt | Cardiomyopathy | Mild |
| | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Adenoma | Multiple |
| | | Hyperplasia | Moderate |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Lymph Node, Mesenteric | | Hyperplasia | Lymphocyte, Minimal |
| | [Hyperplasia TGLs = 5-15] | | |
| * Mammary Gland | Duct | Dilation | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1227

TRT#: 7

SEX: Male

DAY ON TEST: 734

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1227

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Hyperplasia	Mild
[Adenoma TGLs = 4-4]			
* Preputial Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Minimal
[Dilation TGLs = 1,2-16]			
* Salivary Glands	Parotid GI	Atrophy	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1228

TRT#: 7

SEX: Male

DAY ON TEST: 716

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1228

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Harderian Gland
- * Pituitary Gland
- * Seminal Vesicle
- * Urinary Bladder
- * Aorta
- * Epididymis
- * Intestine Large, Rectum
- * Preputial Gland
- * Spinal Cord, Cervical
- * Bone
- * Esophagus
- * Lymph Node, Mesenteric
- * Prostate
- * Stomach, Forestomach
- * Bone Marrow
- * Eye
- * Mammary Gland
- * Salivary Glands
- * Thyroid Gland

MISSING

Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Thymus
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Trachea
- * Intestine Small, Duodenum
- * Pancreas
- * Intestine Small, Ileum
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
- * Heart
- * Kidney
- * Liver
- * Lung
- * Lymph Node, Mandibular
- * Nerve Trigeminal
- * Nose
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Skeletal Muscle
- * Skin
- Ventricl Rgt
- Alveolus
- [Infiltration Cellular TGLs = 3-10]
- Olfactory Epi
- Hypertrophy
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Mixed Cell Focus
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Degeneration
- Accumulation, Hyaline Droplet
- Hyperplasia
- Degeneration
- Degeneration
- Degeneration
- Cyst Epithelial Inclusion
- Minimal
- Moderate
- Mild
- Chronicprogr, Marked
- Histiocyte, Mild
- Lymphocyte, Minimal
- Plasma Cell, Minimal
- Moderate
- Mild
- Marked
- Moderate
- Mild
- Moderate
- Multifocal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1228

TRT#: 7

SEX: Male

DAY ON TEST: 716

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1228

ORGAN AND ACCOUNTABLE SITE STATUS

[Cyst Epithelial Inclusion TGLs = 5,6-20,21]

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
Testis	Artery	Inflammation	Chronic Active, Mild

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 1,2,7 = NCL (No Corresponding Lesion)

Animal Note: TGL 4 = NCL (No Corresponding Lesion) Tissue autolysis precludes evaluation.

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1229

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1229

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Prostate
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Seminal Vesicle
- * Thyroid Gland
- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Adrenal Medulla
 - Pheochromocytoma Benign
- * Brain
 - [Pheochromocytoma Benign TGLs = 3,4-7]
 - Pineal Gland
- * Eye
 - Cornea, Epithelium
 - Cornea
- * Heart
 - Ventricl Rgt
- * Kidney
 - [Nephropathy TGLs = 5-13]
- * Liver
 - Clear Cell Focus
 - Mixed Cell Focus
- * Lung
 - Alveolus
- * Lymph Node, Mandibular
 - Infiltration Cellular
- * Nerve Trigeminal
 - Hyperplasia
 - Proliferation
 - Degeneration
- * Nose
 - Olfactory Epi
- * Pancreas
 - Accumulation, Hyaline Droplet
 - Acinus
 - Artery
 - Hyperplasia
 - Inflammation
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1229

TRT#: 7

SEX: Male

DAY ON TEST: 733

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1229

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Moderate
* Preputial Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Minimal
* Skin		Cyst Epithelial Inclusion	
Note: Multiple small areas of basal cell hyperplasia within epithelial inclusion cyst.			
[Cyst Epithelial Inclusion TGLs = 1,2-20]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
Testis	Interstit Cell	Hyperplasia	Marked
* Thymus		Atrophy	Minimal
		Cyst	

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1230

TRT#: 7

SEX: Male

DAY ON TEST: 638

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1230

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Salivary Glands
- * Thyroid Gland
- * Aorta
- * Eye
- * Islets, Pancreatic
- * Pituitary Gland
- * Seminal Vesicle
- * Trachea
- * Bone
- * Harderian Gland
- * Lung
- * Preputial Gland
- Skeletal Muscle
- * Urinary Bladder
- * Brain
- * Intestine Large, Colon
- * Mammary Gland
- * Prostate
- * Skin

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Stomach, Glandular
- * Intestine Large, Rectum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Epididymis
- * Heart
- * Kidney
- * Liver
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Nerve Trigeminal
- * Nose
- * Pancreas
- Hyperplasia
- Hypercellularity
- Exfoliated Germ Cell
- Hypospermia
- Cardiomyopathy
- Ventricl Rgt
- Myocardium
- Renal Tubule
- Accumulation, Hyaline Droplet
- Nephropathy
- Extramedullary Hematopoiesis
- Hyperplasia
- Proliferation
- Erythrophagocytosis
- Degeneration
- Accumulation, Hyaline Droplet
- Hyperplasia
- Mild
- Marked
- Mild
- Moderate
- Mild
- Minimal
- Moderate
- Chronicprogr, Moderate
- Mild
- Lymphocyte, Minimal
- Plasma Cell, Mild
- Minimal
- Mild
- Mild
- Mild

[Nephropathy TGLs = 4-13]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1230

TRT#: 7

SEX: Male

DAY ON TEST: 638

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1230

ORGAN AND ACCOUNTABLE SITE STATUS

	Artery	Inflammation	Chronic Active, Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary G1			
Note: Pars distalis available for evaluation.			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Mild
	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Erythrophagocytosis	Marked
		Hemangiosarcoma	
	[Erythrophagocytosis TGLs = 5-12]		
	[Hemangiosarcoma TGLs = 6-12]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
Testis	Germ Cell	Degeneration	Moderate
	[Degeneration TGLs = 1-16A]		
* Thymus		Hemorrhage	Mild

PRIMARY CAUSE OF DEATH - Spleen Hemangiosarcoma

Animal Note: TGLs 2,3,8,9 = NCL (No Corresponding Lesion)

Animal Note: TGL 7 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1231

TRT#: 7

SEX: Male

DAY ON TEST: 554

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1231

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Harderian Gland
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Skin
- * Thyroid Gland
- * Aorta
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea
- * Esophagus
- * Intestine Small, Duodenum
- * Liver
- * Seminal Vesicle
- * Spinal Cord, Thoracic
- Trigeminal Ganglion
- * Eye
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Forestomach
- * Urinary Bladder

MISSING

- * Mammary Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Bone
 - Fibrous Osteodystrophy
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Necrosis
- * Epididymis
 - Pineal Gland
 - Vacuolation, Cytoplasmic
 - Hypospermia
- * Heart
 - Artery
 - Inflammation
 - Cardiomyopathy
- * Intestine Large, Cecum
 - Artery
 - Inflammation
- * Intestine Large, Colon
 - Artery
 - Inflammation
- * Kidney
 - Artery
 - Inflammation
 - Nephropathy
- * Lung
 - [Nephropathy TGLs = 3,7-13]
 - Congestion
 - Artery
 - Inflammation
 - [Congestion TGLs = 5-10]
- * Lymph Node
 - Artery, Mediastinal
 - Inflammation
- * Lymph Node, Mandibular
 - Congestion
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1231

TRT#: 7

SEX: Male

DAY ON TEST: 554

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1231

ORGAN AND ACCOUNTABLE SITE STATUS

		Proliferation	Plasma Cell, Mild
[Congestion TGLs = 1-9]			
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Pancreas	Acinus	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Preputial Gland	Duct	Dilation	Moderate
	Artery	Inflammation	Chronic Active, Moderate
* Prostate		Inflammation	Chronic Active, Mild
* Salivary Glands	Artery	Inflammation	Chronic Active, Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Stomach, Glandular	Artery	Inflammation	Chronic Active, Mild
Testis	Germ Cell	Degeneration	Moderate
	Artery	Inflammation	Chronic Active, Marked
* Thymus		Atrophy	Mild

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: TGLs 2,4,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1234

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1234

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Liver
- * Salivary Glands
- Testis
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Seminal Vesicle
- * Trachea
- * Epididymis
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
- * Brain
 - Pineal Gland
 - Vacuolation, Cytoplasmic
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Cardiomyopathy
 - Adenoma
- * Islets, Pancreatic
 - [Adenoma TGLs = 4-6]
- * Kidney
 - Nephropathy
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Lymph Node, Mesenteric
 - [Proliferation TGLs = 2-9]
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Pancreas
 - Acinus
 - Hyperplasia
 - [Hyperplasia TGLs = 4-14]
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1234

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1234

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland [Dilation TGLs = 3-16]	Duct	Dilation	Moderate
* Prostate		Inflammation	Chronic Active, Minimal
Skeletal Muscle		Degeneration	Minimal
* Skin [Inflammation TGLs = 1-20]	Lip, Subcut Tiss Lip, Subcut Tiss	Foreign Body Inflammation	Chronic Active, Marked
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Pigment	Mild
* Thymus		Atrophy Cyst	Moderate
* Thyroid Gland	C Cell	Adenoma	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1235

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1235

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Epididymis |
| * Esophagus | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Mammary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Moderate |
| | | Vacuolation, Cytoplasmic | Mild |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Brain | Pineal Gland | Vacuolation, Cytoplasmic | Mild |
| * Eye | Retina | Atrophy | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | Ventricle Rgt | Cardiomyopathy | Moderate |
| | [Cardiomyopathy TGLs = 6-11,20] | | |
| * Kidney | | Nephropathy | Chronicprogr, Marked |
| | [Nephropathy TGLs = 3,4-13] | | |
| * Liver | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 5-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Lymph Node, Mesenteric | | Erythrophagocytosis | Minimal |
| | | Hyperplasia | Lymphocyte, Minimal |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | | Adenoma | Multiple |
| | Acinus | Atrophy | Mild |
| | Acinus | Hyperplasia | Moderate |
| | Artery | Inflammation | Chronic Active, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1235

TRT#: 7

SEX: Male

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1235

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 2-6]

[Hyperplasia TGLs = 2-6,14]

* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Preputial Gland	Duct	Dilation	Moderate
	[Dilation TGLs = 1-16]		
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Pigment	Minimal
Testis	Interstit Cell	Hyperplasia	Moderate
	Artery	Inflammation	Chronic Active, Minimal
* Thymus		Cyst	
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 7 = NCL (No Correlating Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 607

TRT#: 2

SEX: Female

DAY ON TEST: 550

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-607

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|----------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Tibial | * Pituitary Gland |
| * Salivary Glands | Skeletal Muscle | * Spinal Cord, Cervical | * Spinal Cord, Lumbar |
| * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

MISSING

- * Nerve Trigeminal

OBSERVATIONS

- | | | | |
|-----------------------------|-------------------------------------|--------------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Bone Marrow | | Hypercellularity | Moderate |
| * Clitoral Gland | Duct | Dilation | Marked |
| | [Dilation TGLs = 5,6-16] | | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Angiectasis | Minimal |
| | [Angiectasis TGLs = 1-12] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | Lumbar | Erythrophagocytosis | Moderate |
| | Lumbar | Lymphoma Malignant | |
| | [Erythrophagocytosis TGLs = 4-21] | | |
| | [Lymphoma Malignant TGLs = 3-21] | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 9-20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Marked |
| | | Granulosa Cell Tumor Malignant | |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 607

TRT#: 2

SEX: Female

DAY ON TEST: 550

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-607

ORGAN AND ACCOUNTABLE SITE STATUS

* Skin	Subcut Tiss	Fibroma	
[Fibroma TGLs = 8-21]			
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Moderate
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Mild

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibroma

CONTRIBUTORY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 2,7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 608

TRT#: 2

SEX: Female

DAY ON TEST: 662

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-608

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Parathyroid Gland
- Skeletal Muscle
- * Stomach, Glandular
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Peripheral Nerve, Sciatic
- * Skin
- * Thyroid Gland
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Salivary Glands
- * Spinal Cord, Thoracic
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Clitoral GI
- Note: One of pair available for evaluation.
- * Liver
- * Lung
- [Infiltration Cellular TGLs = 3-10]
- * Lymph Node, Mandibular
- * Mammary Gland
- [Fibroadenoma TGLs = 1-20]
- * Nose
- * Ovary
- * Peripheral Nerve, Tibial
- * Spinal Cord, Lumbar
- * Spleen
- * Stomach, Forestomach
- * Thymus
- Vacuolation, Cytoplasmic
- Hypercellularity
- Extramedullary Hematopoiesis
- Infiltration Cellular
- Proliferation
- Dilation
- Fibroadenoma
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Degeneration
- Extramedullary Hematopoiesis
- Pigment
- Hyperplasia
- Ulcer
- Atrophy
- Cyst
- Minimal
- Marked
- Minimal
- Histiocyte, Minimal
- Plasma Cell, Moderate
- Moderate
- Moderate
- Moderate
- Moderate
- Minimal
- Minimal
- Moderate
- Minimal
- Mild
- Mild
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 608

TRT#: 2

SEX: Female

DAY ON TEST: 662

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-608

ORGAN AND ACCOUNTABLE SITE STATUS

* Urinary Bladder

Inflammation

Acute, Mild

* Uterus

Endometrium

Hyperplasia

Cystic, Minimal

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59
Test Type: CHRONIC
Route: Whole Body Exposure
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
Time Report Requested: 11:58:55
First Dose M/F: 09/16/12 / 09/16/12
Lab: IIT

ANIMAL ID: 609

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-609

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Aorta	* Bone	* Bone Marrow	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Liver	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Salivary Glands	Skeletal Muscle	* Skin
* Spinal Cord, Cervical	* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Nerve Trigeminal

INSUFFICIENT TISSUE

* Adrenal Medulla

OBSERVATIONS

* Adrenal Cortex		Degeneration Hypertrophy	Cystic, Minimal Minimal
* Brain			
Note: Olfactory bulbs unavailable for evaluation.			
* Clitoral Gland	Duct	Dilation	Minimal
* Eye	Lens	Cataract	Mild
* Harderian Gland		Atrophy	Minimal
* Kidney		Nephropathy	Chronicprogr, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Moderate
[Infiltration Cellular TGLs = 2-10]			
* Lymph Node, Mandibular		Hyperplasia Proliferation	Lymphocyte, Minimal Plasma Cell, Minimal
* Mammary Gland	Duct	Dilation	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
Note: Longitudinal section available for evaluation.			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 609

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-609

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 1-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 610

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-610

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
- * Clitoral Gland
 - Duct
 - Dilation
- * Liver
 - Bile Duct
 - Cyst
- * Lung
 - Alveolus
 - Infiltration Cellular
- [Infiltration Cellular TGLs = 1-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Duct
 - Dilation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Adenoma
- [Adenoma TGLs = 2-4]
- * Spinal Cord, Lumbar
 - Nerve
 - Degeneration
- * Spinal Cord, Thoracic
 - Degeneration
- * Spleen
 - Extramedullary Hematopoiesis
 - Pigment
- * Thymus
 - Atrophy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 610

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-610

ORGAN AND ACCOUNTABLE SITE STATUS

Hyperplasia

Epithelial, Minimal

Degeneration

Minimal

Metaplasia

Squamous, Minimal

Trigeminal Ganglion

* Uterus

Epithelium

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 611

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-611

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lung | * Lymph Node, Mesenteric | * Parathyroid Gland | * Peripheral Nerve, Sciatic |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

MISSING

- * Thymus

OBSERVATIONS

- | | | | |
|---|--|--|---|
| * Adrenal Cortex | | Degeneration
Hypertrophy | Cystic, Minimal
Mild |
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Eye | Retina | Atrophy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | Bile Duct | Basophilic Focus
Cyst
Hepatocellular Adenoma | |
| | [Cyst TGLs = 2-12] | | |
| | [Hepatocellular Adenoma TGLs = 3-20] | | |
| * Lymph Node, Mandibular | | Hyperplasia
Proliferation | Lymphocyte, Minimal
Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Minimal |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Moderate |
| * Pancreas | | Ectopic Liver | |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 611

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-611

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Stomach, Forestomach		Sarcoma	
[Sarcoma TGLs = 4-21RT]			
* Stomach, Glandular		Sarcoma	Metastatic (Stomach, Forestomach)
[Sarcoma TGLs = 4-21RT]			
Tissue NOS	Fat	Necrosis	Moderate
[Necrosis TGLs = 1-20]			
* Uterus	Endometrium	Dilation	Mild
		Hyperplasia	Cystic, Minimal
		Inflammation	Suppurative, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 613

TRT#: 2

SEX: Female

DAY ON TEST: 493

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-613

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|-----------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lymph Node, Mesenteric | * Nerve Trigeminal | * Ovary | * Pancreas |
| * Parathyroid Gland | * Peripheral Nerve, Sciatic | * Pituitary Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Spinal Cord, Lumbar |
| * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| Trigeminal Ganglion | * Urinary Bladder | * Uterus | |

OBSERVATIONS

- | | | | |
|----------------------------|--|-------------------------------|-------------------------|
| * Bone Marrow | | Hypercellularity | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | | Hyperplasia | Minimal |
| | [Fibroadenoma TGLs = 1-20] | | |
| * Nerve Sciatic | | | |
| | Note: Longitudinal section available for evaluation. | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Spleen | | Extramedullary Hematopoiesis | Moderate |
| | | Pigment | Minimal |
| * Thymus | | Atrophy | Minimal |
| * Trachea | | Inflammation | Chronic Active, Minimal |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59
 Test Type: CHRONIC
 Route: Whole Body Exposure
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Cell Phone Radiation: GSM
 CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
 Time Report Requested: 11:58:55
 First Dose M/F: 09/16/12 / 09/16/12
 Lab: IIT

ANIMAL ID: 614

TRT#: 2

SEX: Female

DAY ON TEST: 745

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-614

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |
| * Uterus | | | |

OBSERVATIONS

- | | | | |
|---|----------|----------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | | Compression | Moderate |
| [Compression TGLs = 8-1,2] | | | |
| * Clitoral Gland | Duct | Dilation | Marked |
| [Dilation TGLs = 1-16] | | | |
| * Harderian Gland | | Atrophy | Minimal |
| | | Infiltration Cellular | Lymphocyte, Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Clear Cell Focus | |
| | | Hepatodiaphragmatic Nodule | |
| [Hepatodiaphragmatic Nodule TGLs = 5-12] | | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Adenoma | |
| | | Fibroadenoma | |
| | | Hyperplasia | Mild |
| [Adenoma TGLs = 2-20] | | | |
| [Fibroadenoma TGLs = 3-21] | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 614

TRT#: 2

SEX: Female

DAY ON TEST: 745

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-614

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Marked
* Ovary		Atrophy	Mild
	Rete Ovarii	Hyperplasia	Marked
* Peripheral Nerve, Sciatic		Degeneration	Minimal
Note: Longitudinal section available for evaluation.			
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 9-4]		
* Spinal Cord, Cervical		Degeneration	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Moderate
* Stomach, Forestomach		Fibrosis	Mild
	[Fibrosis TGLs = 11-22RT]		
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Minimal

Animal Note: TGL 7 = NST (No Section Taken)

Animal Note: TGLs 4,6 = NCL (No Corresponding Lesion)

Animal Note: TGL 10 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 615

TRT#: 2

SEX: Female

DAY ON TEST: 660

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-615

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Liver |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Spinal Cord, Cervical | * Spinal Cord, Thoracic |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|--|---------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Brain | | Compression | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | | Inflammation | Suppurative, Minimal |
| [Inflammation TGLs = 3-21] | | | |
| * Mammary Gland | Duct | Dilation | Minimal |
| [Galactocele TGLs = 1-9] | | | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Marked |
| * Ovary | | Atrophy | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| Note: Longitudinal section available for evaluation. | | | |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 4-4] | | | |
| * Skin | Epidermis | Hyperplasia | Mild |
| | | Inflammation | Chronic Active, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 615

TRT#: 2

SEX: Female

DAY ON TEST: 660

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-615

ORGAN AND ACCOUNTABLE SITE STATUS

Note: Multifocal serocellular crust formation.

[Inflammation TGLs = 2-20]

* Spinal Cord, Lumbar

* Spleen

* Uterus

Red Pulp

Epithelium

Degeneration

Atrophy

Extramedullary Hematopoiesis

Pigment

Inflammation

Metaplasia

Minimal

Mild

Minimal

Moderate

Acute, Minimal

Squamous, Mild

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 616

TRT#: 2

SEX: Female

DAY ON TEST: 268

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-616

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lung | * Lymph Node, Mandibular | * Mammary Gland | * Nerve Trigeminal |
| * Ovary | * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Sciatic |
| * Peripheral Nerve, Tibial | * Pituitary Gland | * Salivary Glands | Skeletal Muscle |
| * Spinal Cord, Cervical | * Spinal Cord, Lumbar | * Spinal Cord, Thoracic | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | | |

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|-------------------------|-------------------------------|-----------------------|
| * Bone Marrow | | Hypercellularity | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| * Lymph Node, Mesenteric | | Infiltration Cellular | Histiocyte, Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Skin | Subcut Tiss | Sarcoma | |
| | [Sarcoma TGLs = 1-20] | | |
| * Spleen | | Extramedullary Hematopoiesis | Mild |
| | | Lymphoma Malignant | |
| | | Pigment | Mild |

PRIMARY CAUSE OF DEATH

- Skin Subcut Tiss Sarcoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 618

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-618

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

MISSING

- * Thymus

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | Duct | Dilation | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Angiectasis | Minimal |
| | | Eosinophilic Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 2-10] | | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Minimal |
| | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-20] | | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Marked |
| * Ovary | | Atrophy | Mild |
| | | Cyst | |
| | [Cyst TGLs = 4,5-16] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 618

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-618

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Basal Cell, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Marked
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal

Animal Note: TGL 3 = NCL (No Correlating Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 619

TRT#: 2

SEX: Female

DAY ON TEST: 508

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-619

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Colon
- * Liver
- * Nerve Trigeminal
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Pancreas
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Trachea
- * Bone
- * Eye
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Skeletal Muscle
- * Stomach, Forestomach
- * Trigeminal Ganglion
- * Brain
- * Harderian Gland
- * Islets, Pancreatic
- * Mammary Gland
- * Peripheral Nerve, Tibial
- * Skin
- * Stomach, Glandular
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Brain
 - Note: Olfactory bulbs not available.
- * Heart
- * Kidney
 - Bilateral, Renal Tubule
 - Renal Tubule
 - [Carcinoma TGLs = 1,2-13,20]
 - [Cyst TGLs = 5-13]
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 6-10]
- * Nose
 - Olfactory Epi
 - Note: Level 3 largely absent.
- * Ovary
- * Peripheral Nerve, Sciatic
- * Spinal Cord, Lumbar
- * Spleen
- Hypertrophy
- Hypercellularity
- Cardiomyopathy
- Carcinoma
- Cyst
- Nephropathy
- Infiltration Cellular
- Accumulation, Hyaline Droplet
- Atrophy
- Cyst
- Degeneration
- Degeneration
- Hemangiosarcoma
- Mild
- Moderate
- Minimal
- Chronicprogr, Minimal
- Histiocyte, Moderate
- Moderate
- Mild
- Minimal
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 619

TRT#: 2

SEX: Female

DAY ON TEST: 508

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-619

ORGAN AND ACCOUNTABLE SITE STATUS

[Hemangiosarcoma TGLs = 3,4-12]

* Thymus

Atrophy

Minimal

Cyst

Hyperplasia

Epithelial, Minimal

* Uterus

Cervix, Serosa

Fibrosis

Mild

Epithelium

Metaplasia

Squamous, Moderate

[Fibrosis TGLs = 7-20]

PRIMARY CAUSE OF DEATH

- Kidney Bilateral Renal Tubule Carcinoma

Experiment Number: 20105 - 59
 Test Type: CHRONIC
 Route: Whole Body Exposure
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Cell Phone Radiation: GSM
 CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
 Time Report Requested: 11:58:55
 First Dose M/F: 09/16/12 / 09/16/12
 Lab: IIT

ANIMAL ID: 621

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-621

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Brain
* Esophagus	* Eye	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	Skeletal Muscle	* Skin
* Spinal Cord, Cervical	* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Degeneration	Cystic, Mild
		Hypertrophy	Mild
* Bone Marrow		Hypercellularity	Moderate
* Clitoral Gland		Inflammation	Chronic Active, Minimal
* Harderian Gland		Atrophy	Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	[Infiltration Cellular TGLs = 3-10]		
* Mammary Gland		Fibroadenoma	Multiple
	[Fibroadenoma TGLs = 1,5-20,21]		
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Marked
* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Minimal
Trigeminal Ganglion		Degeneration	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 621

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-621

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Epithelium

Metaplasia

Squamous, Mild

Polyp Stromal

Thrombus

Marked

[Polyp Stromal TGLs = 2-16]

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 622

TRT#: 2

SEX: Female

DAY ON TEST: 745

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-622

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Aorta
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular
- * Bone Marrow
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- * Thyroid Gland

MISSING

- * Nerve Trigeminal

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Mild
- * Kidney
 - Hypertrophy
 - Minimal
- * Liver
 - Periductal
 - Nephropathy
 - Cholangiofibrosis
 - Mild
 - Mixed Cell Focus
- Note: Intestinal metaplasia of bile ducts within region of fibrosis.
 - [Mixed Cell Focus TGLs = 5,6-12,20]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - TGLs = 7-10]
 - Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Proliferation
 - Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Minimal
 - Multiple
- [Fibroadenoma TGLs = 1,2,3-20,21,22]
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate
- * Ovary
 - Atrophy
 - Moderate
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Moderate
- * Peripheral Nerve, Tibial
 - Degeneration
 - Moderate
- * Spinal Cord, Lumbar
 - Degeneration
 - Mild
- * Spinal Cord, Thoracic
 - Degeneration
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 622

TRT#: 2

SEX: Female

DAY ON TEST: 745

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-622

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Dilation	Mild
	Endometrium	Hyperplasia	Cystic, Moderate
	[Dilation TGLs = 4-16.1]		

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 623

TRT#: 2

SEX: Female

DAY ON TEST: 712

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-623

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Harderian Gland
- * Intestine Small, Jejunum
- * Salivary Glands
- * Thyroid Gland
- * Uterus
- * Bone
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Skeletal Muscle
- * Trachea
- * Esophagus
- * Intestine Large, Rectum
- * Pancreas
- * Spinal Cord, Cervical
- * Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Duodenum

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Brain
- * Clitoral Gland
- * Heart
- * Kidney
- * Liver
- * Lung
- * Mammary Gland
- * Nerve Trigeminal
- Duct
- Bile Duct
- [Lymphoma Malignant TGLs = 5-10]
- Lymph Node
- Note: Lymph node present within routine section of mammary gland.
- [Lymphoma Malignant TGLs = 9-9]
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- [Lymphoma Malignant TGLs = 3-15]
- [Fibroadenoma TGLs = 7-20]
- Lymphoma Malignant
- Hypercellularity
- Edema
- Lymphoma Malignant
- Dilation
- Cardiomyopathy
- Nephropathy
- Hyperplasia
- Lymphoma Malignant
- Lymphoma Malignant
- Lymphoma Malignant
- Lymphoma Malignant
- Fibroadenoma
- Hyperplasia
- Degeneration
- Mild
- Mild
- Moderate
- Minimal
- Chronicprogr, Minimal
- Mild
- Moderate
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 623

TRT#: 2

SEX: Female

DAY ON TEST: 712

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-623

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Cyst	
		Lymphoma Malignant	
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Skin	Subcut Tiss	Malignant Fibrous Histiocytoma	
	[Malignant Fibrous Histiocytoma TGLs = 7,8-20,21]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 1-12]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Minimal

PRIMARY CAUSE OF DEATH - Spleen Lymphoma Malignant

Animal Note: TGLs 2,4,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 624

TRT#: 2

SEX: Female

DAY ON TEST: 565

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-624

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|-----------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Eye |
| * Harderian Gland | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mesenteric | * Nerve Trigeminal |
| * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Sciatic | * Peripheral Nerve, Tibial |
| * Pituitary Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |
| * Uterus | | | |

OBSERVATIONS

- | | | | |
|--------------------------|---|-------------------------------|--------------------|
| * Clitoral Gland | Duct | Dilation | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| | [Nephropathy TGLs = 6-13] | | |
| * Liver | Hepatocyte | Vacuolation, Cytoplasmic | Mild |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Hyperplasia | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Cyst | |
| | [Cyst TGLs = 1,2-16] | | |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Mild |
| | | Degeneration | Minimal |
| * Spleen | Red Pulp | Atrophy | Mild |
| | | Pigment | Mild |
| | [Atrophy TGLs = 5-12] | | |
| * Thymus | | Atrophy | Marked |
| Tongue | | Squamous Cell Carcinoma | |
| | [Squamous Cell Carcinoma TGLs = 3-20] | | |

PRIMARY CAUSE OF DEATH - Tongue Squamous Cell Carcinoma

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 625

TRT#: 2

SEX: Female

DAY ON TEST: 622

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-625

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skin
- * Stomach, Glandular
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Urinary Bladder
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Liver
- Skeletal Muscle
- * Stomach, Forestomach
- * Uterus

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Medulla Hyperplasia Mild
- * Brain Compression Mild
 - [Compression TGLs = 7-1,2]
- * Clitoral Gland Inflammation Chronic Active, Moderate
- * Kidney Nephropathy Chronicprogr, Minimal
- * Lung Alveolus Infiltration Cellular Histocyte, Mild
 - [Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Mild
- * Mammary Gland Proliferation Plasma Cell, Mild
 - Duct Adenocarcinoma Mild
 - Dilation Multiple
 - Fibroadenoma
 - Galactocele
 - [Fibroadenoma TGLs = 1,2,3,4-20,21,22,23]
- * Nerve Trigeminal Degeneration Minimal
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Moderate
- * Ovary Atrophy Moderate
- * Parathyroid Gland Fibrosis Minimal
- * Peripheral Nerve, Sciatic Degeneration Mild
- * Peripheral Nerve, Tibial Degeneration Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 625

TRT#: 2

SEX: Female

DAY ON TEST: 622

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-625

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland [Adenoma TGLs = 6-4]	Pars Distalis	Adenoma	
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Mild
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH - Mammary Gland Galactocele

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 626

TRT#: 2

SEX: Female

DAY ON TEST: 578

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-626

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney |
| * Lung | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Peripheral Nerve, Tibial | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|-----------------------------|-----------------------------------|-------------------------------|--------------------------|
| * Adrenal Cortex | | Vacuolation, Cytoplasmic | Mild |
| * Bone Marrow | | Hypercellularity | Marked |
| * Clitoral Gland | | Inflammation | Chronic Active, Moderate |
| | [Inflammation TGLs = 1-16] | | |
| * Liver | | Eosinophilic Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Adenoma | Multiple |
| | Duct | Dilation | Mild |
| | | Fibroadenoma | Multiple |
| | | Hyperplasia | Minimal |
| | [Adenoma TGLs = 4,5-22,23] | | |
| | [Fibroadenoma TGLs = 2,3-20,21] | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| * Spinal Cord, Cervical | | Degeneration | Minimal |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Moderate |
| * Spleen | | Extramedullary Hematopoiesis | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 626

TRT#: 2

SEX: Female

DAY ON TEST: 578

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-626

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus		Pigment	Minimal
		Atrophy	Mild
		Cyst	
* Thyroid GI			
Note: One of pair available for evaluation.			
* Uterus	Epithelium	Metaplasia	Squamous, Mild
		Polyp Stromal	Multiple
[Polyp Stromal TGLs = 7-16]			

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 6,8,9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 627

TRT#: 2

SEX: Female

DAY ON TEST: 531

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-627

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Trachea
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- Skeletal Muscle
- * Spinal Cord, Thoracic
- Trigeminal Ganglion
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Peripheral Nerve, Sciatic
- * Skin
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Peripheral Nerve, Tibial
- * Spinal Cord, Cervical
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Clitoral Gland
- * Harderian Gland
- * Kidney
- * Lung
- * Lymph Node, Mandibular
- * Mammary Gland
[Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
- * Nose
- * Ovary
- * Pituitary Gland
- * Spleen
- * Thymus
- * Thyroid Gland
- * Uterus
- Alveolus
- Olfactory Epi
- Pars Distalis
- C Cell
- Epithelium
- Hypertrophy
- Hypercellularity
- Inflammation
- Atrophy
- Nephropathy
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Hyperplasia
- Extramedullary Hematopoiesis
- Pigment
- Atrophy
- Hyperplasia
- Hyperplasia
- Metaplasia
- Mild
- Moderate
- Chronic Active, Minimal
- Minimal
- Chronicprogr, Minimal
- Histiocyte, Minimal
- Lymphocyte, Minimal
- Plasma Cell, Minimal
- Minimal
- Moderate
- Mild
- Moderate
- Moderate
- Minimal
- Minimal
- Epithelial, Minimal
- Minimal
- Squamous, Marked

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 628

TRT#: 2

SEX: Female

DAY ON TEST: 711

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-628

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Ovary
- * Salivary Glands
- * Stomach, Forestomach
- * Uterus
- * Aorta
- * Eye
- * Intestine Small, Duodenum
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Intestine Large, Cecum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Skin
- * Thyroid Gland
- * Brain
- * Intestine Large, Colon
- * Nerve Trigeminal
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea

AUTO PRECLUDES DIAG.

- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - Cystic, Mild
- * Bone Marrow
 - Hypercellularity
 - Mild
- * Clitoral Gland
 - Duct
 - Dilation
 - Marked
 - Inflammation
 - Mild
- * Harderian Gland
 - Inflammation
 - Chronic Active, Mild
- * Heart
 - Cardiomyopathy
 - Mild
- * Islets, Pancreatic
 - Carcinoma TGLs = 9-6]
 - Carcinoma
- * Kidney
 - Nephropathy
 - Chronicprogr, Moderate
- * Liver
 - Nephropathy TGLs = 11-13]
 - Extramedullary Hematopoiesis
 - Minimal
 - Kupffer Cell
 - Hyperplasia
 - Minimal
 - Hepatocyte
 - Necrosis
 - Mild
 - [Necrosis TGLs = 10-12]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Mild
 - [Infiltration Cellular TGLs = 6-10]
- Lymph Node
 - Inguinal, Lymph Sinus
 - Ectasia
 - Mild
 - Inguinal
 - Erythrophagocytosis
 - Mild
 - Inguinal
 - Proliferation
 - Plasma Cell, Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 628

TRT#: 2

SEX: Female

DAY ON TEST: 711

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-628

ORGAN AND ACCOUNTABLE SITE STATUS

[Erythrophagocytosis TGLs = 12-20]

[Proliferation TGLs = 7-20]

* Lymph Node, Mandibular

Proliferation

Plasma Cell, Mild

* Mammary Gland

Fibroadenoma

Multiple

[Fibroadenoma TGLs = 1,2-21,22,23RT]

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

Note: Approximately two-thirds of Level 3 available for evaluation.

* Peripheral Nerve, Sciatic

Degeneration

Mild

Note: Longitudinal section available for evaluation.

* Peripheral Nerve, Tibial

Degeneration

Mild

* Spinal Cord, Lumbar

Nerve

Degeneration

Mild

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

Extramedullary Hematopoiesis

Marked

[Extramedullary Hematopoiesis TGLs = 5-12]

* Thymus

Atrophy

Moderate

Trigeminal Ganglion

Degeneration

Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 8 = NCL (No Corresponding Lesion)

Animal Note: TGL 3 = NCL (No Corresponding Lesion) as autolysis precludes evaluation.

Animal Note: TGL 4 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 629

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-629

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Skeletal Muscle
- * Thyroid Gland
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea

MISSING

- * Clitoral Gland

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 5,7-7]
 - [Vacuolation, Cytoplasmic TGLs = 6-7]
 - * Bone Marrow
 - * Eye
 - Cornea, Epithelium
 - Cornea
 - * Heart
 - * Kidney
 - * Liver
 - * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 9-10]
 - * Lymph Node, Mandibular
 - * Mammary Gland
 - [Fibroadenoma TGLs = 2,3,4-20,21,22]
 - * Nose
 - Olfactory Epi
 - * Ovary
- | | | |
|--|-------------------------------|-----------------------|
| | Degeneration | Cystic, Moderate |
| | Hyperplasia | Moderate |
| | Vacuolation, Cytoplasmic | Mild |
| | Hypercellularity | Marked |
| | Hyperplasia | Minimal |
| | Inflammation | Acute, Minimal |
| | Cardiomyopathy | Minimal |
| | Nephropathy | Chronicprogr, Minimal |
| | Extramedullary Hematopoiesis | Minimal |
| | Infiltration Cellular | Histiocyte, Moderate |
| | Hyperplasia | Lymphocyte, Minimal |
| | Proliferation | Plasma Cell, Minimal |
| | Fibroadenoma | Multiple |
| | Hyperplasia | Mild |
| | Accumulation, Hyaline Droplet | Moderate |
| | Atrophy | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 629

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-629

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 10-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Inflammation	Chronic Active, Moderate
* Thymus		Atrophy	Moderate
		Cyst	
		Hyperplasia	Epithelial, Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

Animal Note: TGL 1 = NST (No Section Taken)

Animal Note: TGL 8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 630

TRT#: 2

SEX: Female

DAY ON TEST: 719

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-630

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Esophagus |
| * Harderian Gland | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| Skeletal Muscle | * Skin | * Stomach, Glandular | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | * Uterus | |

MISSING

- * Adrenal Medulla

OBSERVATIONS

- | | | | |
|---------------------------------------|---------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Brain | | Compression | Mild |
| [Compression TGLs = 4-2] | | | |
| * Clitoral Gland | Duct | Dilation | Moderate |
| * Eye | Retina | Atrophy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Infiltration Cellular | Mixed Cell, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| [Infiltration Cellular TGLs = 3-10] | | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Adenocarcinoma | |
| | | Hyperplasia | Marked |
| [Adenocarcinoma TGLs = 1-20] | | | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Minimal |
| | Rete Ovarii | Hyperplasia | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 630

TRT#: 2

SEX: Female

DAY ON TEST: 719

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-630

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 2-4]

* Salivary Glands	Parotid GI	Atrophy	Mild
	Duct, Parotid GI	Dilation	Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Minimal
	Red Pulp	Atrophy	Mild
		Pigment	Mild

[Atrophy TGLs = 5-12]

* Stomach, Forestomach		Edema	Mild
		Erosion	Minimal
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 631

TRT#: 2

SEX: Female

DAY ON TEST: 464

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-631

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Liver |
| * Lymph Node, Mandibular | * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Tibial |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Spinal Cord, Lumbar | * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|-----------------------|
| * Bone Marrow | | Hypercellularity | Marked |
| * Brain | | Compression | Mild |
| * Clitoral Gland | Duct | Dilation | Moderate |
| * Kidney | Renal Tubule | Cyst | |
| | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 2-10] | | |
| * Lymph Node, Mesenteric | | Infiltration Cellular | Histiocyte, Minimal |
| * Mammary Gland | Duct | Dilation | Moderate |
| | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-20] | Galactocele | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Respirat Epith | Accumulation, Hyaline Droplet | Mild |
| | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 3-4] | | |
| * Spleen | | Extramedullary Hematopoiesis | Mild |
| | | Pigment | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 631

TRT#: 2

SEX: Female

DAY ON TEST: 464

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-631

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Minimal

* Uterus

Epithelium

Metaplasia

Squamous, Minimal

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 632

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-522-632

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Pancreas
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- Skeletal Muscle
- * Stomach, Glandular
- * Uterus

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hypertrophy Minimal
 - Vacuolation, Cytoplasmic Minimal
- * Bone Marrow
 - Hypercellularity Minimal
- * Brain
 - Compression Minimal
- * Eye
 - Retina
 - Atrophy Minimal
- * Heart
 - Cardiomyopathy Minimal
- * Islets, Pancreatic
 - Carcinoma TGLs = 4-6]
 - Carcinoma
- * Kidney
 - Nephropathy Chronicprogr, Minimal
- * Liver
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 3-10]
 - Infiltration Cellular
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Mild
 - Proliferation Plasma Cell, Mild
- * Mammary Gland
 - Fibroadenoma
 - Fibroadenoma TGLs = 1-20]
 - Fibroadenoma
 - Hyperplasia Marked
- * Nerve Trigeminal
 - Degeneration Moderate
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet Moderate
- * Ovary
 - Cyst
- * Parathyroid Gland
 - Fibrosis Minimal
- * Peripheral Nerve, Sciatic
 - Degeneration Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 632

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-522-632

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Angiectasis	Moderate
	Pars Distalis	Hyperplasia	Mild
[Angiectasis TGLs = 2-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	Follicle	Cyst	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 633

TRT#: 2

SEX: Female

DAY ON TEST: 737

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-633

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Nerve Trigeminal |
| * Pancreas | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|-----------------------|--------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | | Compression | Minimal |
| | [Compression TGLs = 8-2] | | |
| * Clitoral Gland | Duct | Dilation | Mild |
| | [Inflammation TGLs = 4-16] | Inflammation | Chronic Active, Moderate |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | Bile Duct | Cyst | |
| | | Eosinophilic Focus | |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Moderate |
| | [Infiltration Cellular TGLs = 7-10] | Inflammation | Suppurative, Minimal |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Adenoma | |
| | Duct | Dilation | Mild |
| | | Fibroadenoma | Multiple |
| | | Galactocele | |
| | | Hyperplasia | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 633

TRT#: 2

SEX: Female

DAY ON TEST: 737

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-633

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 2,3,5-20,21,22]

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Marked
	Bursa	Dilation	Mild
	Rete Ovarii	Hyperplasia	Minimal
[Dilation TGLs = 6-16]			
* Parathyroid Gland		Fibrosis	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma Cyst	
[Adenoma TGLs = 9-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis Pigment	Moderate Moderate
* Thymus		Atrophy Cyst	Minimal
		Hyperplasia	Epithelial, Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59
 Test Type: CHRONIC
 Route: Whole Body Exposure
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Cell Phone Radiation: GSM
 CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
 Time Report Requested: 11:58:55
 First Dose M/F: 09/16/12 / 09/16/12
 Lab: IIT

ANIMAL ID: 634

TRT#: 2

SEX: Female

DAY ON TEST: 547

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-634

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Aorta	* Bone
* Clitoral Gland	* Esophagus	* Eye	* Heart
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Islets, Pancreatic	* Liver	* Lymph Node, Mesenteric	* Pancreas
* Peripheral Nerve, Tibial	* Salivary Glands	Skeletal Muscle	* Skin
* Spinal Cord, Cervical	* Spinal Cord, Thoracic	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	Trigeminal Ganglion	* Urinary Bladder

AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Small, Jejunum
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OBSERVATIONS

* Bone Marrow		Hypercellularity	Mild
* Brain		Compression	Moderate
* Harderian Gland		Infiltration Cellular	Lymphocyte, Minimal
* Kidney		Nephropathy	Chronicprogr, Minimal
* Lung	Alveolus	Congestion	Moderate
	[Congestion TGLs = 5-10]	Infiltration Cellular	Histiocyte, Mild
	[Infiltration Cellular TGLs = 1,2-20,21]		
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Mild
		Proliferation	Plasma Cell, Mild
* Mammary Gland	Duct	Dilation	Mild
		Hyperplasia	Minimal
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Mild
* Parathyroid Gland		Fibrosis	Mild
		Hyperplasia	Focal, Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 634

TRT#: 2

SEX: Female

DAY ON TEST: 547

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-634

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 6-4]

* Spinal Cord, Lumbar

Nerve

Degeneration

Minimal

* Spleen

Red Pulp

Atrophy

Moderate

Extramedullary Hematopoiesis

Minimal

Pigment

Moderate

* Thymus

Hemorrhage

Mild

* Uterus

Epithelium

Metaplasia

Squamous, Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGLs 3,4,7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 635

TRT#: 2

SEX: Female

DAY ON TEST: 737

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-635

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Clitoral Gland |
| * Esophagus | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|--------------------------|---|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Bone Marrow | | Hypercellularity | Mild |
| * Brain | | Compression | Minimal |
| | [Compression TGLs = 9-2] | | |
| * Clitoral Gland | | | |
| | Note: One of pair available for evaluation. | | |
| * Eye | Retina | Atrophy | Minimal |
| * Islets, Pancreatic | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Basophilic Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 8-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | | Adenocarcinoma | |
| | | Adenoma | |
| | Duct | Dilation | Marked |
| | | Fibroadenoma | Multiple |
| | | Galactocele | |
| | [Adenocarcinoma TGLs = 4-23] | | |
| | [Fibroadenoma TGLs = 1,2,3-20,21,22] | | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 635

TRT#: 2

SEX: Female

DAY ON TEST: 737

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-635

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Moderate
	Rete Ovarii	Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 10-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Moderate
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Dilation	Moderate
		Inflammation	Suppurative, Moderate
	Epithelium	Metaplasia	Squamous, Marked
[Dilation TGLs = 7-16]			
[Inflammation TGLs = 7-16]			

Animal Note: TGLs 5,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59
Test Type: CHRONIC
Route: Whole Body Exposure
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
Time Report Requested: 11:58:55
First Dose M/F: 09/16/12 / 09/16/12
Lab: IIT

ANIMAL ID: 636

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-636

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Nerve Trigeminal	* Pancreas	* Salivary Glands
Skeletal Muscle	* Skin	* Spinal Cord, Cervical	* Stomach, Forestomach
* Stomach, Glandular	* Thyroid Gland	* Trachea	Trigeminal Ganglion
* Urinary Bladder			

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	
		Hypertrophy	Minimal
* Bone Marrow		Hypercellularity	Mild
* Brain		Compression	Minimal
	[Compression TGLs = 7-2]		
* Clitoral Gland	Duct	Dilation	Marked
		Inflammation	Chronic Active, Mild
	[Dilation TGLs = 2,3-16]		
* Eye	Retina	Atrophy	Minimal
* Harderian Gland		Atrophy	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Minimal
* Liver		Hepatocellular Adenoma	
		Mixed Cell Focus	
	[Mixed Cell Focus TGLs = 5-12]		
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	[Infiltration Cellular TGLs = 6-10]		
* Mammary Gland	Duct	Dilation	Minimal
		Fibroadenoma	
	[Fibroadenoma TGLs = 1-20]		
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
		Inflammation	Suppurative, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 636

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-636

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Marked
* Parathyroid Gland		Fibrosis	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	Multiple
[Adenoma TGLs = 8-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 637

TRT#: 2

SEX: Female

DAY ON TEST: 489

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-637

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|----------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Harderian Gland | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lymph Node, Mesenteric | * Nerve Trigeminal |
| * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Tibial | * Pituitary Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Spinal Cord, Lumbar | * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|-----------------------------|------------------------------|-------------------------------|----------------------|
| * Bone Marrow | | Hypercellularity | Mild |
| * Liver | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Moderate |
| | | Fibroadenoma | |
| | | Hyperplasia | Minimal |
| | [Dilation TGLs = 1-9] | | |
| | [Fibroadenoma TGLs = 3-20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Spleen | | Extramedullary Hematopoiesis | Minimal |
| | | Pigment | Mild |
| * Thymus | | Atrophy | Minimal |
| | | Cyst | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |
| | Epithelium | Metaplasia | Squamous, Minimal |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 637

TRT#: 2

SEX: Female

DAY ON TEST: 489

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-637

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 639

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-639

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Liver | * Lymph Node, Mesenteric | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|---|---------------|-------------------------------|---|
| * Adrenal Cortex | | Degeneration
Hyperplasia | Cystic, Minimal
Moderate |
| [Degeneration TGLs = 4-7] | | | |
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Clitoral Gland | Duct | Dilation
Inflammation | Marked
Chronic Active, Mild |
| [Dilation TGLs = 2-16] | | | |
| * Eye | Retina | Atrophy | Minimal |
| * Harderian Gland | | Inflammation | Chronic, Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| [Infiltration Cellular TGLs = 6-10] | | | |
| * Lymph Node, Mandibular | | Hyperplasia
Proliferation | Lymphocyte, Minimal
Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation
Hyperplasia | Marked
Minimal |
| [Dilation TGLs = 3-20] | | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 639

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-639

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 641

TRT#: 2

SEX: Female

DAY ON TEST: 614

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-641

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Skin
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Liver
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Trachea
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lung
- Skeletal Muscle
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Clitoral Gland
- * Heart
- * Kidney
- * Lymph Node, Mandibular
- * Mammary Gland
- [Fibroadenoma TGLs = 1,2-20,21]
- * Nerve Trigeminal
- * Nose
- * Ovary
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- Duct
- Duct
- Olfactory Epi
- Respirat Epith
- Rete Ovarii
- Pars Distalis
- Hypertrophy
- Hypercellularity
- Dilation
- Cardiomyopathy
- Nephropathy
- Hyperplasia
- Proliferation
- Dilation
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Accumulation, Hyaline Droplet
- Atrophy
- Hyperplasia
- Fibrosis
- Degeneration
- Degeneration
- Adenoma
- Minimal
- Minimal
- Moderate
- Minimal
- Chronicprogr, Minimal
- Lymphocyte, Minimal
- Plasma Cell, Moderate
- Minimal
- Multiple
- Mild
- Mild
- Minimal
- Moderate
- Minimal
- Minimal
- Minimal

Note: Cyst is hemorrhagic.

[Adenoma TGLs = 4-4]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 641

TRT#: 2

SEX: Female

DAY ON TEST: 614

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-641

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 642

TRT#: 2

SEX: Female

DAY ON TEST: 464

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-642

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Nerve Trigeminal
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- * Urinary Bladder
- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Ovary
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thyroid Gland
- * Uterus
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Skin
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Bone Marrow
- * Clitoral Gland
- * Islets, Pancreatic
- * Kidney
- * Liver
- * Lung
- Lymph Node
- Note: Affecting lymph node in section of skin/mammary tissue.
- * Lymph Node, Mandibular
- * Mammary Gland
- [Fibroadenoma TGLs = 1-20]
- * Nose
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Spleen
- * Thymus
- Duct
- Alveolus
- Hypercellularity
- Dilation
- Hyperplasia
- Nephropathy
- Extramedullary Hematopoiesis
- Mixed Cell Focus
- Infiltration Cellular
- Proliferation
- Fibroadenoma
- Hyperplasia
- Accumulation, Hyaline Droplet
- Degeneration
- Degeneration
- Extramedullary Hematopoiesis
- Pigment
- Atrophy
- Hyperplasia
- Mild
- Marked
- Minimal
- Chronicprogr, Minimal
- Minimal
- Histiocyte, Minimal
- Plasma Cell, Mild
- Moderate
- Moderate
- Minimal
- Minimal
- Mild
- Minimal
- Minimal
- Epithelial, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 642

TRT#: 2

SEX: Female

DAY ON TEST: 464

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-642

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 643

TRT#: 2

SEX: Female

DAY ON TEST: 656

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-643

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Thyroid Gland
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Kidney
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Mild
 - Hypertrophy Mild
 - Vacuolation, Cytoplasmic Mild
 - [Vacuolation, Cytoplasmic TGLs = 9-7]
- * Bone Marrow
 - Hypercellularity Marked
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Heart
 - Cardiomyopathy Minimal
- * Liver
 - Bile Duct
 - Cyst
 - Extramedullary Hematopoiesis Minimal
 - [Cyst TGLs = 5-21]
- * Lung
 - Alveolus
 - Infiltration Cellular Histiocyte, Minimal
 - [Infiltration Cellular TGLs = 7-22]
- * Lymph Node, Mandibular
 - Proliferation Plasma Cell, Mild
- * Mammary Gland
 - Duct
 - Dilation Moderate
 - Fibroadenoma Multiple
 - Galactocele
 - Hyperplasia Minimal
 - [Fibroadenoma TGLs = 2,3-20,21]
 - [Galactocele TGLs = 10-22]
- * Nerve Trigeminal
 - Degeneration Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 643

TRT#: 2

SEX: Female

DAY ON TEST: 656

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-643

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 8-4]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
	[Extramedullary Hematopoiesis TGLs = 1-12]		
* Thymus		Atrophy	Minimal
		Cyst	
Tissue NOS	Fat	Necrosis	Moderate
	[Necrosis TGLs = 6-20]		
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate
	[Hyperplasia TGLs = 11-16]		

PRIMARY CAUSE OF DEATH - UNCERTAIN

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 644

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-644

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Urinary Bladder
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Forestomach
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Salivary Glands
- * Stomach, Glandular
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Cystic, Mild
- * Bone Marrow
 - Hypertrophy
 - Minimal
 - Hypercellularity
 - Moderate
- * Clitoral Gland
 - Duct
 - Dilation
 - Moderate
- * Harderian Gland
 - Inflammation
 - Chronic, Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Bile Duct
 - Cyst
 - Eosinophilic Focus
- * Lung
 - [Cyst TGLs = 12-20]
 - Epithlm Alvlus
 - Hyperplasia
 - Mild
 - Alveolus
 - Infiltration Cellular TGLs = 10-10]
 - Infiltration Cellular
 - Histiocyte, Mild
- * Mammary Gland
 - Duct
 - Adenocarcinoma
 - Adenoma
 - Multiple
 - Dilation
 - Marked
 - Fibroadenoma
 - Multiple
 - Galactocele
 - Hyperplasia
 - Moderate
- [Adenocarcinoma TGLs = 4-23]
- [Adenoma TGLs = 1,2-20,21]
- [Fibroadenoma TGLs = 1,3,4,5,6-20,22,23,24,25]
- [Galactocele TGLs = 5-24]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 644

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-644

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	
	[Adenoma TGLs = 11-4]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Marked
		Pigment	Minimal
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Hemangiosarcoma	
	Endometrium	Hyperplasia	Cystic, Moderate
	Epithelium	Metaplasia	Squamous, Minimal
	[Hemangiosarcoma TGLs = 9-21]		
	[Hyperplasia TGLs = 8-16]		

Animal Note: TGL 7 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 645

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-645

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|--------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Islets, Pancreatic | * Liver |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Pancreas | * Salivary Glands |
| Skeletal Muscle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|---|---------------|--|-------------------------|
| * Adrenal Cortex | | Hypertrophy
Vacuolation, Cytoplasmic | Mild
Minimal |
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Clitoral Gland | | Inflammation | Chronic Active, Minimal |
| * Intestine Small, Jejunum | | Leiomyosarcoma | |
| [Leiomyosarcoma TGLs = 7-21.1] | | | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| [Infiltration Cellular TGLs = 10-10] | | | |
| * Mammary Gland | | Fibroadenoma
Galactocele
Hyperplasia | Minimal |
| [Fibroadenoma TGLs = 3-21.1] | | | |
| [Galactocele TGLs = 1,2,4-9,20.1] | | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Moderate |
| | Rete Ovarii | Hyperplasia | Mild |
| * Parathyroid Gland | | Hyperplasia | Focal, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 645

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-645

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 11-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tissue NOS	Fat	Necrosis	Mild
[Necrosis TGLs = 6-21.1]			
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal
[Hyperplasia TGLs = 5-16]			

Animal Note: TGLs 8,9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 646

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-646

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|--|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Clitoral Gland | Duct | Dilation | Marked |
| | | Inflammation | Suppurative, Mild |
| | [Dilation TGLs = 4-16] | | |
| * Kidney | Renal Tubule | Adenoma | |
| * Liver | | Mixed Cell Focus | |
| | [Mixed Cell Focus TGLs = 6,7-20] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 5-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| * Mammary Gland | Duct | Dilation | Mild |
| | | Fibroadenoma | Multiple |
| | | Galactocele | |
| | | Hyperplasia | Mild |
| | | Note: Galactocele is ruptured and predominantly filled with macrophages. | |
| | [Fibroadenoma TGLs = 1,2-20,21] | | |
| | [Galactocele TGLs = 3-22] | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| Oral Mucosa | | Squamous Cell Carcinoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 646

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-646

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Moderate
* Thymus		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus	Epithelium	Metaplasia	Squamous, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 647

TRT#: 2

SEX: Female

DAY ON TEST: 709

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-647

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Pancreas
- * Skin
- * Thyroid Gland
- * Brain
- * Heart
- * Islets, Pancreatic
- * Pituitary Gland
- * Spinal Cord, Thoracic
- * Trachea
- * Esophagus
- * Intestine Large, Colon
- * Lung
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - [Necrosis TGLs = 9-7]
 - * Adrenal Medulla
 - * Bone Marrow
 - * Clitoral Gland
 - [Dilation TGLs = 20-16]
 - * Kidney
 - [Dilation TGLs = 18-13]
 - [Nephropathy TGLs = 19-13]
 - * Liver
 - Lymph Node
- | | | | |
|--|-------------|--------------------------|-------------------------|
| | Duct | Lymphoma Malignant | |
| | | Necrosis | Marked |
| | | Vacuolation, Cytoplasmic | Mild |
| | | Necrosis | Moderate |
| | | Hypercellularity | Mild |
| | | Dilation | Marked |
| | | Inflammation | Chronic Active, Minimal |
| | Pelvis | Dilation | Mild |
| | | Lymphoma Malignant | |
| | | Nephropathy | Chronicprogr, Mild |
| | Hepatocyte | Necrosis | Minimal |
| | Mediastinal | Lymphoma Malignant | |
| | Pancreatic | Lymphoma Malignant | |
| | Renal | Lymphoma Malignant | |
| | Bronchial | Lymphoma Malignant | |

Note: Iliac, lumbar and renal lymph nodes cannot be distinguished in the section.

[Lymphoma Malignant TGLs = 10,12-6,22]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 647

TRT#: 2

SEX: Female

DAY ON TEST: 709

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-647

ORGAN AND ACCOUNTABLE SITE STATUS

[Lymphoma Malignant	TGLs = 16-6]		
[Lymphoma Malignant	TGLs = 22,23,24,25-13]		
[Lymphoma Malignant	TGLs = 14-21]		
* Lymph Node, Mesenteric		Erythrophagocytosis	Moderate
		Lymphoma Malignant	
[Lymphoma Malignant	TGLs = 17-15]		
* Mammary Gland	Duct	Dilation	Moderate
		Galactoceles	
		Hyperplasia	Minimal
[Galactoceles	TGLs = 3,5,6-9,20,21]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Mild
Note: One of pair available for evaluation.			
* Parathyroid Gland		Fibrosis	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
		Lymphoma Malignant	
Tissue NOS	Abdominal, Fat	Lymphoma Malignant	
[Lymphoma Malignant	TGLs = 21-22]		
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Lymphoma Malignant	
[Lymphoma Malignant	TGLs = 7,8-16]		

PRIMARY CAUSE OF DEATH - Uterus Lymphoma Malignant

Animal Note: TGLs 4,11,13 = NCL (No Corresponding Lesion)

Animal Note: TGLs 1,2 = NST (No Section Taken)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 648

TRT#: 2

SEX: Female

DAY ON TEST: 641

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-648

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Rectum
- * Parathyroid Gland
- * Stomach, Glandular
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Salivary Glands
- * Trachea
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Skin
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Spinal Cord, Thoracic
- * Uterus

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
Lymphoma Malignant
Vacuolation, Cytoplasmic
Mild
- * Bone Marrow
Hypercellularity
Marked
- * Brain
Lymphoma Malignant
- [Lymphoma Malignant TGLs = 7-2]
- * Clitoral Gland
Duct
Dilation
Mild
- * Heart
Lymphoma Malignant
- * Kidney
Nephropathy
Chronicprogr, Mild
- * Liver
Bile Duct
Cyst
Hyperplasia
Mild
Lymphoma Malignant
- [Cyst TGLs = 4-12]
- [Lymphoma Malignant TGLs = 3,9-12]
- * Lung
Alveolus
Infiltration Cellular
Histiocyte, Mild
Lymphoma Malignant
- [Infiltration Cellular TGLs = 1-10]
- * Lymph Node, Mandibular
Proliferation
Plasma Cell, Moderate
- * Lymph Node, Mesenteric
Lymphoma Malignant
- * Mammary Gland
Hyperplasia
Minimal
- Mesentery
Lymphoma Malignant
TGLs = 8-12]
- * Nerve Trigeminal
Degeneration
Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 648

TRT#: 2

SEX: Female

DAY ON TEST: 641

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-648

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Lymphoma Malignant	
* Pancreas		Lymphoma Malignant	
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Cervical		Lymphoma Malignant	
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Lymphoma Malignant	
[Lymphoma Malignant TGLs = 2,8-12]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Inflammation	Chronic Active, Minimal
		Lymphoma Malignant	
[Inflammation TGLs = 10-14]			
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Adenoma	
Trigeminal Ganglion		Degeneration	Minimal

PRIMARY CAUSE OF DEATH - Spleen Lymphoma Malignant

Animal Note: Malignant lymphoma is leukemic.
TGLs 5,6 = NCL (No Corresponding Lesion).

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 649

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-649

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea
- * Clitoral Gland
- * Intestine Large, Rectum
- * Lung
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy Minimal
 - Vacuolation, Cytoplasmic Minimal
 - [Vacuolation, Cytoplasmic TGLs = 5-7]
- * Bone Marrow
 - Hypercellularity Mild
- * Brain
 - Compression Mild
- * Eye
 - [Compression TGLs = 7-2]
- * Harderian Gland
 - Retina Atrophy Minimal
- * Heart
 - Atrophy Minimal
- * Islets, Pancreatic
 - Cardiomyopathy Minimal
- * Kidney
 - Hyperplasia Minimal
- * Liver
 - Nephropathy Chronicprogr, Minimal
- * Mammary Gland
 - Duct
 - Basophilic Focus
 - Dilation Moderate
 - Galactocele
 - [Galactocele TGLs = 1-9]
- * Nerve Trigeminal
 - Degeneration Moderate
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet Moderate
- * Ovary
 - Atrophy Mild
- * Peripheral Nerve, Sciatic
 - Degeneration Mild
- * Peripheral Nerve, Tibial
 - Degeneration Minimal
- * Pituitary Gland
 - Pars Distalis
 - Adenoma
 - [Adenoma TGLs = 8-4]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 649

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-649

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Hyperplasia	Stromal, Marked
		Pigment	Mild
[Hyperplasia TGLs = 2-12]			
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus	Epithelium	Metaplasia	Squamous, Moderate

Animal Note: TGLs 3,4,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 651

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-651

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Small, Duodenum
- * Pancreas
- * Skin
- * Trachea
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Adenoma
 - Degeneration
 - Cystic, Minimal
- * Brain
 - [Congestion TGLs = 6-2]
 - Congestion
 - Minimal
- * Harderian Gland
 - Atrophy
 - Inflammation
 - Minimal
 - Chronic, Minimal
- * Heart
 - Cardiomyopathy
 - Minimal
- * Islets, Pancreatic
 - Hyperplasia
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - [Angiectasis TGLs = 8-20]
 - Angiectasis
 - Minimal
- * Lung
 - [Infiltration Cellular TGLs = 5-10]
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Moderate
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Lymphocyte, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Plasma Cell, Minimal
 - Marked
- [Dilation TGLs = 1-9]
- [Fibroadenoma TGLs = 2-20]
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate
- * Ovary
 - Atrophy
 - Mild
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 651

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-651

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	
	[Adenoma TGLs = 7-4]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Marked
* Thyroid Gland	C Cell	Hyperplasia	Marked
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

Animal Note: TGLs 3,4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 652

TRT#: 2

SEX: Female

DAY ON TEST: 550

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-652

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thyroid Gland
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Nerve Trigeminal
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Harderian Gland
- * Islets, Pancreatic
- * Kidney
- * Liver
- * Lung
- [Infiltration Cellular TGLs = 2-10]
- * Lymph Node, Mandibular
- * Mammary Gland
- [Fibroadenoma TGLs = 1-20]
- * Nose
- * Ovary
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Spleen
- Alveolus
- Duct
- Olfactory Epi
- Respirat Epith
- Pars Distalis
- Hypertrophy
- Hypercellularity
- Atrophy
- Inflammation
- Hyperplasia
- Nephropathy
- Mixed Cell Focus
- Infiltration Cellular
- Proliferation
- Dilation
- Fibroadenoma
- Hyperplasia
- Accumulation, Hyaline Droplet
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Degeneration
- Hyperplasia
- Extramedullary Hematopoiesis
- Mild
- Moderate
- Minimal
- Granulomatous, Minimal
- Minimal
- Chronicprogr, Minimal
- Histiocyte, Mild
- Plasma Cell, Minimal
- Mild
- Minimal
- Moderate
- Minimal
- Moderate
- Minimal
- Minimal
- Minimal
- Minimal
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 652

TRT#: 2

SEX: Female

DAY ON TEST: 550

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-652

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus		Pigment	Mild
		Atrophy	Minimal
		Cyst	
* Uterus	Epithelium	Hyperplasia	Epithelial, Minimal
		Metaplasia	Squamous, Marked

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 653

TRT#: 2

SEX: Female

DAY ON TEST: 690

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-653

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Glandular
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skeletal Muscle
- * Thyroid Gland
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Stomach, Forestomach

MISSING

- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Eye

OBSERVATIONS

- * Adrenal Cortex
 - * Bone Marrow
 - * Heart
 - * Kidney
 - * Liver
 - * Lung
 - [Infiltration Cellular TGLs = 5-10]
 - Lymph Node
 - [Congestion TGLs = 13-21]
 - [Inflammation TGLs = 4-20]
 - [Proliferation TGLs = 3-20]
 - [Proliferation TGLs = 12-21]
 - * Lymph Node, Mandibular
- Serosa
- Alveolus
- Mediastinal
- Iliac
- Iliac
- Mediastinal
- Degeneration
- Hypercellularity
- Cardiomyopathy
- Inflammation
- Nephropathy
- Inflammation
- Infiltration Cellular
- Congestion
- Inflammation
- Proliferation
- Proliferation
- Hyperplasia
- Cystic, Mild
- Marked
- Minimal
- Acute, Minimal
- Chronicprogr, Mild
- Chronic Active, Mild
- Histiocyte, Moderate
- Mild
- Acute, Mild
- Plasma Cell, Marked
- Plasma Cell, Moderate
- Lymphocyte, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 653

TRT#: 2

SEX: Female

DAY ON TEST: 690

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-653

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland	Duct	Proliferation Dilation Fibroadenoma Hyperplasia	Plasma Cell, Mild Minimal Multiple Mild
[Fibroadenoma TGLs = 8,9,10-20,22,23]			
Mesentery		Inflammation	Chronic Active, Marked
[Inflammation TGLs = 7,14-21]			
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
Note: One of pair available for evaluation.			
* Pancreas		Inflammation	Chronic Active, Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration Degeneration	Mild Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy Extramedullary Hematopoiesis Pigment	Minimal Mild Mild
* Thymus		Atrophy Cyst Ectopic Parathyroid Gland	Moderate
Trigeminal Ganglion		Degeneration	Mild
* Uterus		Fibrosis Inflammation Metaplasia	Moderate Suppurative, Marked Squamous, Marked
[Inflammation TGLs = 1-16]			

PRIMARY CAUSE OF DEATH - Uterus Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 653

TRT#: 2

SEX: Female

DAY ON TEST: 690

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-653

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: TGL 2 = NST (No Section Taken)

Animal Note: TGLs 6,11 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 654

TRT#: 2

SEX: Female

DAY ON TEST: 745

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-654

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Esophagus | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|----------------------------------|--|-------------------------------|-------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Brain | | Compression | Minimal |
| | Meninges | Hyperplasia | Gran Cell, Moderate |
| Note: Granular cell hyperplasia. | | | |
| | [Compression TGLs = 10-2] | | |
| * Clitoral Gland | | Inflammation | Chronic Active, Minimal |
| * Eye | Retina | Atrophy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | Bile Duct | Cyst | |
| | Bile Duct | Hyperplasia | Minimal |
| | [Cyst TGLs = 3,4-12,20] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Moderate |
| | [Infiltration Cellular TGLs = 6-10] | | |
| | Lymph Node Iliac | Erythrophagocytosis | Moderate |
| | [Erythrophagocytosis TGLs = 7,8-21] | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Mild |
| | | Fibroadenoma | Multiple |
| | | Hyperplasia | Minimal |
| | [Fibroadenoma TGLs = 1,2,11-20,21,9] | | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 654

TRT#: 2

SEX: Female

DAY ON TEST: 745

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-654

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Marked
	Rete Ovarii	Hyperplasia	Minimal
* Pancreas	Acinus	Atrophy	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
		Infiltration Cellular	Mixed Cell, Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 9-4]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Mild

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 655

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-655

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|-----------------------------|--|-------------------------------|-----------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hyperplasia | Mild |
| | | Hypertrophy | Minimal |
| | | Vacuolation, Cytoplasmic | Minimal |
| * Brain | | Compression | Minimal |
| * Clitoral Gland | Duct | Dilation | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Hepatocellular Adenoma | |
| | [Hepatocellular Adenoma TGLs = 6-20] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 4-10] | | |
| * Mammary Gland | Duct | Dilation | Mild |
| | | Fibroadenoma | Multiple |
| | | Galactocele | |
| | | Hyperplasia | Minimal |
| | [Fibroadenoma TGLs = 1,3-20,22] | | |
| | [Galactocele TGLs = 2-21] | | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Moderate |
| | Rete Ovarii | Hyperplasia | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 655

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-655

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	
[Adenoma TGLs = 5-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
Trigeminal Ganglion		Degeneration	Mild
* Uterus	Epithelium	Metaplasia	Squamous, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 656

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-656

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Aorta
- * Eye
- * Intestine Small, Duodenum
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Skin
- * Trachea
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - Cystic, Moderate
 - Mild
- [Degeneration TGLs = 6-7]
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Brain
 - Pineal Gland
 - Pineal Gland
 - Mineral
 - Vacuolation, Cytoplasmic
 - Minimal
 - Minimal
- * Clitoral Gland
 - Inflammation
 - Chronic Active, Minimal
- * Harderian Gland
 - Inflammation
 - Granulomatous, Minimal
- * Heart
 - Cardiomyopathy
 - Minimal
- * Islets, Pancreatic
 - Hyperplasia
 - Marked
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Basophilic Focus
 - Mixed Cell Focus
 - Infiltration Cellular
 - Histiocyte, Mild
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 10-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Lymphocyte, Minimal
 - Plasma Cell, Mild
- * Mammary Gland
 - Duct
 - Adenoma
 - Dilation
 - Fibroadenoma
 - Hyperplasia
 - Minimal
 - Multiple
 - Minimal
- [Adenoma TGLs = 2-20]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 656

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-656

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 3,4-21,22]			
Mesentery		Necrosis	Minimal
[Necrosis TGLs = 5-23]			
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Moderate
		Cyst	
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	Follicular Cel C Cell	Carcinoma	
		Hyperplasia	Marked
[Carcinoma TGLs = 8-8]			
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Dilation	Minimal
	Endometrium	Hyperplasia	Cystic, Minimal

Animal Note: TGLs 1,7,9,11 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 657

TRT#: 2

SEX: Female

DAY ON TEST: 531

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-657

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Spinal Cord, Thoracic | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|------------------------------|------------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| * Bone Marrow | | Hypercellularity | Marked |
| * Clitoral Gland | Duct | Dilation | Mild |
| * Kidney | [Nephropathy TGLs = 4-13] | Nephropathy | Chronicprogr, Moderate |
| * Liver | | Extramedullary Hematopoiesis | Mild |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 3-10] | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Mild |
| | | Fibroadenoma | |
| | | Galactocele | |
| | | Hyperplasia | Mild |

Note: Multiple galactoceles ruptured with granulomatous inflammation.

Note: Fibroadenoma is multilobular and possibly may represent multiple tumors.

[Fibroadenoma TGLs = 2-20]

- | | | | |
|--------------------|---------------|-------------------------------|----------|
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 657

TRT#: 2

SEX: Female

DAY ON TEST: 531

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-657

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Cyst	
		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Intermed	Cyst	
	Pars Intermed	Hyperplasia	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Moderate
		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 658

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5334-658

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lung
- * Salivary Glands
- * Stomach, Forestomach
- * Bone
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Stomach, Glandular
- * Clitoral Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Skin
- * Trachea
- * Esophagus
- * Intestine Small, Duodenum
- * Liver
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
Accessory Adrenal Cortical Nodule
Hypertrophy
Minimal
- * Adrenal Medulla
Hyperplasia
Mild
- * Bone Marrow
Hypercellularity
Moderate
- * Brain
Compression
Mild
- [Compression TGLs = 9-2]
Edema
Minimal
- * Eye
Retina
Atrophy
Minimal
- * Harderian Gland
Inflammation
Granulomatous, Minimal
- * Heart
Cardiomyopathy
Minimal
- * Kidney
Nephropathy
Chronicprogr, Minimal
- * Lymph Node, Mandibular
Hyperplasia
Lymphocyte, Minimal
- Proliferation
Plasma Cell, Minimal
- * Mammary Gland
Adenocarcinoma
Duct
Dilation
Moderate
- Fibroadenoma
Multiple
- Galactocеле
- [Adenocarcinoma TGLs = 1-9]
- [Fibroadenoma TGLs = 2,3,4-20,21,22]
- [Galactocеле TGLs = 5-21]
- * Nerve Trigeminal
Degeneration
Moderate
- * Nose
Olfactory Epi
Accumulation, Hyaline Droplet
Moderate
- * Ovary
Atrophy
Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 658

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5334-658

ORGAN AND ACCOUNTABLE SITE STATUS

Cyst

[Cyst TGLs = 6-16.1]

* Peripheral Nerve, Sciatic

Degeneration

Mild

* Peripheral Nerve, Tibial

Degeneration

Minimal

* Pituitary Gland

Pars Distalis

Adenoma

[Adenoma TGLs = 8-4]

* Spinal Cord, Lumbar

Nerve

Degeneration

Moderate

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

Extramedullary Hematopoiesis

Minimal

Pigment

Minimal

* Thymus

Atrophy

Minimal

* Thyroid Gland

C Cell

Adenoma

C Cell

Hyperplasia

Marked

Trigeminal Ganglion

Degeneration

Minimal

* Uterus

Endometrium

Hyperplasia

Cystic, Moderate

Epithelium

Metaplasia

Squamous, Minimal

Polyp Stromal

[Polyp Stromal TGLs = 7-16.1]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 659

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-659

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Ovary
- * Skin
- * Uterus
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Spinal Cord, Thoracic
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Parathyroid Gland
- * Stomach, Forestomach
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Clitoral Gland
- * Harderian Gland
- * Kidney
- * Liver
- [Hypertrophy TGLs = 7-12]
- * Lung
- Lymph Node
- [Erythrophagocytosis TGLs = 11-20]
- * Mammary Gland
- [Fibroadenoma TGLs = 2,3,4,5-21,22,23,24]
- * Nerve Trigeminal
- * Nose
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- Vacuolation, Cytoplasmic
- Hypercellularity
- Dilation
- Inflammation
- Nephropathy
- Cyst
- Hypertrophy
- Hypertrophy
- Necrosis
- Infiltration Cellular
- Erythrophagocytosis
- Fibroadenoma
- Hyperplasia
- Degeneration
- Accumulation, Hyaline Droplet
- Degeneration
- Degeneration
- Cyst
- Hyperplasia
- Moderate
- Marked
- Mild
- Granulomatous, Minimal
- Chronicprogr, Minimal
- Moderate
- Mild
- Mild
- Histiocyte, Minimal
- Moderate
- Multiple
- Marked
- Minimal
- Minimal
- Mild
- Mild
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 659

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-659

ORGAN AND ACCOUNTABLE SITE STATUS

* Salivary Glands	Parotid GI	Atrophy	Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Marked
[Extramedullary Hematopoiesis	TGLs = 8-12]		
* Stomach, Glandular		Erosion	Mild
* Thymus		Atrophy	Marked
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Urinary Bladder		Inflammation	Acute, Minimal
Vagina		Schwannoma Malignant	
[Schwannoma Malignant	TGLs = 6-25]		

PRIMARY CAUSE OF DEATH - Vagina Schwannoma Malignant

Animal Note: TGLs 9,10,12 = NCL (No Corresponding Lesion)

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 660

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-660

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Stomach, Glandular
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Pancreas
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - [Degeneration TGLs = 8,9-7]
- * Brain
 - Compression
 - Note: Olfactory bulbs unavailable for evaluation.
- * Eye
 - Retina
 - Atrophy
- * Islets, Pancreatic
 - Hyperplasia
- * Kidney
 - Nephropathy
- * Liver
 - Bile Duct
 - Bile Duct
 - Cyst
 - Hyperplasia
 - Mixed Cell Focus
 - [Cyst TGLs = 13-21]
 - [Mixed Cell Focus TGLs = 10,14-20,12]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - [Infiltration Cellular TGLs = 11-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Duct
 - Dilation
 - Galactocele
 - Hyperplasia
 - [Galactocele TGLs = 1-20]
- * Nerve Trigeminal
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 660

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-660

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Marked
		Cyst	
		Cystadenoma	
	[Cystadenoma TGLs = 3-16]		
Oviduct		Cyst	
	[Cyst TGLs = 2-16]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 12-4]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	Red Pulp	Atrophy	Mild
		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Mild
* Uterus		Dilation	Mild
	Endometrium	Hyperplasia	Cystic, Mild
		Polyp Stromal	
	[Dilation TGLs = 7-16]		
	[Hyperplasia TGLs = 5-21]		
	[Polyp Stromal TGLs = 4-16]		

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 661

TRT#: 2

SEX: Female

DAY ON TEST: 202

DOSE: 0.0W/kg(GSM)chr

DISP: Accidentally Killed

HISTO: 12-5224-661

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Ovary
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- Trigeminal Ganglion
- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Pancreas
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thymus
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Parathyroid Gland
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Nose
- * Peripheral Nerve, Tibial
- * Skin
- * Stomach, Forestomach
- * Trachea

MISSING

- * Nerve Trigeminal

OBSERVATIONS

- * Bone
 - Cranium Fracture
 - Maxilla Fracture
 - Mandible Fracture
 - [Fracture TGLs = 3-20]
 - [Fracture TGLs = 2-19]
 - [Fracture TGLs = 1-20]
- * Eye Retina Dysplasia Minimal
- * Kidney Nephropathy Chronicprogr, Minimal
- * Lung Alveolus Infiltration Cellular Histiocyte, Minimal
- * Lymph Node, Mandibular Hemorrhage Minimal
- * Peripheral Nerve, Sciatic Degeneration Minimal
- * Spleen Extramedullary Hematopoiesis Minimal
- Pigment Mild
- * Uterus Dilatation Mild
- [Dilatation TGLs = 4-16]

PRIMARY CAUSE OF DEATH - Bone Cranium Fracture

CONTRIBUTORY CAUSE OF DEATH - Bone Maxilla Fracture

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 661

TRT#: 2

SEX: Female

DAY ON TEST: 202

DOSE: 0.0W/kg(GSM)chr

DISP: Accidentally Killed

HISTO: 12-5224-661

ORGAN AND ACCOUNTABLE SITE STATUS

- Bone Mandible Fracture

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 663

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-663

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Skeletal Muscle
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 Minimal
- * Adrenal Medulla
 - Hyperplasia
 Minimal
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 Marked
Chronic Active, Mild
- * Heart
 - Note: One of pair available for evaluation.
 - [Dilation TGLs = 3-16]
 - Cardiomyopathy
 Minimal
- * Kidney
 - Nephropathy
 Chronicprogr, Minimal
- * Liver
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 4-10]
 - Infiltration Cellular
 Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Proliferation
 Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Hyperplasia
 - [Fibroadenoma TGLs = 1, 2-20, 21]
 Mild
Multiple
Minimal
- * Nose
 - Olfactory Epi
 - Respirat Epith
 - Accumulation, Hyaline Droplet
 - Accumulation, Hyaline Droplet
 Moderate
Minimal
- * Ovary
 - Atrophy
 Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 663

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-663

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
Note: Pars distalis available for evaluation.			
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Marked
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 664

TRT#: 2

SEX: Female

DAY ON TEST: 353

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-664

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Nerve Trigeminal
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Thyroid Gland
- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Pancreas
- Skeletal Muscle
- * Stomach, Forestomach
- * Trachea
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- Trigeminal Ganglion
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Mammary Gland
- * Pituitary Gland
- * Spinal Cord, Lumbar
- * Thymus
- * Urinary Bladder

OBSERVATIONS

- * Bone Marrow
 - * Clitoral Gland
 - * Liver
 - * Lung
 - Mesentery
 - Note: On lesion is relatively acute (TGL 2) and other is chronic with abundant fibrosis (TGL 3).
 - * Nose
 - * Ovary
 - * Peripheral Nerve, Sciatic
 - * Peripheral Nerve, Tibial
 - * Skin
 - [Sarcoma TGLs = 1-20]
 - * Spleen
 - Tissue NOS
 - [Necrosis TGLs = 2,3-21]
 - * Uterus
 - Note: Affecting endometrial glands.
- | | | | |
|--|---------------|-------------------------------|---------------------|
| | Duct | Hypercellularity | Moderate |
| | Alveolus | Dilation | Moderate |
| | | Extramedullary Hematopoiesis | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | | Atrophy | Moderate |
| | | Degeneration | Minimal |
| | | Degeneration | Minimal |
| | Subcut Tiss | Sarcoma | |
| | | Extramedullary Hematopoiesis | Minimal |
| | | Pigment | Minimal |
| | Fat | Necrosis | Moderate |
| | Epithelium | Metaplasia | Squamous, Minimal |

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Sarcoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 665

TRT#: 2

SEX: Female

DAY ON TEST: 662

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-665

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Esophagus | * Eye | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | * Uterus |

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|-------------------------------|--------------------------|
| * Bone Marrow | | Hypercellularity | Marked |
| * Clitoral Gland | | Inflammation | Chronic Active, Moderate |
| * Harderian Gland | | Inflammation | Granulomatous, Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Liver | Ventricle Rgt | Cardiomyopathy | Minimal |
| | | Extramedullary Hematopoiesis | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 2-10] | | |
| Lymph Node | Iliac | Hyperplasia | Lymphocyte, Minimal |
| | Iliac | Proliferation | Plasma Cell, Moderate |
| | [Proliferation TGLs = 3-20] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Adenoma | Multiple |
| | | Fibroadenoma | |
| | | Hyperplasia | Marked |
| | [Adenoma TGLs = 5-9] | | |
| | [Fibroadenoma TGLs = 1-20] | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 665

TRT#: 2

SEX: Female

DAY ON TEST: 662

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-665

ORGAN AND ACCOUNTABLE SITE STATUS

Note: Approximately one-third of Level 3 available for evaluation.

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 666

TRT#: 2

SEX: Female

DAY ON TEST: 531

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-666

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Parathyroid Gland
- Skeletal Muscle
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Liver
- * Peripheral Nerve, Sciatic
- * Skin
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Trachea

OBSERVATIONS

- * Bone Marrow
- * Clitoral Gland
- [Dilation TGLs = 2-16]
- * Lung
- [Infiltration Cellular TGLs = 1-10]
- * Lymph Node, Mandibular
- * Mammary Gland
- [Fibroadenoma TGLs = 3,4,5-20,21,22]
- * Nerve Trigeminal
- * Nose
- Note: Approximately two-thirds of Level 3 available for evaluation.
- * Ovary
- * Peripheral Nerve, Tibial
- * Spinal Cord, Lumbar
- Hypercellularity
- Dilation
- Inflammation
- Infiltration Cellular
- Inflammation
- Proliferation
- Dilation
- Fibroadenoma
- Hyperplasia
- Degeneration
- Accumulation, Hyaline Droplet
- Accumulation, Hyaline Droplet
- Atrophy
- Cyst
- Degeneration
- Degeneration
- Moderate
- Mild
- Chronic Active, Mild
- Histiocyte, Moderate
- Chronic Active, Minimal
- Plasma Cell, Mild
- Minimal
- Multiple
- Minimal
- Minimal
- Mild
- Minimal
- Moderate
- Minimal
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 666

TRT#: 2

SEX: Female

DAY ON TEST: 531

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-666

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate
	Epithelium	Metaplasia	Squamous, Mild

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 668

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-668

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Urinary Bladder
- * Aorta
- * Heart
- * Intestine Small, Duodenum
- * Pancreas
- * Stomach, Forestomach
- * Uterus
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Stomach, Glandular
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hypertrophy Minimal
 - [Hypertrophy TGLs = 9-7]
- * Bone Marrow
 - Hypercellularity Marked
- * Clitoral Gland
 - Duct Dilation Mild
- * Eye
 - Retina Atrophy Minimal
- * Harderian Gland
 - Atrophy Minimal
- * Islets, Pancreatic
 - Adenoma
 - [Adenoma TGLs = 8-6]
- * Kidney
 - Nephropathy Chronicprogr, Minimal
- * Liver
 - Eosinophilic Focus
 - Bile Duct Hyperplasia Minimal
 - Kupffer Cell Hypertrophy Minimal
- * Lung
 - Alveolus Infiltration Cellular Histocyte, Mild
 - [Infiltration Cellular TGLs = 11-10]
- Lymph Node
 - Axillary Proliferation Plasma Cell, Moderate
 - [Proliferation TGLs = 4-20]
- * Lymph Node, Mandibular
 - Proliferation Plasma Cell, Mild
- * Mammary Gland
 - Duct Dilation Minimal
 - Fibroadenoma
 - Hyperplasia Moderate
 - [Fibroadenoma TGLs = 2-20]
- * Nerve Trigeminal
 - Degeneration Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 668

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-668

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	
	[Cyst TGLs = 5-16]		
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
	Note: Pars distalis available for evaluation.		
* Skin	Subcut Tiss	Fibroma	
	[Fibroma TGLs = 3-21]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
	[Extramedullary Hematopoiesis TGLs = 6-12]		
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 1 = NST (No Section Taken)

Animal Note: TGL 10 = NCL (No Corresponding Lesion)

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 669

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-669

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|---|---------------|--|--|
| * Adrenal Cortex | | Degeneration
Hyperplasia
Hypertrophy | Cystic, Minimal
Moderate
Minimal |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Harderian Gland | | Inflammation | Chronic Active, Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| [Infiltration Cellular TGLs = 3-10] | | | |
| * Lymph Node, Mandibular | | Hyperplasia
Proliferation | Lymphocyte, Mild
Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation
Fibroadenoma
Hyperplasia | Mild
Mild |
| [Fibroadenoma TGLs = 1-20] | | | |
| [Hyperplasia TGLs = 2-9.1] | | | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Cyst | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 669

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-669

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Atrophy	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Marked
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Polyp Stromal	

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 670

TRT#: 2

SEX: Female

DAY ON TEST: 737

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-670

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Liver | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|--|---------------|-------------------------------|-----------------------|
| * Clitoral Gland
[Dilation TGLs = 1,2-16] | Duct | Dilation | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| Mesentery | | Adenocarcinoma | Metastatic (Uterus) |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose
Note: Focally incomplete septum. | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Mild |
| | Rete Ovarii | Hyperplasia | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Minimal |
| * Spinal Cord, Thoracic | | Degeneration | Mild |
| * Spleen | | Extramedullary Hematopoiesis | Minimal |
| * Thymus | | Atrophy | Minimal |
| | | Cyst | |
| | | Hyperplasia | Epithelial, Minimal |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 670

TRT#: 2

SEX: Female

DAY ON TEST: 737

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-670

ORGAN AND ACCOUNTABLE SITE STATUS

Trigeminal Ganglion

* Uterus

Epithelium

[Adenocarcinoma TGLs = 4-16]

[Dilation TGLs = 5-20]

[Polyp Stromal TGLs = 3-16]

Degeneration

Adenocarcinoma

Dilation

Metaplasia

Polyp Stromal

Minimal

Mild

Squamous, Moderate

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 671

TRT#: 2

SEX: Female

DAY ON TEST: 662

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-671

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Peripheral Nerve, Sciatic
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Peripheral Nerve, Tibial
- * Skin
- * Thyroid Gland
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion

MISSING

- * Clitoral Gland
- * Nerve Trigeminal

OBSERVATIONS

- * Bone Marrow Hypercellularity Marked
- * Brain
- Note: Olfactory bulbs unavailable for evaluation.
- * Liver Extramedullary Hematopoiesis Minimal
- Mixed Cell Focus
- * Lung Infiltration Cellular Histiocyte, Minimal
- Alveolus
- [Infiltration Cellular TGLs = 2-20]
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Mild
- Proliferation Plasma Cell, Moderate
- * Mammary Gland Dilation Mild
- Duct Fibroadenoma Multiple
- [Fibroadenoma TGLs = 1-20]
- * Nose Accumulation, Hyaline Droplet Minimal
- Respirat Epith Accumulation, Hyaline Droplet Moderate
- Olfactory Epi Atrophy Moderate
- * Ovary Degeneration Minimal
- * Spinal Cord, Lumbar Degeneration Minimal
- Nerve Degeneration Minimal
- * Spinal Cord, Thoracic Degeneration Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 671

TRT#: 2

SEX: Female

DAY ON TEST: 662

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-671

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
* Uterus		Angiectasis	Mild
	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Moderate

[Angiectasis TGLs = 4-16]

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 3,5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 672

TRT#: 2

SEX: Female

DAY ON TEST: 492

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-672

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Ovary
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thyroid Gland
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Peripheral Nerve, Sciatic
- * Skin
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- * Uterus

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Clitoral Gland
- * Kidney
- * Liver
- * Lung
- [Infiltration Cellular TGLs = 2-10]
- * Lymph Node, Mandibular
- * Mammary Gland
- [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
- * Nose
- * Pancreas
- * Peripheral Nerve, Tibial
- * Spleen
- * Thymus
- Bile Duct
- Alveolus
- Olfactory Epi
- Acinus
- Hypertrophy
- Hypercellularity
- Inflammation
- Nephropathy
- Eosinophilic Focus
- Hyperplasia
- Infiltration Cellular
- Proliferation
- Fibroadenoma
- Hyperplasia
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Extramedullary Hematopoiesis
- Atrophy
- Moderate
- Marked
- Chronic Active, Mild
- Chronicprogr, Minimal
- Minimal
- Histiocyte, Minimal
- Plasma Cell, Mild
- Minimal
- Minimal
- Moderate
- Minimal
- Minimal
- Moderate
- Mild

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 674

TRT#: 2

SEX: Female

DAY ON TEST: 634

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-674

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Brain
- * Clitoral Gland
- * Esophagus
- * Eye
- * Harderian Gland
- * Heart
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Liver
- * Lymph Node, Mesenteric
- * Nerve Trigeminal
- * Pancreas
- * Parathyroid Gland
- * Salivary Glands
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Thoracic
- * Stomach, Glandular
- * Trachea
- * Urinary Bladder

OBSERVATIONS

- * Bone Marrow Hypercellularity Marked
- * Kidney Nephropathy Chronicprogr, Minimal
- * Lung Alveolus Infiltration Cellular Histiocyte, Mild
 - [Infiltration Cellular TGLs = 1-10]
- * Lymph Node, Mandibular Proliferation Plasma Cell, Mild
- * Mammary Gland Duct Dilation Moderate
 - [Fibroadenoma TGLs = 3-20]
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Moderate
- * Ovary Atrophy Moderate
- * Peripheral Nerve, Sciatic Degeneration Minimal
- * Peripheral Nerve, Tibial Degeneration Minimal
- * Pituitary Gland Pars Distalis Hyperplasia Moderate
 - [Hyperplasia TGLs = 4-4]
- * Skin Note: Fibrosarcoma arising within fibroadenoma.
- * Spinal Cord, Cervical Degeneration Minimal
- * Spinal Cord, Lumbar Nerve Degeneration Minimal
- * Spleen Extramedullary Hematopoiesis Moderate
 - Pigment Minimal
- * Stomach, Forestomach Erosion Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 674

TRT#: 2

SEX: Female

DAY ON TEST: 634

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-674

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus	Epithelium	Hyperplasia Inflammation Atrophy Cyst	Mild Chronic Active, Mild Minimal
* Thyroid Gland	C Cell	Hyperplasia Adenoma	Epithelial, Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 675

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-675

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Mild
	Bursa	Dilation	Marked
	[Dilation TGLs = 4-16]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
	[Extramedullary Hematopoiesis TGLs = 8-12]		
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Mild
* Uterus		Dilation	Moderate
		Hemangiosarcoma	
	[Dilation TGLs = 5-16]		
	[Hemangiosarcoma TGLs = 3,5,6-16]		

Animal Note: TGL 1 = NST (No Section Taken)

Animal Note: TGLs 9,11 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 677

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-677

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 8-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Mild
Trigeminal Ganglion		Degeneration	Minimal
* Urinary Bladder	Urothelium	Hyperplasia	Mild
		Leiomyosarcoma	
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal
[Hyperplasia TGLs = 4-20]			

Animal Note: TGL 1 = NST (No Section Taken)

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 678

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-678

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Skin
- * Thymus
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex [Hypertrophy TGLs = 3-7] Hypertrophy Minimal
- * Bone Marrow Hypercellularity Minimal
- * Brain Meninges Granular Cell Tumor Benign
- * Clitoral Gland Duct Dilation Moderate [Dilation TGLs = 1-16]
- * Heart Cardiomyopathy Minimal
- * Islets, Pancreatic Hyperplasia Minimal
- * Kidney Nephropathy Chronicprogr, Minimal
- * Liver Bile Duct Cyst Mixed Cell Focus [Cyst TGLs = 4-12]
- * Lung Alveolus Infiltration Cellular Histiocyte, Minimal
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Minimal
- Proliferation Plasma Cell, Minimal
- Degeneration Moderate
- * Nerve Trigeminal Accumulation, Hyaline Droplet Moderate
- * Nose Olfactory Epi Atrophy Marked
- * Ovary Atrophy Minimal
- * Pancreas Acinus Degeneration Minimal
- * Peripheral Nerve, Sciatic Degeneration Mild
- * Peripheral Nerve, Tibial
- * Pituitary Gland Pars Distalis Cyst

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 678

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-678

ORGAN AND ACCOUNTABLE SITE STATUS

	Pars Intermed	Cyst	
	Pars Distalis	Hyperplasia	Mild
[Hyperplasia TGLs = 6-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
* Trachea	Glands	Cyst	
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Mild
		Polyp Stromal	
[Polyp Stromal TGLs = 2-16]			

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 679

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-679

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Skin
- * Trachea
- * Bone
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Stomach, Forestomach
- * Esophagus
- * Intestine Small, Duodenum
- * Salivary Glands
- * Stomach, Glandular

MISSING

- * Adrenal Medulla
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Brain
- * Clitoral Gland
- * Eye
- * Harderian Gland
- * Heart
- * Islets, Pancreatic
- [Adenoma TGLs = 8-6]
- * Kidney
- * Liver
- * Lung
- * Lymph Node, Mandibular
- * Mammary Gland
- [Fibroadenoma TGLs = 1,2-20,21]
- * Nerve Trigeminal
- * Nose
- * Ovary
- * Pancreas
- Hypertrophy
- Hyperplasia
- Inflammation
- Atrophy
- Inflammation
- Cardiomyopathy
- Adenoma
- Hyperplasia
- Nephropathy
- Mixed Cell Focus
- Inflammation
- Hyperplasia
- Proliferation
- Dilation
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Cyst
- Hyperplasia
- Minimal
- Mild
- Chronic Active, Mild
- Minimal
- Chronic, Mild
- Minimal
- Minimal
- Chronicprogr, Minimal
- Chronic Active, Minimal
- Lymphocyte, Minimal
- Plasma Cell, Mild
- Moderate
- Multiple
- Mild
- Moderate
- Moderate
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 679

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-679

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland		Fibrosis	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Angiectasis	Mild
[Angiectasis TGLs = 7-4]			
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Marked
* Uterus		Cyst	
	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Marked
[Cyst TGLs = 3-16]			

Animal Note: TGLs 4,5,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 680

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-680

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Small, Duodenum
- * Lung
- Skeletal Muscle
- * Urinary Bladder
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skin
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Stomach, Glandular
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Trachea

MISSING

- * Adrenal Medulla

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Degeneration
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Cystic, Minimal
 - Moderate
 - Mild
- * Brain
 - [Degeneration TGLs = 4-7]
 - Compression
 - Mild
- * Clitoral Gland
 - [Compression TGLs = 7-1,2]
 - Duct
 - Dilation
 - Inflammation
 - Mild
 - Chronic Active, Moderate
- * Harderian Gland
 - Atrophy
 - Inflammation
 - Minimal
 - Chronic, Minimal
- * Heart
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Bile Duct
 - Cyst
- * Lymph Node, Mandibular
 - [Cyst TGLs = 5-12]
 - Proliferation
 - Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Galactocele
 - Hyperplasia
 - Mild
 - Minimal
- * Nerve Trigeminal
 - [Galactocele TGLs = 2-9]
 - Degeneration
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 680

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-680

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Ovary		Atrophy	Marked
	Rete Ovarii	Hyperplasia	Mild
		Sertoli Cell Tumor Benign	
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 8-4]		
* Salivary Glands	Parotid GI	Atrophy	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
		Inflammation	Chronic Active, Minimal
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Adenoma	
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Cyst	

Animal Note: TGL 1 = NST (No Section Taken)

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 681

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-681

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skin
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Clitoral Gland
- [Dilation TGLs = 2,3,4-16]
- * Heart
- * Kidney
- * Liver
- * Lymph Node, Mandibular
- * Mammary Gland
- [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
- * Nose
- * Ovary
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- * Spleen
- Duct
- Duct
- Olfactory Epi
- Pars Distalis
- Nerve
- Hypertrophy
- Dilation
- Inflammation
- Cardiomyopathy
- Nephropathy
- Mixed Cell Focus
- Hyperplasia
- Proliferation
- Dilation
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Fibrosis
- Degeneration
- Degeneration
- Hyperplasia
- Degeneration
- Degeneration
- Extramedullary Hematopoiesis
- Minimal
- Marked
- Chronic Active, Minimal
- Minimal
- Chronicprogr, Minimal
- Lymphocyte, Mild
- Plasma Cell, Mild
- Mild
- Mild
- Moderate
- Moderate
- Mild
- Minimal
- Minimal
- Marked
- Moderate
- Mild
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 681

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-681

ORGAN AND ACCOUNTABLE SITE STATUS

* Stomach, Forestomach [Hyperplasia TGLs = 5-22RT]	Epithelium	Pigment Hyperplasia	Mild Moderate
* Thymus		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus	Endometrium Epithelium	Hyperplasia Metaplasia	Cystic, Mild Squamous, Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 683

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-683

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lung | * Lymph Node, Mesenteric |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|-----------------------------|------------------------------|-------------------------------|-------------------------|
| * Adrenal Cortex | | Vacuolation, Cytoplasmic | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | Duct | Dilation | Moderate |
| | | Inflammation | Chronic Active, Minimal |
| * Islets, Pancreatic | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | | Clear Cell Focus | |
| | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Fibroadenoma | |
| | | Hyperplasia | Marked |
| | [Fibroadenoma TGLs = 1-20] | | |
| | [Hyperplasia TGLs = 4-9] | | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Cyst | |
| | [Cyst TGLs = 5,6-16] | | |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 683

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-683

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Minimal
		Thymoma Malignant	
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGLs 2,3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 684

TRT#: 2

SEX: Female

DAY ON TEST: 524

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-684

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Bone Marrow | * Clitoral Gland |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Spinal Cord, Thoracic | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | * Uterus |

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|------------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | | Carcinoma | Metastatic (Pituitary Gland) |
| | | Compression | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Basophilic Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Moderate |
| | [Infiltration Cellular TGLs = 3-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Adenoma | Multiple |
| | [Adenoma TGLs = 1,2-9,20] | | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| | Note: Level 3 largely absent. | | |
| * Ovary | | Atrophy | Marked |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 684

TRT#: 2

SEX: Female

DAY ON TEST: 524

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-684

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Carcinoma	
[Carcinoma TGLs = 4-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Pigment	Moderate
* Stomach, Forestomach		Edema	Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Carcinoma

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 686

TRT#: 2

SEX: Female

DAY ON TEST: 737

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-686

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Thyroid Gland
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Kidney
- * Salivary Glands
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Cystic, Minimal
- * Bone Marrow
 - Hypertrophy
 - Minimal
- * Heart
 - Hypercellularity
 - Minimal
- * Liver
 - Cardiomyopathy
 - Minimal
 - Basophilic Focus
 - Eosinophilic Focus
 - Infiltration Cellular
 - Histiocyte, Minimal
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 2-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Lymphocyte, Mild
 - Proliferation
 - Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Minimal
 - Fibroadenoma
 - Hyperplasia
 - Minimal
 - [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate
 - Respirat Epith
 - Accumulation, Hyaline Droplet
 - Minimal
- * Ovary
 - Atrophy
 - Moderate
 - Rete Ovarii
 - Hyperplasia
 - Minimal
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Mild
- * Peripheral Nerve, Tibial
 - Degeneration
 - Minimal
- * Pituitary Gland
 - Pars Distalis
 - Hyperplasia
 - Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 686

TRT#: 2

SEX: Female

DAY ON TEST: 737

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-686

ORGAN AND ACCOUNTABLE SITE STATUS

[Hyperplasia TGLs = 3-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Pigment	Moderate
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
		Polyp Stromal	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 687

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-687

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Aorta	* Bone
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Lymph Node, Mandibular	* Pancreas
Skeletal Muscle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Trachea	Trigeminal Ganglion		

OBSERVATIONS

* Bone Marrow		Hypercellularity	Marked
* Brain		Compression	Moderate
[Compression TGLs = 20-1,2]			
* Clitoral Gland	Duct	Dilation	Moderate
[Dilation TGLs = 2-16]			
* Eye	Retina	Atrophy	Minimal
* Harderian Gland		Atrophy	Minimal
		Inflammation	Chronic, Mild
* Liver		Angiectasis	Minimal
		Extramedullary Hematopoiesis	Minimal
	Bile Duct	Fibrosis	Minimal
	Kupffer Cell	Hyperplasia	Minimal
	Hepatocyte	Hypertrophy	Minimal
	Hepatocyte	Increased Mitoses	Minimal
[Angiectasis TGLs = 22-22]			
[Fibrosis TGLs = 15-12]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic Active, Minimal
[Infiltration Cellular TGLs = 17-10]			
Lymph Node	Iliac	Proliferation	Plasma Cell, Minimal
[Proliferation TGLs = 14-24]			
* Lymph Node, Mesenteric		Atrophy	Minimal
* Mammary Gland		Fibroadenoma	Multiple

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 687

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-687

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 1,3,4,5-20,21,22,23]

* Nerve Trigeminal Degeneration Moderate

* Nose Olfactory Epi Accumulation, Hyaline Droplet Mild

* Ovary Atrophy Moderate

Cyst

* Parathyroid Gland Fibrosis Mild

* Peripheral Nerve, Sciatic Degeneration Minimal

* Peripheral Nerve, Tibial Degeneration Minimal

* Pituitary Gland Pars Distalis Adenoma

[Adenoma TGLs = 19-4]

* Salivary Glands Parotid GI Atrophy Mild

* Spinal Cord, Cervical Degeneration Minimal

* Spinal Cord, Lumbar Nerve Degeneration Moderate

* Spinal Cord, Thoracic Degeneration Mild

* Spleen Extramedullary Hematopoiesis Marked

[Extramedullary Hematopoiesis TGLs = 12-12]

* Thymus Atrophy Mild

Cyst

Hyperplasia Epithelial, Moderate

[Atrophy TGLs = 18-6]

* Thyroid Gland C Cell Hyperplasia Mild

* Urinary Bladder Dilatation Mild

[Dilatation TGLs = 10-13]

* Uterus Endometrium Hyperplasia Cystic, Minimal

Cervix Schwannoma Malignant

[Schwannoma Malignant TGLs = 8,9-26,27]

Vagina Schwannoma Malignant

Metastatic (Uterus)

[Schwannoma Malignant TGLs = 6,7-25]

Animal Note: TGL 11 = NST (No Section Taken)

Animal Note: TGLs 16,21 = NCL (No Corresponding Lesion)

Animal Note: TGL 13 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 688

TRT#: 2

SEX: Female

DAY ON TEST: 608

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-688

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Clitoral Gland
- * Esophagus
- * Eye
- * Harderian Gland
- * Heart
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Liver
- * Lymph Node, Mesenteric
- * Pancreas
- * Parathyroid Gland
- * Salivary Glands
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Stomach, Forestomach
- * Stomach, Glandular
- * Trachea
- Trigeminal Ganglion
- * Urinary Bladder

OBSERVATIONS

- * Brain
[Compression TGLs = 6-2]
Compression Mild
- * Kidney
Nephropathy Chronicprogr, Minimal
- * Lung
Alveolus
[Infiltration Cellular TGLs = 4-10]
Infiltration Cellular Histiocyte, Minimal
- * Lymph Node, Mandibular
Proliferation Plasma Cell, Minimal
- * Mammary Gland
Duct
Dilation Minimal
Fibroadenoma
Galactocele
Hyperplasia Minimal
- Note: Multiple galactoceles are ruptured with granulomatous inflammation.
[Fibroadenoma TGLs = 1-21]
[Galactocele TGLs = 2,3-20,21]
- * Nerve Trigeminal
Degeneration Mild
- * Nose
Olfactory Epi
Accumulation, Hyaline Droplet Mild
- * Ovary
Atrophy Mild
Granulosa Cell Tumor Benign
- * Peripheral Nerve, Sciatic
Rete Ovarii
Hyperplasia Marked
- * Peripheral Nerve, Tibial
Degeneration Minimal
- * Pituitary Gland
Pars Distalis
Degeneration Minimal
Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 688

TRT#: 2

SEX: Female

DAY ON TEST: 608

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-688

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 5-4]

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Mild
* Thyroid Gland	C Cell	Adenoma	
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Marked

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 689

TRT#: 2

SEX: Female

DAY ON TEST: 513

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-689

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Brain
- * Esophagus
- * Eye
- * Harderian Gland
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- * Nerve Trigeminal
- * Pancreas
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Salivary Glands
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- * Trigeminal Ganglion
- * Urinary Bladder

OBSERVATIONS

- * Bone Marrow Hypercellularity Mild
- * Clitoral Gland Duct Dilation Moderate
[Dilation TGLs = 2-16]
- * Heart Cardiomyopathy Minimal
- * Kidney Nephropathy Chronicprogr, Moderate
[Nephropathy TGLs = 3-13]
- * Liver Eosinophilic Focus
Mixed Cell Focus
[Eosinophilic Focus TGLs = 4-12]
- * Lung Alveolus Infiltration Cellular Histiocyte, Minimal
[Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular Proliferation Plasma Cell, Minimal
- * Mammary Gland Duct Dilation Mild
Galactocele
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Mild
- * Ovary Atrophy Moderate
- * Pituitary Gland Pars Distalis Hyperplasia Mild
- * Spleen Extramedullary Hematopoiesis Minimal
Pigment Mild
- * Thymus Hyperplasia Epithelial, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 689

TRT#: 2

SEX: Female

DAY ON TEST: 513

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-689

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Epithelium

Metaplasia

Squamous, Marked

Schwannoma Malignant

[Schwannoma Malignant TGLs = 1,7-20,21RT]

PRIMARY CAUSE OF DEATH - Uterus Schwannoma Malignant

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 690

TRT#: 2

SEX: Female

DAY ON TEST: 622

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-690

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Skin
- * Thyroid Gland
- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder

INSUFFICIENT TISSUE

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Compression
- * Clitoral Gland
 - Duct
 - Dilation
- * Kidney
 - Nephropathy
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Inflammation
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Adenocarcinoma
 - Dilation
 - Hyperplasia
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
 - Cyst
 - Bursa
 - Dilation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 690

TRT#: 2

SEX: Female

DAY ON TEST: 622

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-690

ORGAN AND ACCOUNTABLE SITE STATUS

[Dilation TGLs = 4-16]	Rete Ovarii	Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 6-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Cyst	
* Uterus	Epithelium	Metaplasia	Squamous, Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 691

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-691

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Skin
- * Thyroid Gland
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Necrosis
- * Adrenal Medulla
 - Hyperplasia
- * Heart
 - Cardiomyopathy
- * Islets, Pancreatic
- * Kidney
 - Artery
 - Inflammation
 - Nephropathy
 - [Nephropathy TGLs = 5-13]
- * Liver
- * Lung
 - Alveolus
 - Mixed Cell Focus
 - Artery
 - Infiltration Cellular
 - Inflammation
 - [Infiltration Cellular TGLs = 6-10]
- * Lymph Node, Mandibular
 - Proliferation
- * Mammary Gland
 - Fibroadenoma
 - Hyperplasia
 - [Fibroadenoma TGLs = 1,3-20,21]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Spinal Cord, Lumbar
 - Nerve
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 691

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-691

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Minimal
Tissue NOS	Fat	Necrosis	Mild
[Necrosis TGLs = 4-22]			
* Uterus		Adenocarcinoma	
	Epithelium	Metaplasia	Squamous, Minimal

Animal Note: TGL 2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 692

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-692

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Stomach, Glandular
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Pancreas
- * Skin
- * Trachea

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 7-7]
 - * Clitoral Gland
 - [Dilation TGLs = 1,2-16]
 - * Heart
 - * Islets, Pancreatic
 - [Adenoma TGLs = 6-6]
 - * Kidney
 - * Liver
 - [Basophilic Focus TGLs = 9-20]
 - * Lung
 - [Infiltration Cellular TGLs = 8-10]
 - * Lymph Node, Mandibular
 - * Mammary Gland
- | | | | |
|--|--------------|---|--|
| | Duct | Degeneration
Hyperplasia
Hypertrophy | Cystic, Minimal
Minimal
Minimal |
| | Ventricl Rgt | Dilation
Inflammation

Cardiomyopathy
Cardiomyopathy
Adenoma | Marked
Chronic Active, Mild

Minimal
Minimal |
| | | Nephropathy
Basophilic Focus
Mixed Cell Focus | Chronicprogr, Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Hyperplasia
Proliferation
Fibroadenoma | Lymphocyte, Mild
Plasma Cell, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 692

TRT#: 2

SEX: Female

DAY ON TEST: 741

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-692

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 3-20]

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
		Granulosa Cell Tumor Malignant	

[Granulosa Cell Tumor Malignant TGLs = 4-16]

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Adenocarcinoma	
		Cyst	

[Adenocarcinoma TGLs = 5-16]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 693

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-693

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Stomach, Forestomach
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- Skeletal Muscle
- * Trachea
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 Minimal
Mild
- * Adrenal Medulla
 - Hyperplasia
 Minimal
- * Bone Marrow
 - Hypercellularity
 Minimal
- * Brain
 - Note: Scant olfactory bulbs available for evaluation.
- * Clitoral Gland
 - Duct
 Dilation
 - Mild
- * Heart
 - Ventricl Rgt
 Cardiomyopathy
 - Minimal
- * Kidney
 - Nephropathy
 Chronicprogr, Mild
- * Liver
 - Angiectasis
 - Mixed Cell Focus
 Minimal
- [Angiectasis TGLs = 3-20]
- * Lung
 - Alveolus
 Infiltration Cellular
 - Histiocyte, Mild
- [Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 Lymphocyte, Mild
Plasma Cell, Mild
- * Mammary Gland
 - Duct
 Adenocarcinoma
 - Mild
- [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
 - Degeneration
 Mild
- * Nose
 - Respirat Epith
 Accumulation, Hyaline Droplet
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 693

TRT#: 2

SEX: Female

DAY ON TEST: 744

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-693

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
		Atrophy	Marked
	Rete Ovarii	Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Marked
		Polyp Stromal	

Note: Large cyst within center of polyp.

[Polyp Stromal TGLs = 2-16]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 694

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-694

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Pancreas | * Salivary Glands |
| Skeletal Muscle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|---|--|-------------------------------|-------------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Bone Marrow | | Hypercellularity | Marked |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Clitoral Gland | Duct | Dilation | Mild |
| | [Dilation TGLs = 1-16] | | |
| * Eye | Retina | Atrophy | Minimal |
| * Harderian Gland | | Inflammation | Chronic, Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Hepatocellular Adenoma | |
| | | Mixed Cell Focus | |
| | [Hepatocellular Adenoma TGLs = 7-20] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic Active, Minimal |
| | [Infiltration Cellular TGLs = 4-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 2-20] | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 694

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-694

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland		Fibrosis	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[Hyperplasia TGLs = 5-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Mild
		Polyp Stromal	
[Polyp Stromal TGLs = 6-20]			

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 695

TRT#: 2

SEX: Female

DAY ON TEST: 668

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-695

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Salivary Glands
- * Stomach, Forestomach
- * Uterus
- * Aorta
- * Eye
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Islets, Pancreatic
- * Pancreas
- * Skin
- * Thyroid Gland
- * Brain
- * Intestine Large, Rectum
- * Lung
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea

MISSING

- * Clitoral Gland
- * Thymus

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Small, Duodenum

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Heart
- * Kidney
- * Liver
- * Mammary Gland
- [Adenocarcinoma TGLs = 2-20]
- [Dilation TGLs = 7-9]
- [Fibroadenoma TGLs = 1-21]
- * Nerve Trigeminal
- * Nose
- * Ovary
- Hypertrophy
- Hypercellularity
- Cardiomyopathy
- Dilation
- Extramedullary Hematopoiesis
- Hyperplasia
- Necrosis
- Adenocarcinoma
- Dilation
- Fibroadenoma
- Minimal
- Marked
- Minimal
- Mild
- Minimal
- Minimal
- Mild
- Multiple
- Moderate
- Moderate
- Marked
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Cyst

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 695

TRT#: 2

SEX: Female

DAY ON TEST: 668

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-695

ORGAN AND ACCOUNTABLE SITE STATUS

[Cyst TGLs = 6-16]

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
Tissue NOS		Inflammation	Chronic Active, Marked
Note: Possible clitoral gland; tissue too inflamed to identify definitively.			
Trigeminal Ganglion		Degeneration	Minimal
* Urinary Bladder		Inflammation	Acute, Marked
		Necrosis	Moderate

Note: Multiple thromboses present in submucosal vessels.

[Inflammation TGLs = 3,4-13]

PRIMARY CAUSE OF DEATH - Urinary Bladder Inflammation

Animal Note: TGL 5 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 696

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-696

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Pancreas
- * Skin
- * Thyroid Gland
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Vacuolation, Cytoplasmic
 Cystic, Moderate
- * Bone Marrow
 - Hypercellularity
 Minimal
- * Brain
 - Compression
 Marked
- Note: Olfactory bulbs unavailable for evaluation.
 - [Compression TGLs = 9-2]
- * Clitoral Gland
 - Duct
 - [Dilation TGLs = 5-16]
 Dilation
 - Dilation
 Marked
- * Intestine Small, Ileum
 - Hyperplasia
 Lymphocyte, Mild
- * Kidney
 - Nephropathy
 Chronicprogr, Mild
- * Liver
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 7-10]
 Infiltration Cellular
 - Infiltration Cellular
 Histiocyte, Minimal
- Lymph Node
 - Iliac
 - Iliac
 - [Erythrophagocytosis TGLs = 8-22]
 - [Proliferation TGLs = 8-22]
 Erythrophagocytosis
 - Erythrophagocytosis
 - Proliferation
 Mild
 - Proliferation
 Plasma Cell, Mild
- * Lymph Node, Mandibular
 - Hyperplasia
 Lymphocyte, Mild
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Galactocele
 - Hyperplasia
 Dilation
 - Dilation
 - Fibroadenoma
 - Galactocele
 - Hyperplasia
 Moderate
 - Fibroadenoma
 - Galactocele
 - Hyperplasia
 Multiple
 - Hyperplasia
 Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 696

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-696

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 1,2-20,21]

[Galactocele TGLs = 3-22]

* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	
	[Adenoma TGLs = 10-4]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
		Pigment	Minimal
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
	[Atrophy TGLs = 6-6]		
* Uterus		Cyst	
	Endometrium	Hyperplasia	Cystic, Mild
		Polyp Stromal	

Animal Note: TGL 4 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 697

TRT#: 2

SEX: Female

DAY ON TEST: 489

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-697

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Pancreas
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thyroid Gland
- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Parathyroid Gland
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Trachea
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Peripheral Nerve, Tibial
- * Skin
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Nerve Trigeminal
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular

OBSERVATIONS

- * Bone Marrow
- * Clitoral Gland
- * Kidney
- * Lung
- [Infiltration Cellular TGLs = 4-10]
- * Mammary Gland
- Note: Multiple galactoceles are ruptured with granulomatous inflammation.
- [Galactocoele TGLs = 1-9,20]
- * Nose
- * Ovary
- * Peripheral Nerve, Sciatic
- * Spleen
- [Extramedullary Hematopoiesis TGLs = 5-12]
- * Thymus
- [Atrophy TGLs = 6-6]
- Tissue NOS
- Alveolus
- Duct
- Olfactory Epi
- Fat
- Hypercellularity
- Inflammation
- Nephropathy
- Infiltration Cellular
- Dilation
- Galactocoele
- Hyperplasia
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Extramedullary Hematopoiesis
- Pigment
- Atrophy
- Hyperplasia
- Necrosis
- Marked
- Chronic Active, Minimal
- Chronicprogr, Minimal
- Histiocyte, Minimal
- Moderate
- Moderate
- Minimal
- Moderate
- Minimal
- Moderate
- Minimal
- Mild
- Epithelial, Mild
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 697

TRT#: 2

SEX: Female

DAY ON TEST: 489

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-697

ORGAN AND ACCOUNTABLE SITE STATUS

Abdominal

Schwannoma Malignant

[Necrosis TGLs = 2-20]

[Schwannoma Malignant TGLs = 3-21]

* Urinary Bladder

Schwannoma Malignant

Metastatic (Tissue Nos)

* Uterus

Endometrium

Hyperplasia

Cystic, Mild

Epithelium

Metaplasia

Squamous, Mild

PRIMARY CAUSE OF DEATH - Tissue NOS Abdominal Schwannoma Malignant

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 698

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-698

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Pancreas
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Liver
- * Skin
- * Thyroid Gland
- * Brain
- * Heart
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Spinal Cord, Cervical
- * Trachea

MISSING

- * Nerve Trigeminal

OBSERVATIONS

- * Adrenal Cortex
 - Atrophy
 - Carcinoma
 - Pigment

[Atrophy TGLs = 2-7]
 [Carcinoma TGLs = 4-7]
 [Pigment TGLs = 3-7]
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
- * Intestine Large, Rectum
 - Granular Cell Tumor Benign
- * Kidney
 - Renal Tubule
 - Cyst
 - Nephropathy
- * Lung
 - Alveolus
 - Infiltration Cellular

[Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation

Marked

Moderate

Mild

Marked
Chronic Active, Mild

Chronicprogr, Minimal
Histiocyte, Moderate

Lymphocyte, Mild
Plasma Cell, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 698

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-698

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland		Hyperplasia	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Marked
* Parathyroid Gland		Hyperplasia	Focal, Mild
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Cyst	
	Pars Intermed	Cyst	
	Pars Distalis	Hyperplasia	Mild
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
* Thymus		Atrophy	Moderate
		Cyst	
* Uterus		Polyp Stromal	

[Polyp Stromal TGLs = 6-16]

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 699

TRT#: 2

SEX: Female

DAY ON TEST: 707

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-699

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Bone Marrow | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | Skeletal Muscle |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | * Uterus |

OBSERVATIONS

- | | | | |
|---|---------------|-------------------------------|-------------------------|
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Brain | | Compression | Mild |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| [Compression TGLs = 6-2] | | | |
| * Clitoral Gland | Duct | Dilation | Moderate |
| * Islets, Pancreatic | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Hepatocellular Adenoma | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic Active, Minimal |
| [Infiltration Cellular TGLs = 8-10] | | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Moderate |
| * Mammary Gland | | Fibroadenoma | |
| | | Hyperplasia | Marked |
| [Fibroadenoma TGLs = 1-20] | | | |
| [Hyperplasia TGLs = 4-9] | | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Minimal |
| | | Congestion | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 699

TRT#: 2

SEX: Female

DAY ON TEST: 707

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-699

ORGAN AND ACCOUNTABLE SITE STATUS

[Congestion TGLs = 5-16]

* Peripheral Nerve, Sciatic

Degeneration

Mild

* Peripheral Nerve, Tibial

Degeneration

Mild

* Pituitary Gland

Pars Distalis

Adenoma

[Adenoma TGLs = 2-4]

* Skin

Epidermis

Hyperplasia

Marked

Note: Hyperplastic epidermis with abundant keratin material likely of vulva region and corresponds to vaginal mass diagnosed grossly.

[Hyperplasia TGLs = 7-21]

* Spinal Cord, Lumbar

Nerve

Degeneration

Minimal

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

Red Pulp

Atrophy

Mild

White Pulp

Atrophy

Mild

Pigment

Mild

* Thymus

Atrophy

Mild

Cyst

Hyperplasia

Epithelial, Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 701

TRT#: 2

SEX: Female

DAY ON TEST: 492

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-701

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney |
| * Lung | * Lymph Node, Mesenteric | * Nerve Trigeminal | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Spinal Cord, Thoracic | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | * Uterus | | |

OBSERVATIONS

- | | | | |
|-----------------------------|------------------------------|-------------------------------|-------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Bone Marrow | | Hypercellularity | Mild |
| * Clitoral Gland | Duct | Dilation | Moderate |
| | [Dilation TGLs = 1-16] | | |
| * Liver | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 2-20] | Hyperplasia | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Minimal |
| * Spleen | | Extramedullary Hematopoiesis | Mild |
| | | Pigment | Minimal |
| * Thymus | | Atrophy | Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 703

TRT#: 2

SEX: Female

DAY ON TEST: 636

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-703

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Aorta | * Bone | * Bone Marrow |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Nerve Trigeminal | * Pancreas | * Salivary Glands | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|-----------------------------|------------------------------|-------------------------------|-----------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | | Compression | Mild |
| | [Compression TGLs = 2-1,2] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Basophilic Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Marked |
| | | Fibroadenoma | |
| | | Galactocele | |
| | | Hyperplasia | Minimal |
| | [Fibroadenoma TGLs = 5-21] | | |
| | [Galactocele TGLs = 4-20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Moderate |
| | | Cyst | |
| * Parathyroid Gland | | Fibrosis | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 703

TRT#: 2

SEX: Female

DAY ON TEST: 636

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-703

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 3-4]

* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	Red Pulp	Atrophy	Moderate
		Pigment	Mild
* Thymus		Atrophy	Moderate
		Hyperplasia	Epithelial, Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 704

TRT#: 2

SEX: Female

DAY ON TEST: 737

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-704

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Liver
- Skeletal Muscle
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Stomach, Forestomach
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Bone Marrow
- * Clitoral Gland
- * Heart
- * Islets, Pancreatic
- * Kidney
- * Lung
- [Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular
- * Mammary Gland
- * Nerve Trigeminal
- * Nose
- * Ovary
- [Cyst TGLs = 3-16]
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- Alveolus
- Duct
- Olfactory Epi
- Pars Distalis
- Hypertrophy
- Hyperplasia
- Hypercellularity
- Inflammation
- Cardiomyopathy
- Hyperplasia
- Nephropathy
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Dilation
- Hyperplasia
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Cyst
- Fibrosis
- Degeneration
- Degeneration
- Adenoma
- Minimal
- Mild
- Minimal
- Chronic Active, Minimal
- Minimal
- Minimal
- Chronicprogr, Mild
- Histiocyte, Moderate
- Lymphocyte, Minimal
- Plasma Cell, Minimal
- Mild
- Marked
- Moderate
- Mild
- Marked
- Minimal
- Mild
- Mild

Note: Pars distalis available for evaluation.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 704

TRT#: 2

SEX: Female

DAY ON TEST: 737

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-704

ORGAN AND ACCOUNTABLE SITE STATUS

* Skin		Cyst Epithelial Inclusion	
Note: Epithelial inclusion cyst present in clitoral gland section.			
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Cervix	Hyperplasia	Stromal, Mild
		Inflammation	Suppurative, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

[Hyperplasia TGLs = 5-20RT]

Animal Note: TGLs 1,2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 705

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-705

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Urinary Bladder
- * Aorta
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Glandular
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Cystic, Minimal
 - Minimal
 - Minimal
- [Hypertrophy TGLs = 7-7]
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Eye
 - Retina
 - Atrophy
- * Heart
 - Cardiomyopathy
- * Kidney
 - Nephropathy
 - Chronicprogr, Mild
- [Nephropathy TGLs = 6-13]
- * Liver
 - Angiectasis
 - Hepatocellular Adenoma
 - Mild
- [Angiectasis TGLs = 9-21]
- [Hepatocellular Adenoma TGLs = 8-20]
- * Lung
 - Hemorrhage
 - Hyperplasia
- * Lymph Node, Mandibular
 - Epithlm Alvlus
 - Hyperplasia
 - Proliferation
 - Galactocele
 - Lymphocyte, Minimal
 - Plasma Cell, Mild
- * Mammary Gland
 - [Galactocele TGLs = 2-9]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 705

TRT#: 2

SEX: Female

DAY ON TEST: 739

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-705

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Moderate
	Rete Ovarii	Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Cyst	
	Cervix	Leiomyosarcoma	
	Epithelium	Metaplasia	Squamous, Minimal
		Polyp Stromal	

[Leiomyosarcoma TGLs = 4-20]

[Polyp Stromal TGLs = 3-16.1]

Animal Note: TGL 1 = NST (No Section Taken)

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 706

TRT#: 2

SEX: Female

DAY ON TEST: 550

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-706

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|-----------------------------|------------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Mild |
| * Bone Marrow | | Hypercellularity | Marked |
| * Clitoral Gland | Duct | Dilation | Marked |
| | [Dilation TGLs = 4,5-16] | | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Basophilic Focus | |
| | | Mixed Cell Focus | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-20] | Hyperplasia | Moderate |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Cyst | |
| | [Cyst TGLs = 2-16] | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Mild |
| * Spleen | | Extramedullary Hematopoiesis | Moderate |
| * Thymus | | Atrophy | Minimal |
| * Uterus | Cervix | Hyperplasia | Stromal, Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 706

TRT#: 2

SEX: Female

DAY ON TEST: 550

DOSE: 0.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-706

ORGAN AND ACCOUNTABLE SITE STATUS

[Hyperplasia TGLs = 6-21RT]

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 707

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-707

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Pancreas
- * Skin
- * Thyroid Gland
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Cystic, Moderate
 - Mild
 - Mild
 - Mild
- [Degeneration TGLs = 9, 11-7]
- [Vacuolation, Cytoplasmic TGLs = 10-7]
- * Adrenal Medulla
 - Note: One of pair available for evaluation.
 - Pheochromocytoma Benign
- * Bone Marrow
 - Hypercellularity
 - Marked
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 - Marked
 - Chronic Active, Minimal
- [Dilation TGLs = 4-16]
- * Harderian Gland
 - Atrophy
 - Minimal
- * Islets, Pancreatic
 - Hyperplasia
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Basophilic Focus
 - Extramedullary Hematopoiesis
 - Hepatocellular Adenoma
 - Minimal
- [Hepatocellular Adenoma TGLs = 14-12]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 707

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-707

ORGAN AND ACCOUNTABLE SITE STATUS

[Infiltration Cellular TGLs = 13-10]

* Lymph Node, Mandibular

Hyperplasia

Lymphocyte, Moderate

Proliferation

Plasma Cell, Mild

* Mammary Gland

Adenocarcinoma

Duct

Dilation

Minimal

Fibroadenoma

Multiple

[Adenocarcinoma TGLs = 2-21]

[Fibroadenoma TGLs = 1,2,3-20,21,22]

* Nerve Trigeminal

Degeneration

Minimal

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

* Ovary

Atrophy

Moderate

Cyst

[Cyst TGLs = 5-16]

* Peripheral Nerve, Sciatic

Degeneration

Minimal

* Peripheral Nerve, Tibial

Degeneration

Minimal

* Pituitary Gland

Pars Distalis

Adenoma

* Spinal Cord, Lumbar

Nerve

Degeneration

Mild

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

Extramedullary Hematopoiesis

Moderate

Pigment

Minimal

* Thymus

Atrophy

Mild

Cyst

* Uterus

Endometrium

Hyperplasia

Epithelial, Minimal

Hyperplasia

Cystic, Minimal

Polyp Stromal

[Polyp Stromal TGLs = 6-16]

Animal Note: TGLs 7,8,12 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 708

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-708

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Liver | * Lymph Node, Mesenteric | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|---|----------------|-------------------------------|-------------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Clitoral Gland | Duct | Dilation | Moderate |
| | | Inflammation | Chronic Active, Minimal |
| * Eye | Retina | Atrophy | Minimal |
| * Harderian Gland | | Atrophy | Minimal |
| | | Inflammation | Granulomatous, Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | | Congestion | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| [Infiltration Cellular TGLs = 5-10] | | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Mild |
| | | Fibroadenoma | Multiple |
| | | Hyperplasia | Minimal |
| [Fibroadenoma TGLs = 1,2-20,21] | | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 708

TRT#: 2

SEX: Female

DAY ON TEST: 740

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-708

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Marked
	Bursa	Dilation	Mild
	[Dilation TGLs = 3-16]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
	[Hyperplasia TGLs = 6-4]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Thymoma Benign	
* Thyroid Gland	C Cell	Adenoma	
	[Adenoma TGLs = 4-8]		
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate
	Epithelium	Metaplasia	Squamous, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 709

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-709

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- Trigeminal Ganglion
- * Bone
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Rectum
- * Lung
- * Salivary Glands
- * Stomach, Glandular
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy Mild
 - Vacuolation, Cytoplasmic Minimal
 - [Vacuolation, Cytoplasmic TGLs = 6-7]
- * Adrenal Medulla
 - Hyperplasia Minimal
 - Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity Minimal
- * Brain
 - Compression Mild
 - [Compression TGLs = 9-2]
- * Clitoral Gland
 - Duct
 - Dilation Moderate
 - Inflammation Chronic Active, Minimal
 - [Dilation TGLs = 2-16]
- * Eye
 - Retina
 - Atrophy Minimal
- * Heart
 - Cardiomyopathy Minimal
- * Islets, Pancreatic
 - Adenoma
- * Kidney
 - Nephropathy Chronicprogr, Minimal
- * Liver
 - Eosinophilic Focus
 - Extramedullary Hematopoiesis Minimal
 - Mixed Cell Focus
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Mild
 - Proliferation Plasma Cell, Mild
- * Mammary Gland
 - Adenocarcinoma
 - Fibroadenoma
 - Hyperplasia Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 709

TRT#: 2

SEX: Female

DAY ON TEST: 738

DOSE: 0.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-709

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenocarcinoma TGLs = 4-21]

[Fibroadenoma TGLs = 3-20]

[Hyperplasia TGLs = 1-9]

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
	Olfactory Epi	Metaplasia	Respiratory, Minimal
* Ovary		Cyst	
	[Cyst TGLs = 5-16]		
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 10-4]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
		Polyp Stromal	

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 710

TRT#: 2

SEX: Female

DAY ON TEST: 629

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-710

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|----------------------|--------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Esophagus | * Harderian Gland | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Stomach, Glandular | * Thyroid Gland | Trigeminal Ganglion |
| * Urinary Bladder | | | |

AUTO PRECLUDES DIAG.

- | | | | |
|-----------|--------------------------|--------------------------|----------------------------|
| * Eye | * Intestine Large, Cecum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Trachea | | | |

OBSERVATIONS

- | | | | |
|---------------------------------------|-----------|--------------------------|-------------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| | | Vacuolation, Cytoplasmic | Minimal |
| * Brain | | Compression | Mild |
| [Compression TGLs = 11-2] | | | |
| * Clitoral Gland | | Inflammation | Chronic Active, Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Congestion | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| [Congestion TGLs = 7-10] | | | |
| [Infiltration Cellular TGLs = 6-10] | | | |
| Lymph Node | Iliac | Pigment | Minimal |
| | Iliac | Proliferation | Plasma Cell, Mild |
| [Pigment TGLs = 10-20] | | | |
| [Proliferation TGLs = 9-20] | | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| [Proliferation TGLs = 2-9] | | | |
| * Mammary Gland | Duct | Dilation | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 710

TRT#: 2

SEX: Female

DAY ON TEST: 629

DOSE: 0.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-710

ORGAN AND ACCOUNTABLE SITE STATUS

Galactocele

[Galactocele TGLs = 1-9,20]

* Nerve Trigeminal

Degeneration

Mild

* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

* Ovary

Atrophy

Mild

* Peripheral Nerve, Sciatic

Degeneration

Minimal

* Peripheral Nerve, Tibial

Degeneration

Minimal

* Pituitary Gland

Pars Distalis

Adenoma

[Adenoma TGLs = 12-4]

* Spinal Cord, Lumbar

Nerve

Degeneration

Minimal

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

Pigment

Moderate

* Stomach, Forestomach

Epithelium

Hyperplasia

Minimal

* Thymus

Hemorrhage

Mild

[Hemorrhage TGLs = 4-6]

* Thyroid Gland

Note: One of a pair available for evaluation.

* Uterus

Epithelium

Metaplasia

Squamous, Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGLs 3,5,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 816

TRT#: 4

SEX: Female

DAY ON TEST: 545

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-816

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|----------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lung | * Lymph Node, Mesenteric | * Nerve Trigeminal | * Pancreas |
| * Parathyroid Gland | * Peripheral Nerve, Tibial | * Pituitary Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

- * Clitoral Gland

OBSERVATIONS

- | | | | |
|-----------------------------|--|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Eosinophilic Focus | |
| | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Minimal |
| | [Fibroadenoma TGLs = 1-20] | Fibroadenoma | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| | Note: Longitudinal section available for evaluation. | | |
| * Spinal Cord, Lumbar | | Degeneration | Minimal |
| | Note: Affecting adjacent spinal nerves. | | |
| * Spinal Cord, Thoracic | | Degeneration | Minimal |
| * Spleen | | Extramedullary Hematopoiesis | Moderate |
| * Thymus | | Atrophy | Moderate |
| Trigeminal Ganglion | | Degeneration | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 816

TRT#: 4

SEX: Female

DAY ON TEST: 545

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-816

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 817

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-817

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Moderate
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Inflammation	Suppurative, Minimal
	Epithelium	Metaplasia	Squamous, Marked
	Cervix	Polyp Stromal	
		Sarcoma	
[Sarcoma TGLs = 5-20]			
Vagina		Sarcoma	Metastatic (Uterus)
Note: Cervix is the primary site			
[Sarcoma TGLs = 4,6-20]			

Animal Note: TGL 8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 818

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-818

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Degeneration
 - Hypertrophy
 - [Degeneration TGLs = 5-7]
- * Bone Marrow
 - Hypercellularity
- * Clitoral Gland
 - Duct
 - Dilation
 - [Dilation TGLs = 2-16]
- * Liver
 - Basophilic Focus
 - Eosinophilic Focus
 - [Eosinophilic Focus TGLs = 10-20]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - [Infiltration Cellular TGLs = 7,8-10,20,21]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Adenocarcinoma
 - Duct
 - Dilation
 - Galactocele
- Note: Carcinoma arising within a fibroadenoma.
 - [Adenocarcinoma TGLs = 1-22]
 - [Galactocele TGLs = 3-20]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 818

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-818

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Marked
	Rete Ovarii	Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
	[Hyperplasia TGLs = 9-4]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Moderate
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Moderate
Tissue NOS	Fat	Necrosis	Moderate
	[Necrosis TGLs = 4-21]		
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Marked

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 819

TRT#: 4

SEX: Female

DAY ON TEST: 737

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-819

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Marked

[Hyperplasia TGLs = 4-16]

Experiment Number: 20105 - 59
 Test Type: CHRONIC
 Route: Whole Body Exposure
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Cell Phone Radiation: GSM
 CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
 Time Report Requested: 11:58:55
 First Dose M/F: 09/16/12 / 09/16/12
 Lab: IIT

ANIMAL ID: 820

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-820

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	Skeletal Muscle	* Skin	* Spinal Cord, Cervical
* Stomach, Forestomach	* Stomach, Glandular	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Adrenal Cortex		Degeneration	Cystic, Minimal
		Hypertrophy	Minimal
* Eye	Retina	Atrophy	Minimal
* Kidney		Nephropathy	Chronicprogr, Minimal
* Liver		Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
	[Infiltration Cellular TGLs = 2-10]		
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Mild
		Proliferation	Plasma Cell, Mild
* Mammary Gland		Adenoma	
	Duct	Dilation	Minimal
	[Adenoma TGLs = 1-20]	Hyperplasia	Mild
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Atrophy	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 820

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-820

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus		Pigment	Minimal
* Thyroid Gland		Atrophy	Moderate
Trigeminal Ganglion	C Cell	Hyperplasia	Minimal
		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 821

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-821

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Brain
* Esophagus	* Eye	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland	* Salivary Glands
Skeletal Muscle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Mild
* Bone Marrow		Hypercellularity	Marked
* Clitoral Gland	Duct	Dilation	Moderate
		Inflammation	Suppurative, Minimal
	[Dilation TGLs = 2,3-16]		
* Harderian Gland		Inflammation	Chronic, Minimal
* Liver		Eosinophilic Focus	
		Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	[Infiltration Cellular TGLs = 9-10]		
Lymph Node	Inguinal	Infiltration Cellular	Plasma Cell, Minimal
	[Infiltration Cellular TGLs = 8-21]		
* Mammary Gland	Duct	Dilation	Minimal
		Fibroadenoma	
		Hyperplasia	Marked
	[Fibroadenoma TGLs = 1,4-20,21]		
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary	Bursa	Dilation	Mild
	Rete Ovarii	Hyperplasia	Moderate
		Inflammation	Suppurative, Moderate
	[Dilation TGLs = 5-16]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 821

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-821

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 10-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Cyst	
* Thyroid Gland	Follicle	Cyst	
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Inflammation	Suppurative, Marked
	Epithelium	Metaplasia	Squamous, Marked
[Inflammation TGLs = 6,7-16]			

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 822

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-822

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Trachea
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 11-7]
 - * Bone Marrow
 - * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
 - * Clitoral Gland
 - [Dilation TGLs = 5,6-16]
 - * Eye
 - * Heart
 - * Kidney
 - * Liver
 - [Eosinophilic Focus TGLs = 10-20]
 - * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 12-10]
 - * Lymph Node, Mandibular
 - * Mammary Gland
 - Duct
- | | | |
|--|-----------------------|-----------------------|
| | Degeneration | Cystic, Minimal |
| | Hypertrophy | Mild |
| | Hypercellularity | Minimal |
| | Dilation | Marked |
| | Atrophy | Minimal |
| | Cardiomyopathy | Minimal |
| | Nephropathy | Chronicprogr, Minimal |
| | Eosinophilic Focus | |
| | Congestion | Minimal |
| | Infiltration Cellular | Histiocyte, Mild |
| | Hyperplasia | Lymphocyte, Minimal |
| | Proliferation | Plasma Cell, Minimal |
| | Adenoma | |
| | Dilation | Moderate |
| | Fibroadenoma | Multiple |
| | Galactocele | |
| | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 822

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-822

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 3-22]

[Dilation TGLs = 4-9.1]

[Fibroadenoma TGLs = 1,2-20,21]

[Galactocele TGLs = 7-16]

* Nerve Trigeminal

Degeneration

Mild

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

* Ovary

Atrophy

Marked

Bursa

Dilation

Mild

Rete Ovarii

Hyperplasia

Mild

[Dilation TGLs = 15-16]

* Peripheral Nerve, Sciatic

Degeneration

Minimal

* Peripheral Nerve, Tibial

Degeneration

Minimal

* Pituitary Gland

Pars Distalis

Hyperplasia

Mild

Note: Pars distalis available for evaluation.

[Hyperplasia TGLs = 13-4]

* Spinal Cord, Lumbar

Nerve

Degeneration

Moderate

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

Extramedullary Hematopoiesis

Mild

* Thymus

Pigment

Moderate

Atrophy

Mild

Cyst

* Thyroid Gland

C Cell

Hyperplasia

Marked

Trigeminal Ganglion

Degeneration

Minimal

* Uterus

Endometrium

Hyperplasia

Cystic, Moderate

Hyperplasia

Stromal, Mild

Epithelium

Metaplasia

Squamous, Marked

[Hyperplasia TGLs = 8-16]

Animal Note: TGLs 9,14 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 823

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-823

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Bone
- * Esophagus
- * Eye
- * Heart
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Nerve Trigeminal
- * Pancreas
- * Parathyroid Gland
- * Salivary Glands
- Skeletal Muscle
- * Skin
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Mild
 - Hypertrophy
 - Minimal
- * Adrenal Medulla
 - Hyperplasia
 - Minimal

Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity
 - Mild
- * Brain
 - Meninges
 - Granular Cell Tumor Benign
- * Clitoral Gland
 - Duct
 - Dilation
 - Marked

[Dilation TGLs = 3,4-16]
- * Harderian Gland
 - Inflammation
 - Granulomatous, Minimal
- * Kidney
 - Renal Tubule
 - Hypertrophy
 - Minimal
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Bile Duct
 - Angiectasis
 - Mild
 - Cyst
 - Hepatocellular Adenoma

[Angiectasis TGLs = 6-12]

[Cyst TGLs = 9-21]

[Hepatocellular Adenoma TGLs = 10-20]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Mild

[Infiltration Cellular TGLs = 7-10]
- * Lymph Node, Mandibular
 - Proliferation
 - Plasma Cell, Minimal
- * Lymph Node, Mesenteric
 - Hyperplasia
 - Lymphocyte, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Minimal
 - Fibroadenoma
 - Multiple

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 823

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-823

ORGAN AND ACCOUNTABLE SITE STATUS

[Dilation TGLs = 2-9]

[Fibroadenoma TGLs = 1,11-20,21]

* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Marked
	Rete Ovarii	Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Intermed	Cyst	
	Pars Distalis	Hyperplasia	Moderate

Note: Cysts filled with blood.

[Cyst TGLs = 8-4]

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
		Polyp Stromal	Multiple

[Polyp Stromal TGLs = 5-16]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 824

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-824

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skeletal Muscle
- * Stomach, Glandular
- * Heart
- * Intestine Small, Duodenum
- * Pancreas
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - Hyperplasia
 - Hypercellularity
 - Compression
 - Cyst
 - Cystic, Minimal
 - Minimal
- * Adrenal Medulla
 - Hyperplasia
 - Minimal
- * Bone Marrow
 - Hypercellularity
 - Marked
- * Brain
 - Hypothalamus
 - [Compression TGLs = 6-2]
 - Compression
 - Cyst
 - Minimal
- * Clitoral Gland
 - Inflammation
 - Chronic Active, Mild
- * Eye
 - Retina
 - Atrophy
 - Minimal
- * Harderian Gland
 - Inflammation
 - Granulomatous, Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Eosinophilic Focus
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 5-10]
 - Infiltration Cellular
 - Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Lymph Sinus
 - Ectasia
 - Hyperplasia
 - Proliferation
 - Minimal
- * Lymph Node, Mesenteric
 - Infiltration Cellular
 - Histiocyte, Mild
- * Mammary Gland
 - Duct
 - Dilation
 - Minimal
- * Nerve Trigeminal
 - Hyperplasia
 - Minimal
- * Nose
 - Olfactory Epi
 - Degeneration
 - Mild
- * Ovary
 - Accumulation, Hyaline Droplet
 - Moderate
 - Atrophy
 - Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 824

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-824

ORGAN AND ACCOUNTABLE SITE STATUS

	Rete Ovarii	Cyst Hyperplasia	Minimal
[Cyst TGLs = 2,3-16]			
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 7-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
[Extramedullary Hematopoiesis TGLs = 10-12]			
* Thymus		Atrophy	Minimal
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Epithelial, Minimal
Trigeminal Ganglion		Hyperplasia	Minimal
* Uterus		Degeneration	Minimal
		Dilation	Marked
		Inflammation	Suppurative, Marked
[Dilation TGLs = 1-16]			
[Inflammation TGLs = 8-16]			

Animal Note: TGLs 4,9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 825

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-825

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Stomach, Glandular
- * Uterus
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Kidney
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Salivary Glands
- * Spinal Cord, Lumbar
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Bone Marrow
 - Hypercellularity
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
- [Inflammation TGLs = 1-16]
- * Harderian Gland
 - Atrophy
 - Inflammation
- * Islets, Pancreatic
 - Adenoma
- * Lung
 - Alveolus
 - Infiltration Cellular
- [Infiltration Cellular TGLs = 2-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Hyperplasia
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Accumulation, Hyaline Droplet
- * Ovary
 - Rete Ovarii
 - Hyperplasia
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Hyperplasia
- * Spinal Cord, Thoracic
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 825

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-825

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 826

TRT#: 4

SEX: Female

DAY ON TEST: 682

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-826

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Thyroid Gland
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Pancreas
- * Skin
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Brain
- * Heart
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Clitoral Gland
- Duct
- Note: One of pair available for evaluation.
- * Kidney
- * Liver
- * Lung
- [Infiltration Cellular TGLs = 3-10]
- * Lymph Node, Mandibular
- * Mammary Gland
- [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
- * Nose
- Olfactory Epi
- Note: Approximately two-thirds of Level 3 available for evaluation.
- * Ovary
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- Necrosis
- Hypercellularity
- Dilation
- Nephropathy
- Basophilic Focus
- Eosinophilic Focus
- Extramedullary Hematopoiesis
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Cyst
- Degeneration
- Degeneration
- Mild
- Marked
- Moderate
- Chronicprogr, Minimal
- Minimal
- Histiocyte, Moderate
- Lymphocyte, Moderate
- Plasma Cell, Mild
- Minimal
- Moderate
- Mild
- Mild
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 826

TRT#: 4

SEX: Female

DAY ON TEST: 682

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-826

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
	[Extramedullary Hematopoiesis TGLs = 2-12]		
* Thymus		Atrophy	Moderate
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

PRIMARY CAUSE OF DEATH

- UNCERTAIN

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 827

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-827

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skin
- * Thyroid Gland
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Spinal Cord, Cervical
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Bone Marrow
 - Hypercellularity
- * Clitoral Gland
 - Inflammation
- * Eye
 - Retina
 - Atrophy
- * Harderian Gland
 - Atrophy
 - Inflammation
- * Liver
 - Extramedullary Hematopoiesis
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 5-10]
 - Infiltration Cellular
- * Lymph Node, Mandibular
 - Proliferation
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - [Dilation TGLs = 1-21]
 - [Fibroadenoma TGLs = 2-20]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
 - Cyst
 - [Cyst TGLs = 8-16]
- * Parathyroid Gland
 - Fibrosis
- * Peripheral Nerve, Sciatic
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 827

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-827

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 6,7-4]			
* Spinal Cord, Lumbar		Cyst	
	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
		Cyst	
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Mild

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 828

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-828

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Uterus
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Liver
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Minimal
 - Hypertrophy Minimal
 - Thrombus Minimal
 - Vacuolation, Cytoplasmic Minimal
- * Clitoral Gland
 - Duct Dilation Moderate
- * Heart
 - Cardiomyopathy Minimal
- * Kidney
 - Nephropathy Chronicprogr, Minimal
- * Lung
 - Hemorrhage TGLs = 6-10] Mild
 - [Infiltration Cellular TGLs = 5-10] Infiltration Cellular Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Minimal
 - Proliferation Plasma Cell, Minimal
- * Lymph Node, Mesenteric
 - Lymph Sinus Ectasia Minimal
 - Erythrophagocytosis Minimal
- * Mammary Gland
 - Fibroadenoma TGLs = 1-22] Marked
 - [Hyperplasia TGLs = 2-20]
- * Nerve Trigeminal
 - Degeneration Mild
- * Nose
 - Olfactory Epi Accumulation, Hyaline Droplet Moderate
- * Ovary
 - Bursa Dilatation Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 828

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-828

ORGAN AND ACCOUNTABLE SITE STATUS

[Dilation TGLs = 4-16]

* Peripheral Nerve, Sciatic

Degeneration

Minimal

* Peripheral Nerve, Tibial

Degeneration

Mild

* Pituitary Gland

Pars Distalis

Hyperplasia

Mild

* Skin

Subcut Tiss

Fibroma

[Fibroma TGLs = 3-21]

* Spinal Cord, Lumbar

Nerve

Degeneration

Mild

* Spinal Cord, Thoracic

Degeneration

Mild

* Spleen

Extramedullary Hematopoiesis

Mild

Pigment

Mild

* Thymus

Atrophy

Mild

* Thyroid Gland

C Cell

Hyperplasia

Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 829

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-829

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- * Trachea
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Kidney
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Uterus

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Bone Marrow
 - Hypercellularity
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
- * Eye
 - Note: One eye is damaged.
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Cardiomyopathy
- * Liver
 - Sinusoid
 - Dilation
 - Eosinophilic Focus
 - Extramedullary Hematopoiesis
 - Necrosis
 - Centrilobular, Hepatocyte
 - [Eosinophilic Focus TGLs = 7-12]
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular
 - Proliferation
- * Mammary Gland
 - Fibroadenoma
 - Hyperplasia
 - [Fibroadenoma TGLs = 1-20,21RT]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 829

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-829

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary	Respirat Epith	Accumulation, Hyaline Droplet Cyst	Minimal
* Pancreas	Rete Ovarii	Hyperplasia	Moderate
* Peripheral Nerve, Sciatic	Acinus	Hyperplasia	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
[Extramedullary Hematopoiesis	TGLs = 2-12]		
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Animal Note: TGLs 3,5 = NCL (No Corresponding Lesion)

Animal Note: TGL 6 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 830

TRT#: 4

SEX: Female

DAY ON TEST: 745

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-830

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Liver
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Spinal Cord, Cervical
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - [Degeneration TGLs = 3-7]
- * Clitoral Gland
 - Duct
 - Dilation
 - [Dilation TGLs = 2-16]
- * Eye
 - Retina
 - Atrophy
- * Heart
 - Cardiomyopathy
 - Hyperplasia
- * Islets, Pancreatic
 - Nephropathy
- * Kidney
 - Alveolus
 - Infiltration Cellular
 - [Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - [Fibroadenoma TGLs = 1-9]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Rete Ovarii
 - Atrophy
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 830

TRT#: 4

SEX: Female

DAY ON TEST: 745

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-830

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland		Fibrosis	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 5,6-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 831

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-831

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Brain
- * Heart
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Medulla
[Pheochromocytoma Complex TGLs = 5-7]
- * Bone Marrow
- * Clitoral Gland Duct
- * Intestine Large, Rectum
- * Kidney
- * Liver
[Mixed Cell Focus TGLs = 4-12]
- * Lung
[Infiltration Cellular TGLs = 6-10]
- * Lymph Node, Mandibular
- * Mammary Gland
[Fibroadenoma TGLs = 1,2-20,21]
- * Nerve Trigeminal
- * Nose Olfactory Epi
- * Ovary
[Cyst TGLs = 3-16]
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- Pheochromocytoma Complex
- Hypercellularity
- Dilation
- Hyperplasia
- Nephropathy
- Basophilic Focus
- Eosinophilic Focus
- Mixed Cell Focus
- Infiltration Cellular
- Hyperplasia
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Cyst
- Degeneration
- Degeneration
- Minimal
- Marked
- Lymphocyte, Moderate
- Chronicprogr, Minimal
- Histiocyte, Minimal
- Lymphocyte, Minimal
- Multiple
- Mild
- Moderate
- Moderate
- Mild
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 831

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-831

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 832

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-832

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|---|---------------|--|---|
| * Adrenal Cortex | | Degeneration
Hyperplasia
Hypertrophy
Vacuolation, Cytoplasmic | Cystic, Minimal
Minimal
Mild
Minimal |
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Bone Marrow | | Hypercellularity | Marked |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Clitoral Gland | Duct | Dilation | Mild |
| * Liver | | Basophilic Focus | |
| * Lung | Alveolus | Foreign Body
Infiltration Cellular
Inflammation | Histiocyte, Minimal
Granulomatous, Minimal |
| [Infiltration Cellular TGLs = 5-10] | | | |
| * Mammary Gland | Duct | Dilation
Fibroadenoma | Minimal |
| [Fibroadenoma TGLs = 1-20] | | | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 832

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-832

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
		Inflammation	Chronic Active, Minimal
* Thymus		Atrophy	Mild
		Cyst	
	[Atrophy TGLs = 4-6]		
* Uterus		Polyp Stromal	
	[Polyp Stromal TGLs = 3-16]		

Animal Note: TGL 2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 833

TRT#: 4

SEX: Female

DAY ON TEST: 718

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-833

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
		Pigment	Moderate
* Thymus		Hemorrhage	Mild
* Uterus	Epithelium	Metaplasia	Squamous, Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 836

TRT#: 4

SEX: Female

DAY ON TEST: 464

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-836

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Brain
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Nerve Trigeminal	* Pancreas	* Parathyroid Gland	* Peripheral Nerve, Sciatic
* Peripheral Nerve, Tibial	* Pituitary Gland	* Salivary Glands	Skeletal Muscle
* Skin	* Spinal Cord, Cervical	* Spinal Cord, Thoracic	* Stomach, Forestomach
* Stomach, Glandular	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Marked
* Bone Marrow		Hypercellularity	Marked
* Brain			
Note: Olfactory bulbs unavailable for evaluation.			
* Clitoral Gland	Duct	Dilation	Moderate
* Kidney		Nephropathy	Chronicprogr, Minimal
* Liver		Eosinophilic Focus	
		Extramedullary Hematopoiesis	Minimal
		Infiltration Cellular	Mixed Cell, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
	[Infiltration Cellular TGLs = 2-10]		
* Lymph Node, Mandibular		Proliferation	Plasma Cell, Mild
* Mammary Gland	Duct	Adenocarcinoma	
		Dilation	Minimal
		Galactoceles	
	[Adenocarcinoma TGLs = 1-20]		
	[Galactoceles TGLs = 3-9]		
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Moderate
		Cyst	
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 836

TRT#: 4

SEX: Female

DAY ON TEST: 464

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-836

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Extramedullary Hematopoiesis	Marked
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Mild

PRIMARY CAUSE OF DEATH - Mammary Gland Adenocarcinoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 837

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-837

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Mammary Gland
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea
- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Kidney
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Parathyroid Gland
- * Skin
- * Thymus

OBSERVATIONS

- * Bone Marrow Hypercellularity Minimal
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland Duct Dilation Moderate
 - [Dilation TGLs = 1,7-16] Inflammation Chronic Active, Minimal
- * Eye Retina Atrophy Minimal
 - [Leiomyosarcoma TGLs = 5-14] Leiomyosarcoma
- * Liver
- * Lung Alveolus Basophilic Focus Infiltration Cellular Histiocyte, Minimal
 - [Infiltration Cellular TGLs = 6-10]
- * Nerve Trigeminal Degeneration Moderate
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Minimal
- * Ovary Atrophy Marked
- * Peripheral Nerve, Sciatic Degeneration Minimal
- * Peripheral Nerve, Tibial Degeneration Minimal
- * Pituitary Gland
 - Note: Pars distalis available for evaluation.
- * Spinal Cord, Lumbar Nerve Degeneration Minimal
- * Spinal Cord, Thoracic Degeneration Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 837

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-837

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate
		Inflammation	Suppurative, Mild
		Polyp Stromal	Multiple
	[Inflammation TGLs = 3-16]		
	[Polyp Stromal TGLs = 2+4-16,20]		

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 838

TRT#: 4

SEX: Female

DAY ON TEST: 602

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-838

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Thoracic
- * Urinary Bladder
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Thyroid Gland
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Nerve Trigeminal
- * Spinal Cord, Cervical
- * Trachea
- * Brain
- * Heart
- * Intestine Small, Jejunum
- * Pancreas
- * Spinal Cord, Lumbar
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Small, Ileum

OBSERVATIONS

- * Adrenal Cortex Hypertrophy Moderate
 Note: One adrenal gland completely necrotic.
 [Hypertrophy TGLs = 4-7]
- * Adren Medulla Hypercellularity Marked
 Note: One adrenal gland completely necrotic.
- * Bone Marrow Dilation Mild
- * Clitoral Gland Ulcer Marked
- * Intestine Small, Duodenum Necrosis Mild
 [Ulcer TGLs = 21-26RT]
- * Kidney Cyst Mild
- * Liver Necrosis Mild
 Renal Tubule Vacuolation, Cytoplasmic Moderate
 Bile Duct
 Centrilobular, Hepatocyte
 Centrilobular, Hepatocyte
 [Cyst TGLs = 10,11,12-20]
 [Vacuolation, Cytoplasmic TGLs = 9-12,20]
- * Lung Basal Cell Carcinoma Metastatic (Skin)
 Alveolus Infiltration Cellular Histiocyte, Mild
 Note: Some histiocytic infiltrates associated with linear eosinophilic crystalline material.
 [Basal Cell Carcinoma TGLs = 16-10]
 [Infiltration Cellular TGLs = 15,18-10,24]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 838

TRT#: 4

SEX: Female

DAY ON TEST: 602

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-838

ORGAN AND ACCOUNTABLE SITE STATUS

Lymph Node	Lumbar	Basal Cell Carcinoma	Metastatic (Skin)
	Lumbar	Erythrophagocytosis	Mild
[Erythrophagocytosis	TGLs = 13,14-21]		
* Lymph Node, Mandibular		Proliferation	Plasma Cell, Mild
* Mammary Gland	Duct	Dilation	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Salivary Glands	Submandibul GI	Atrophy	Mild
	Parotid GI	Atrophy	Mild
* Skin		Basal Cell Carcinoma	
		Cyst Epithelial Inclusion	
[Basal Cell Carcinoma	TGLs = 2-23]		
[Cyst Epithelial Inclusion	TGLs = 1-22]		
* Spleen		Extramedullary Hematopoiesis	Marked
[Extramedullary Hematopoiesis	TGLs = 3-12]		
* Stomach, Forestomach		Ulcer	Marked
* Stomach, Glandular		Erosion	Marked
* Thymus		Atrophy	Marked
* Uterus	Epithelium	Metaplasia	Squamous, Mild
		Polyp Stromal	
[Polyp Stromal	TGLs = 8-16]		

PRIMARY CAUSE OF DEATH - Skin Basal Cell Carcinoma

Animal Note: TGLs 7, 17, 19 and 20 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 839

TRT#: 4

SEX: Female

DAY ON TEST: 745

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-839

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Liver |
| * Lung | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|---|---------------|-------------------------------|-------------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Bone | | Increased Bone | Minimal |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Clitoral Gland | Duct | Dilation | Mild |
| | | Inflammation | Chronic Active, Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | |
| [Dilation TGLs = 2-9] | | | |
| [Fibroadenoma TGLs = 1-20] | | | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Marked |
| | | Cyst | |
| [Cyst TGLs = 3-16] | | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 839

TRT#: 4

SEX: Female

DAY ON TEST: 745

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-839

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Cyst	
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Minimal

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 840

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-840

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nerve Trigeminal | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Trachea | * Urinary Bladder | * Uterus |

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|-----------------------------|----------------|-------------------------------|-------------------------|
| * Adrenal Cortex | | Atrophy | Moderate |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Clitoral Gland | Duct | Dilation | Minimal |
| | | Inflammation | Chronic Active, Minimal |
| * Harderian Gland | | Atrophy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Mild |
| | | Infiltration Cellular | Mononuclear Cl, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Nose | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | Olfactory Epi | Degeneration | Minimal |
| * Ovary | | Atrophy | Marked |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Atrophy | Moderate |
| | Pars Distalis | Hyperplasia | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 840

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-840

ORGAN AND ACCOUNTABLE SITE STATUS

[Atrophy TGLs = 1-4]

* Spinal Cord, Cervical

Degeneration

Minimal

* Spinal Cord, Lumbar

Degeneration

Minimal

Nerve

Degeneration

Mild

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

Pigment

Moderate

* Thyroid Gland

C Cell

Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 841

TRT#: 4

SEX: Female

DAY ON TEST: 626

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-841

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Harderian Gland
- * Spinal Cord, Cervical
Trigeminal Ganglion
- * Brain
- * Islets, Pancreatic
- * Stomach, Glandular
- * Clitoral Gland
- * Lymph Node, Mandibular
- * Thyroid Gland
- * Esophagus
- * Skin
- * Trachea

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Small, Ileum
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Intestine Large, Colon
- * Urinary Bladder
- * Intestine Large, Rectum

INSUFFICIENT TISSUE

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Adenocarcinoma
 - Degeneration
 - Hypertrophy
 - Mineral
- * Aorta
 - Fibrous Osteodystrophy
- * Bone
 - Hypercellularity
- * Bone Marrow
 - Metastatic (Intestine Small, Duodenum)
 - Cystic, Minimal
 - Mild
- * Brain
 - Minimal
- * Brain
 - Note: Olfactory bulbs not available for evaluation.
- * Heart
 - Myocardium
 - Cardiomyopathy
 - Mineral
 - Vein
 - Mineral
- * Intestine Small, Duodenum
 - Adenocarcinoma
- * Kidney
 - Pelvis
 - Adenocarcinoma
 - Dilation
 - [Adenocarcinoma TGLs = 8-13]
 - [Dilation TGLs = 6-13]
- * Liver
 - Adenocarcinoma
- * Liver
 - [Adenocarcinoma TGLs = 11-12]
- * Lung
 - Alveolus
 - Infiltration Cellular

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 841

TRT#: 4

SEX: Female

DAY ON TEST: 626

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-841

ORGAN AND ACCOUNTABLE SITE STATUS

[Infiltration Cellular TGLs = 1-10]

Lymph Node	Mediastinal	Adenocarcinoma	Metastatic (Intestine Small, Duodenum)
	Bronchial	Adenocarcinoma	Metastatic (Intestine Small, Duodenum)

[Adenocarcinoma TGLs = 3,4,5-6]

* Lymph Node, Mesenteric		Adenocarcinoma	Metastatic (Intestine Small, Duodenum)
* Mammary Gland	Duct	Dilation	Minimal
		Fibroadenoma	
		Hyperplasia	Minimal

[Fibroadenoma TGLs = 2-20]

Mesentery		Adenocarcinoma	Metastatic (Intestine Small, Duodenum)
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[Adenocarcinoma TGLs = 13,14,15,16,17,19,21-13,14,15,21]

* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
* Ovary		Adenocarcinoma	Metastatic (Intestine Small, Duodenum)
		Atrophy	Moderate

Note: One of pair available for evaluation.

* Pancreas		Adenocarcinoma	Metastatic (Intestine Small, Duodenum)
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Salivary Glands	Parotid GI	Atrophy	Moderate
Skeletal Muscle	Diaphragm	Adenocarcinoma	Metastatic (Intestine Small, Duodenum)
		Degeneration	Minimal

[Adenocarcinoma TGLs = 9,10-20,22]

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	Capsule	Adenocarcinoma	Metastatic (Intestine Small, Duodenum)
	White Pulp	Atrophy	Mild
		Pigment	Mild

[Atrophy TGLs = 18-12]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 841

TRT#: 4

SEX: Female

DAY ON TEST: 626

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-841

ORGAN AND ACCOUNTABLE SITE STATUS

* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
[Hyperplasia TGLs = 22-14,23RT]			
* Thymus		Atrophy	Marked
* Uterus		Dilation	Marked
[Dilation TGLs = 12-16]			

PRIMARY CAUSE OF DEATH - Intestine Small, Duodenum Adenocarcinoma

Animal Note: TGLs 7,20 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 842

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-842

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Stomach, Glandular
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Pancreas
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Bone Marrow
 - Hypercellularity
- * Eye
 - Atrophy
- * Islets, Pancreatic
 - Hyperplasia
- * Kidney
 - Nephropathy
- * Liver
 - Eosinophilic Focus
 - Mixed Cell Focus
- [Eosinophilic Focus TGLs = 5-20]
- [Mixed Cell Focus TGLs = 4-12]
- * Lung
 - Infiltration Cellular
 - Inflammation
- [Infiltration Cellular TGLs = 6-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Dilation
 - Fibroadenoma
 - Hyperplasia
- [Fibroadenoma TGLs = 2-20]
- [Hyperplasia TGLs = 1-9]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Accumulation, Hyaline Droplet

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 842

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-842

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Marked
		Cyst	
	[Cyst TGLs = 7-16]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Marked
Vagina		Granular Cell Tumor Benign	
	[Granular Cell Tumor Benign TGLs = 3-20]		

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 843

TRT#: 4

SEX: Female

DAY ON TEST: 716

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-843

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Colon
- * Islets, Pancreatic
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Pancreas
- * Skin
- * Thyroid Gland
- * Bone
- * Eye
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Small, Jejunum
- * Salivary Glands
- * Spinal Cord, Thoracic
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 3,4-7]
- * Bone Marrow
- * Clitoral GI
 - Note: One of pair available for evaluation.
- * Heart
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Kidney
- * Liver
- * Lung
 - [Infiltration Cellular TGLs = 8-10]
- Lymph Node
 - [Proliferation TGLs = 10-20]
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Mammary Gland
 - [Fibroadenoma TGLs = 2-20]
- * Nerve Trigeminal
- * Nose
- Degeneration
- Hypertrophy
- Hypercellularity
- Cardiomyopathy
- Inflammation
- Inflammation
- Nephropathy
- Inflammation
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Proliferation
- Infiltration Cellular
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Cystic, Marked
- Moderate
- Moderate
- Minimal
- Acute, Mild
- Acute, Minimal
- Chronicprogr, Mild
- Suppurative, Mild
- Histiocyte, Mild
- Lymphocyte, Minimal
- Plasma Cell, Moderate
- Plasma Cell, Minimal
- Histiocyte, Minimal
- Mild
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 843

TRT#: 4

SEX: Female

DAY ON TEST: 716

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-843

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Marked
	Rete Ovarii	Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 9-4]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thymus		Atrophy	Marked
Tissue NOS	Fat	Necrosis	Moderate
	[Necrosis TGLs = 1-20]		
* Uterus	Serosa	Inflammation	Suppurative, Marked
		Polyp Stromal	
	[Inflammation TGLs = 5,11-16]		
	[Polyp Stromal TGLs = 7-16]		

PRIMARY CAUSE OF DEATH - Uterus Serosa Inflammation

Animal Note: TGL 6 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 844

TRT#: 4

SEX: Female

DAY ON TEST: 622

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-844

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Lymph Node, Mesenteric	* Pancreas	* Pituitary Gland
* Salivary Glands	Skeletal Muscle	* Skin	* Spinal Cord, Cervical
* Spinal Cord, Thoracic	* Stomach, Glandular	* Thyroid Gland	* Trachea
Trigeminal Ganglion	* Urinary Bladder		

MISSING

* Parathyroid Gland

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Mild
		Vacuolation, Cytoplasmic	Mild
* Bone Marrow		Hypercellularity	Marked
* Liver		Extramedullary Hematopoiesis	Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
	[Infiltration Cellular TGLs = 2-10]		
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Mild
		Proliferation	Plasma Cell, Moderate
	[Proliferation TGLs = 3-9]		
* Mammary Gland	Duct	Dilation	Minimal
		Fibroadenoma	
	[Dilation TGLs = 5-9]		
	[Fibroadenoma TGLs = 1-20]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Moderate
	Rete Ovarii	Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 844

TRT#: 4

SEX: Female

DAY ON TEST: 622

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-844

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
[Extramedullary Hematopoiesis	TGLs = 4-12]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Inflammation	Chronic Active, Minimal
* Thymus		Atrophy	Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Marked

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 845

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-845

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Bone
- * Esophagus
- * Eye
- * Heart
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Liver
- * Lymph Node, Mesenteric
- * Pancreas
- * Parathyroid Gland
- * Salivary Glands
- Skeletal Muscle
- * Spinal Cord, Cervical
- * Spinal Cord, Thoracic
- * Stomach, Forestomach
- * Stomach, Glandular
- * Trachea
- * Urinary Bladder
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex Hyperplasia Moderate
- * Adrenal Medulla Hyperplasia Minimal
- * Bone Marrow Hypercellularity Minimal
- * Brain Carcinoma Metastatic (Pituitary Gland)
- Compression Mild

Note: Olfactory bulbs unavailable for evaluation.

[Compression TGLs = 8-2]

- * Clitoral Gland Duct Dilation Marked
- [Dilation TGLs = 3,4-16]
- * Harderian Gland Atrophy Minimal
- Inflammation Chronic, Minimal
- * Kidney Nephropathy Chronicprogr, Minimal
- * Lung Alveolus Infiltration Cellular Histiocyte, Minimal
- Inflammation Chronic Active, Minimal
- [Infiltration Cellular TGLs = 7-10]
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Minimal
- Proliferation Plasma Cell, Minimal
- * Mammary Gland Adenocarcinoma
- Duct Dilation Minimal
- Fibroadenoma Multiple
- Hyperplasia Minimal

Note: Carcinoma arising within a fibroadenoma.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 845

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-845

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenocarcinoma TGLs = 2-21]

[Fibroadenoma TGLs = 1,5,10-20,22,23]

* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Carcinoma	
	[Carcinoma TGLs = 9-4]		
* Skin	Subcut Tiss	Fibroma	
	[Fibroma TGLs = 5-22]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Inflammation	Suppurative, Minimal
	Epithelium	Metaplasia	Squamous, Marked
	[Metaplasia TGLs = 6-16]		

Experiment Number: 20105 - 59
 Test Type: CHRONIC
 Route: Whole Body Exposure
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM
 CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
 Time Report Requested: 11:58:55
 First Dose M/F: 09/16/12 / 09/16/12
 Lab: IIT

ANIMAL ID: 846

TRT#: 4

SEX: Female

DAY ON TEST: 690

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-846

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|----------------------|--------------------------|--------------------------|
| * Aorta | * Bone | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Ovary |
| * Parathyroid Gland | * Pituitary Gland | Skeletal Muscle | * Spinal Cord, Cervical |
| * Spinal Cord, Thoracic | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | * Uterus | |

AUTO PRECLUDES DIAG.

- | | | |
|-----------------------------|--------------------------|----------------------------|
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
|-----------------------------|--------------------------|----------------------------|

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|----------|
| * Adrenal Cortex | | Adenoma | |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Bone Marrow | | Histiocytic Sarcoma | |
| | | Hypercellularity | Marked |
| * Brain | | Histiocytic Sarcoma | |
| * Harderian Gland | | Atrophy | Minimal |
| * Kidney | Renal Tubule | Accumulation, Hyaline Droplet | Marked |
| | | Histiocytic Sarcoma | |
| * Liver | | Histiocytic Sarcoma | |
| | [Histiocytic Sarcoma TGLs = 8-12] | | |
| * Lung | | Histiocytic Sarcoma | |
| | [Histiocytic Sarcoma TGLs = 2,3-10] | | |
| * Lymph Node, Mandibular | | Histiocytic Sarcoma | |
| | [Histiocytic Sarcoma TGLs = 1-9] | | |
| * Mammary Gland | | Hyperplasia | Moderate |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | | Histiocytic Sarcoma | |
| * Pancreas | | Histiocytic Sarcoma | |
| | [Histiocytic Sarcoma TGLs = 4-21] | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 846

TRT#: 4

SEX: Female

DAY ON TEST: 690

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-846

ORGAN AND ACCOUNTABLE SITE STATUS

* Salivary Glands		Histiocytic Sarcoma	
* Skin	Subcut Tiss	Histiocytic Sarcoma	
	[Histiocytic Sarcoma TGLs = 6,9-20,21]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen	White Pulp	Atrophy	Mild
		Extramedullary Hematopoiesis	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
* Thymus		Atrophy	Moderate
		Ectopic Thyroid	

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Histiocytic Sarcoma

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Animal Note: TGL 7 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 847

TRT#: 4

SEX: Female

DAY ON TEST: 657

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-847

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pituitary Gland
- * Spinal Cord, Thoracic
- * Urinary Bladder
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Lymph Node, Mandibular
- * Salivary Glands
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Sarcoma Stromal
 - Vacuolation, Cytoplasmic
 - Hypercellularity
- * Bone Marrow
 - Dilation
- * Clitoral Gland
 - Duct
- * Intestine Small, Jejunum
 - [Dilation TGLs = 14-16]
 - Serosa
 - [Sarcoma Stromal TGLs = 20-14]
- * Islets, Pancreatic
 - Hyperplasia
- * Kidney
 - Pelvis
 - Dilation
 - Sarcoma Stromal
- * Liver
 - [Dilation TGLs = 5-13]
 - [Sarcoma Stromal TGLs = 4,7,8-13,20]
 - Sarcoma Stromal
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Sarcoma Stromal
- * Mammary Gland
 - [Infiltration Cellular TGLs = 11-10]
 - [Sarcoma Stromal TGLs = 12-10]
 - Duct
 - Dilation
 - Fibroadenoma
 - Galactocele

[Galactocele TGLs = 13-9,16]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 847

TRT#: 4

SEX: Female

DAY ON TEST: 657

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-847

ORGAN AND ACCOUNTABLE SITE STATUS

Mesentery		Sarcoma Stromal	Metastatic (Uterus)
[Sarcoma Stromal	TGLs = 18-14,15,20]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Moderate
		Cyst	
		Fibrosis	Moderate
	Rete Ovarii	Hyperplasia	Minimal
	Periovarn Tiss	Sarcoma Stromal	Metastatic (Uterus)
[Fibrosis	TGLs = 1-16]		
* Pancreas		Sarcoma Stromal	Metastatic (Uterus)
[Sarcoma Stromal	TGLs = 19-6,14]		
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
Skeletal Muscle		Sarcoma Stromal	Metastatic (Uterus)
[Sarcoma Stromal	TGLs = 9-20]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Mild
		Sarcoma Stromal	Metastatic (Uterus)
[Sarcoma Stromal	TGLs = 6-12]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		Ulcer	Minimal
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Sarcoma Stromal	
[Sarcoma Stromal	TGLs = 2,3-16.21]		

PRIMARY CAUSE OF DEATH - Uterus Sarcoma Stromal

Animal Note: TGLs 16,17,21 = NCL (No Corresponding Lesion)

Animal Note: TGL 15 = NST (No Section Taken)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 848

TRT#: 4

SEX: Female

DAY ON TEST: 699

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-848

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Parathyroid Gland
- * Skin
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Ovary
- * Salivary Glands
- * Stomach, Glandular
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- Skeletal Muscle
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Liver
- * Lung
- [Infiltration Cellular TGLs = 1-10]
- * Lymph Node, Mandibular
- * Mammary Gland
- [Fibroadenoma TGLs = 3-20]
- * Nerve Trigeminal
- * Nose
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Spinal Cord, Cervical
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- * Spleen
- * Thymus
- Trigeminal Ganglion
- * Uterus
- Alveolus
- Olfactory Epi
- Nerve
- Hyperplasia
- Hypercellularity
- Extramedullary Hematopoiesis
- Infiltration Cellular
- Inflammation
- Proliferation
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Degeneration
- Degeneration
- Degeneration
- Degeneration
- Degeneration
- Degeneration
- Extramedullary Hematopoiesis
- Atrophy
- Degeneration
- Hyperplasia
- Moderate
- Moderate
- Minimal
- Histiocyte, Minimal
- Chronic Active, Minimal
- Plasma Cell, Mild
- Mild
- Moderate
- Mild
- Mild
- Minimal
- Moderate
- Minimal
- Mild
- Mild
- Minimal
- Stromal, Mild

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 848

TRT#: 4

SEX: Female

DAY ON TEST: 699

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-848

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: TGL 2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 851

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-851

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | * Uterus |

OBSERVATIONS

- | | | | |
|-----------------------------|---|-------------------------------|---|
| * Clitoral Gland | | Hyperplasia
Inflammation | Focal, Moderate
Granulomatous, Marked |
| | [Hyperplasia TGLs = 1-16]
[Inflammation TGLs = 1-16] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Basophilic Focus | |
| | [Basophilic Focus TGLs = 4-20] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| Lymph Node | Inguinal | Hyperplasia | Lymphocyte, Mild |
| | [Hyperplasia TGLs = 2-20] | | |
| * Lymph Node, Mandibular | | Hyperplasia
Proliferation | Lymphocyte, Minimal
Plasma Cell, Minimal |
| * Mammary Gland | | Hyperplasia | Moderate |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Moderate |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Minimal |
| * Spinal Cord, Thoracic | | Degeneration | Mild |
| * Spleen | | Extramedullary Hematopoiesis | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 851

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-851

ORGAN AND ACCOUNTABLE SITE STATUS

Pigment

Moderate

Atrophy

Moderate

* Thymus

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 852

TRT#: 4

SEX: Female

DAY ON TEST: 493

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-852

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|-----------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Kidney | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Nerve Trigeminal |
| * Parathyroid Gland | * Peripheral Nerve, Sciatic | * Pituitary Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Spinal Cord, Lumbar |
| * Spinal Cord, Thoracic | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

- * Clitoral Gland

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|----------------------------|------------------------------|-------------------------------|--------------------|
| * Bone Marrow | | Hypercellularity | Mild |
| * Liver | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 3-21] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Moderate |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| Tissue NOS | Abdominal | Necrosis | Mild |
| | [Necrosis TGLs = 1-20] | | |
| * Uterus | Epithelium | Metaplasia | Squamous, Moderate |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 2 = NCL (No Corresponding Lesion)--Clitoral glands unavailable for evaluation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 853

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-853

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Brain
* Esophagus	* Eye	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	Skeletal Muscle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
Trigeminal Ganglion	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Minimal
* Bone Marrow		Hypercellularity	Mild
* Clitoral Gland	Duct	Dilation	Marked
[Dilation TGLs = 3,4-16]			
* Harderian Gland		Inflammation	Chronic, Minimal
* Islets, Pancreatic		Hyperplasia	Minimal
* Kidney		Nephropathy	Chronicprogr, Minimal
* Liver		Basophilic Focus	
		Infiltration Cellular	Mixed Cell, Minimal
		Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
[Infiltration Cellular TGLs = 8-10]			
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Mild
* Mammary Gland		Fibroadenoma	Multiple
		Hyperplasia	Mild
[Fibroadenoma TGLs = 1,2,7-20,21,9]			
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
	Olfactory Epi	Atrophy	Minimal
* Ovary		Cyst	
	Bursa	Dilation	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 853

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-853

ORGAN AND ACCOUNTABLE SITE STATUS

	Rete Ovarii	Hyperplasia	Minimal
	[Cyst TGLs = 6-16]		
	[Dilation TGLs = 5-16]		
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Cyst	

Animal Note: TGL 9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 854

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-854

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Clitoral Gland |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Parathyroid Gland | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | * Uterus |

OBSERVATIONS

- | | | | |
|----------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Moderate |
| * Bone Marrow | | Hypercellularity | Moderate |
| * Brain | | Compression | Mild |
| | | Hemorrhage | Minimal |
| | | Pigment | Minimal |
| | [Compression TGLs = 2-2] | | |
| * Islets, Pancreatic | | Adenoma | |
| * Kidney | Renal Tubule | Adenoma | |
| | [Adenoma TGLs = 7-13] | | |
| * Liver | | Infiltration Cellular | Mixed Cell, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 10-10] | | |
| Lymph Node | Renal | Erythrophagocytosis | Mild |
| | [Erythrophagocytosis TGLs = 9-20] | | |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | Multiple |
| | Note: Fibroadenoma also present on slide with female reproductive tissues. Was submitted asclitoral gland, though other submitted section contained both glands. | | |
| | [Fibroadenoma TGLs = 4,5,6-20,21,22] | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| | Note: Level 2 damaged. | | |
| * Ovary | | Atrophy | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 854

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-854

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Artery	Inflammation	Chronic Active, Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 1-4]			
* Salivary Glands	Parotid GI	Atrophy	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
		Degeneration	Minimal
* Spleen	Red Pulp	Atrophy	Mild
		Pigment	Mild
[Atrophy TGLs = 12-12]			
* Thymus		Atrophy	Moderate
[Atrophy TGLs = 8-6.1]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Animal Note: TGL 11 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 856

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-856

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Trachea
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Urinary Bladder
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Uterus

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Degeneration
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Meninges
 - Carcinoma
 - Compression
- * Clitoral Gland
 - [Compression TGLs = 15-2]
 - Duct
 - Dilation
- * Kidney
 - [Dilatation TGLs = 4-16]
 - Bilateral, Renal Tubule
 - Renal Tubule
 - Carcinoma
 - Hyperplasia
 - Nephropathy
- * Liver
 - [Carcinoma TGLs = 6,7-21]
 - [Hyperplasia TGLs = 8-13]
 - Bile Duct
 - Carcinoma
 - Cyst
- * Lung
 - [Cyst TGLs = 9-20]
 - Alveolus
 - Infiltration Cellular
- Lymph Node
 - [Infiltration Cellular TGLs = 13-21,10]
 - Iliac
 - Proliferation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 856

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-856

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Minimal
* Mammary Gland	Duct	Dilation	Mild
		Fibroadenoma	
		Galactocele	
	[Fibroadenoma TGLs = 1-20]		
	[Galactocele TGLs = 3-9]		
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Marked
		Cyst	
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 14-4]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	Red Pulp	Congestion	Moderate
		Hyperplasia	Moderate
	[Hyperplasia TGLs = 5,16-12]		
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Mild
	[Atrophy TGLs = 11-6]		
* Thyroid Gland		Carcinoma	Metastatic (Kidney)
	[Carcinoma TGLs = 12-8]		
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGL 2 = NST (No Section Taken)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 857

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-857

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Stomach, Forestomach
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Stomach, Glandular
- * Eye
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - * Adrenal Medulla
 - * Bone Marrow
 - * Brain
 - Meninges
 - Note: Olfactory bulbs unavailable for evaluation.
 - * Clitoral Gland
 - Duct
 - [Dilation TGLs = 2-16]
 - * Harderian Gland
 - * Heart
 - Ventricl Rgt
 - Myocardium
 - [Hypertrophy TGLs = 15-11]
 - * Kidney
 - Bilateral, Renal Tubule
 - Renal Tubule
 - [Carcinoma TGLs = 5-13]
 - [Cyst TGLs = 6-20]
 - * Liver
 - * Lung
 - Lymph Node
 - Bile Duct
 - Interstitialium
 - Alveolus
 - Pancreatic
 - Renal
 - Mediastinal
- Accessory Adrenal Cortical Nodule
Hyperplasia
Hypercellularity
Carcinoma
Dilation
Inflammation
Atrophy
Cardiomyopathy
Hypertrophy
Carcinoma
Cyst
Nephropathy
Eosinophilic Focus
Hyperplasia
Fibrosis
Infiltration Cellular
Erythrophagocytosis
Erythrophagocytosis
Erythrophagocytosis
- Minimal
Marked
Metastatic (Kidney)
Mild
Chronic Active, Minimal
Minimal
Minimal
Moderate
Multiple
Chronicprogr, Mild
Minimal
Mild
Histiocyte, Marked
Moderate
Mild
Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 857

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-857

ORGAN AND ACCOUNTABLE SITE STATUS

	[Erythrophagocytosis	TGLs = 7-20]		
	[Erythrophagocytosis	TGLs = 12-22]		
	[Erythrophagocytosis	TGLs = 10,11-21]		
* Lymph Node, Mandibular			Erythrophagocytosis	Mild
			Proliferation	Plasma Cell, Mild
* Lymph Node, Mesenteric			Atrophy	Mild
* Mammary Gland	Duct		Dilation	Minimal
* Nerve Trigeminal			Degeneration	Moderate
* Nose	Olfactory Epi		Accumulation, Hyaline Droplet	Minimal
* Ovary			Atrophy	Marked
			Cyst	
			Lymphangiosarcoma	
* Pancreas	Acinus		Atrophy	Moderate
* Peripheral Nerve, Sciatic			Degeneration	Minimal
* Peripheral Nerve, Tibial			Degeneration	Minimal
* Pituitary Gland	Pars Distalis		Adenoma	Multiple
	[Adenoma	TGLs = 14-4]		
* Salivary Glands	Parotid GI		Atrophy	Moderate
Skeletal Muscle			Degeneration	Minimal
* Skin	Dermis		Fibrosis	Minimal
* Spinal Cord, Lumbar	Meninges		Carcinoma	Metastatic (Kidney)
	Nerve		Degeneration	Minimal
* Spinal Cord, Thoracic			Degeneration	Mild
* Spleen			Congestion	Mild
	Red Pulp		Hyperplasia	Mild
* Thymus			Atrophy	Marked
			Cyst	
			Hyperplasia	Epithelial, Moderate
	[Atrophy	TGLs = 9-6]		
* Thyroid Gland			Carcinoma	Metastatic (Kidney)
	C Cell		Hyperplasia	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 857

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-857

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Hyperplasia

Stromal, Marked

Inflammation

Suppurative, Mild

Animal Note: TGLs 1,3,8 = NST (No Section Taken)

Animal Note: TGLs 4,13 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 858

TRT#: 4

SEX: Female

DAY ON TEST: 737

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-858

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Angiectasis Minimal
 - Hyperplasia Moderate
 - Hypertrophy Minimal
 - Thrombus Minimal
 - [Angiectasis TGLs = 9-7]
 - [Hypertrophy TGLs = 8-7]
- * Bone Marrow
 - Hypercellularity Minimal
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Heart
 - Cardiomyopathy Mild
- * Kidney
 - Nephropathy Chronicprogr, Minimal
- * Liver
 - Hepatocellular Adenoma Multiple
 - Mixed Cell Focus
 - [Hepatocellular Adenoma TGLs = 5,6-12,21]
 - [Mixed Cell Focus TGLs = 7-12]
- * Lung
 - Alveolus
 - Infiltration Cellular Histiocyte, Minimal
 - [Infiltration Cellular TGLs = 10-22]
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Mild
 - Proliferation Plasma Cell, Mild
- * Mammary Gland
 - Duct
 - Dilation Minimal
 - Fibroadenoma Multiple
 - [Fibroadenoma TGLs = 1,2,3-20,21,22]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 858

TRT#: 4

SEX: Female

DAY ON TEST: 737

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-858

ORGAN AND ACCOUNTABLE SITE STATUS

Mesentery		Necrosis	Mild
[Necrosis TGLs = 4-20]			
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
	Rete Ovarii	Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 11,12,13-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
		Thymoma Malignant	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal
		Polyp Stromal	Multiple
[Polyp Stromal TGLs = 14-16]			

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 859

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-859

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- Trigeminal Ganglion
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Liver
- * Salivary Glands
- * Stomach, Glandular
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Cystic, Moderate
 - Moderate
 - Moderate
- [Hypertrophy TGLs = 1-7]
- * Adrenal Medulla
 - Hyperplasia
 - Mild
- Note: One of pair available for evaluation.
- * Eye
 - Retina
 - Atrophy
 - Minimal
- * Heart
 - Cardiomyopathy
 - Minimal
 - Ventricl Rgt
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Hyperplasia
 - Lymphocyte, Minimal
 - Proliferation
 - Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Minimal
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate
- * Ovary
 - Atrophy
 - Marked
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Minimal
- Note: Longitudinal section available for evaluation.
- * Peripheral Nerve, Tibial
 - Degeneration
 - Minimal
- * Pituitary Gland
 - Pars Distalis
 - Hyperplasia
 - Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 859

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-859

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	Bilateral, C Cell	Adenoma	
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 860

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-860

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Skin
- Trigeminal Ganglion
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Pituitary Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Uterus
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 2-7]
 - * Adrenal Medulla
 - * Bone Marrow
 - * Clitoral Gland
 - Duct
 - * Heart
 - Ventricl Rgt
 - Atrium, Myocardium
 - * Kidney
 - Renal Tubule
 - [Cyst TGLs = 3,4-13,20]
 - * Liver
 - * Lung
 - Alveolus
 - [Alveolar/Bronchiolar Carcinoma TGLs = 9-10]
 - [Infiltration Cellular TGLs = 8-10]
 - Lymph Node
 - Mediastinal
 - * Mammary Gland
- Degeneration
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Hyperplasia
 - Hypercellularity
 - Dilation
 - Inflammation
 - Cardiomyopathy
 - Cardiomyopathy
 - Hypertrophy
 - Cyst
 - Nephropathy
 - Eosinophilic Focus
 - Alveolar/Bronchiolar Carcinoma
 - Infiltration Cellular
 - Erythrophagocytosis
 - Fibroadenoma
 - Hyperplasia
 - Cystic, Minimal
 - Moderate
 - Minimal
 - Minimal
 - Marked
 - Mild
 - Chronic Active, Minimal
 - Minimal
 - Minimal
 - Minimal
 - Chronicprogr, Minimal
 - Histiocyte, Minimal
 - Minimal
 - Multiple
 - Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 860

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-860

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 1,11,12-20,21,22,23RT]

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary	Rete Ovarii	Hyperplasia	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Marked
* Thymus		Atrophy Cyst	Moderate
[Atrophy TGLs = 14-6]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

Animal Note: TGL 5 = NST (No Section Taken)

Animal Note: TGLs 6,7,13 = NCL (No Corresponding Lesion)

Animal Note: TGL 10 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 861

TRT#: 4

SEX: Female

DAY ON TEST: 737

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-861

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Skin
- * Trachea
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Peripheral Nerve, Tibial
- * Spinal Cord, Cervical
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - [Hyperplasia TGLs = 8-7]
- * Adrenal Medulla
 - Pheochromocytoma Benign
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Compression
 - [Compression TGLs = 13-2]
- * Clitoral Gland
 - Duct
 - [Dilation TGLs = 4,5-16.1]
- * Islets, Pancreatic
 - Hyperplasia
- * Kidney
 - Nephropathy
- * Liver
 - Angiectasis
 - Eosinophilic Focus
 - [Angiectasis TGLs = 9-12]
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 10-10]
- * Lymph Node, Mandibular
 - Hyperplasia
- * Mammary Gland
 - Duct
 - Fibroadenoma
 - Galactocele
 - [Fibroadenoma TGLs = 1-20]
 - [Galactocele TGLs = 3-9]
- * Nerve Trigeminal
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 861

TRT#: 4

SEX: Female

DAY ON TEST: 737

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-861

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 11,12-4]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Moderate
Tissue NOS	Fat	Necrosis	Moderate
	[Necrosis TGLs = 14-20]		
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Marked
	[Hyperplasia TGLs = 6,7-16.1,20]		

Animal Note: TGL 2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 862

TRT#: 4

SEX: Female

DAY ON TEST: 745

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-862

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Liver
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Aorta
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Salivary Glands
- * Stomach, Forestomach
- * Bone
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Stomach, Glandular
- * Bone Marrow
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - [Degeneration TGLs = 6-7]
 - * Adren Medulla
 - Note: One of pair available for evaluation.
 - * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
 - * Islets, Pancreatic
 - * Kidney
 - * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 5-10]
 - * Mammary Gland
 - * Nerve Trigeminal
 - * Nose
 - Olfactory Epi
 - * Ovary
 - * Peripheral Nerve, Sciatic
 - Note: Longitudinal section available for evaluation.
 - * Peripheral Nerve, Tibial
 - * Pituitary Gland
 - * Spinal Cord, Lumbar
 - Pars Distalis
 - Nerve
- | | | |
|--|--|---|
| | <ul style="list-style-type: none"> Degeneration Hypertrophy Hyperplasia Nephropathy Carcinoma Infiltration Cellular Hyperplasia Degeneration Accumulation, Hyaline Droplet Cyst Degeneration Degeneration Hyperplasia Degeneration | <ul style="list-style-type: none"> Cystic, Minimal Mild Minimal Chronicprogr, Minimal Metastatic (Uncertain Primary Site) Histiocyte, Mild Moderate Mild Moderate Mild Mild Minimal Mild |
|--|--|---|

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 862

TRT#: 4

SEX: Female

DAY ON TEST: 745

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-862

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Hemangioma	
		Inflammation	Suppurative, Mild
		Polyp Stromal	

[Hemangioma TGLs = 3-16]

[Inflammation TGLs = 1,2-16,20]

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 863

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-863

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Thymus
- * Uterus
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Trachea
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Ovary
- Skeletal Muscle
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - Hyperplasia
- * Adrenal Medulla
 - Cystic, Minimal
 - Minimal
 - Minimal
- Note: One of pair available for evaluation.
- * Brain
 - [Compression TGLs = 8-2]
 - Compression
- * Clitoral Gland
 - [Inflammation TGLs = 3-16.1]
 - Inflammation
- * Kidney
 - Nephropathy
- * Liver
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 6-10]
 - Infiltration Cellular
- * Lymph Node, Mandibular
 - Hyperplasia
 - Infiltration Cellular
- * Mammary Gland
 - Adenocarcinoma
 - Fibroadenoma
 - Hyperplasia
- [Adenocarcinoma TGLs = 1,5-20,22]
- [Fibroadenoma TGLs = 2-21]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 863

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-863

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 4-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59
Test Type: CHRONIC
Route: Whole Body Exposure
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
Time Report Requested: 11:58:55
First Dose M/F: 09/16/12 / 09/16/12
Lab: IIT

ANIMAL ID: 864

TRT#: 4

SEX: Female

DAY ON TEST: 576

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-864

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Esophagus	* Eye
* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Nerve Trigeminal	* Parathyroid Gland	* Spinal Cord, Cervical
* Spinal Cord, Thoracic	* Trachea		

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

* Adrenal Cortex		Degeneration	Cystic, Moderate
		Lymphoma Malignant	
	[Degeneration TGLs = 3,4-7]		
* Aorta		Lymphoma Malignant	
* Bone Marrow		Lymphoma Malignant	
* Brain	Cerebellum	Hemorrhage	Minimal
* Clitoral Gland		Lymphoma Malignant	
* Harderian Gland		Lymphoma Malignant	
* Heart		Lymphoma Malignant	
* Intestine Large, Colon		Lymphoma Malignant	
* Intestine Large, Rectum		Lymphoma Malignant	
* Kidney		Lymphoma Malignant	
		Nephropathy	Chronicprogr, Minimal
	[Lymphoma Malignant TGLs = 7-13]		
* Liver		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 6-12]		
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 1-10]		
Lymph Node	Iliac	Lymphoma Malignant	
	Renal	Lymphoma Malignant	
	Mediastinal	Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 10-20]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 864

TRT#: 4

SEX: Female

DAY ON TEST: 576

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-864

ORGAN AND ACCOUNTABLE SITE STATUS

[Lymphoma Malignant	TGLs = 11-21]		
[Lymphoma Malignant	TGLs = 14-22]		
* Lymph Node, Mandibular		Lymphoma Malignant	
[Lymphoma Malignant	TGLs = 13-9]		
* Lymph Node, Mesenteric		Lymphoma Malignant	
[Lymphoma Malignant	TGLs = 12-15]		
* Mammary Gland		Fibroadenoma	Multiple
Note: Fibroadenomas infiltrated by malignant lymphoma.			
[Fibroadenoma	TGLs = 2,9-20,21]		
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Lymphoma Malignant	
* Pancreas		Lymphoma Malignant	
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland		Lymphoma Malignant	
* Salivary Glands		Lymphoma Malignant	
Skeletal Muscle		Lymphoma Malignant	
* Skin	Subcut Tiss	Lymphoma Malignant	
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Lymphoma Malignant	
[Lymphoma Malignant	TGLs = 8-12]		
* Stomach, Forestomach		Lymphoma Malignant	
		Ulcer	Moderate
* Stomach, Glandular		Lymphoma Malignant	
[Lymphoma Malignant	TGLs = 16-23RT]		
* Thymus		Lymphoma Malignant	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Urinary Bladder		Lymphoma Malignant	
* Uterus		Lymphoma Malignant	

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 5,15 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 865

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-865

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Stomach, Forestomach
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular

MISSING

- * Clitoral Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Mild
 - Minimal
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Heart
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - [Eosinophilic Focus TGLs = 4-12]
 - Eosinophilic Focus
- * Lung
 - [Infiltration Cellular TGLs = 1-10]
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Mild
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Lymphocyte, Minimal
 - Plasma Cell, Minimal
- * Mammary Gland
 - [Fibroadenoma TGLs = 2-20]
 - Fibroadenoma
 - Galactocele
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate
- * Ovary
 - Atrophy
 - Marked
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Minimal
- * Peripheral Nerve, Tibial
 - Degeneration
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 865

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-865

ORGAN AND ACCOUNTABLE SITE STATUS

Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Moderate
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Animal Note: TGL 3 = NCL (No Corresponding Lesion) tissue unavailable for evaluation.

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 866

TRT#: 4

SEX: Female

DAY ON TEST: 713

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-866

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Trachea
- * Aorta
- * Eye
- * Islets, Pancreatic
- * Bone
- * Harderian Gland
- * Skin
- * Clitoral Gland
- * Heart
- * Spinal Cord, Thoracic

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy Mild
 - Lymphoma Malignant
 - Vacuolation, Cytoplasmic Mild
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity Moderate
- * Brain
 - Lymphoma Malignant
- * Intestine Large, Cecum
 - Lymphoma Malignant
- * Intestine Large, Colon
 - Lymphoma Malignant
- * Intestine Small, Duodenum
 - Lymphoma Malignant
- * Intestine Small, Ileum
 - Lymphoma Malignant
- * Intestine Small, Jejunum
 - Lymphoma Malignant
- * Kidney
 - Lymphoma Malignant
 - Nephropathy Chronicprogr, Mild
- * Liver
 - Lymphoma Malignant
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 3-10]
 - Lymphoma Malignant
 - Duct
 - Proliferation Plasma Cell, Minimal
 - Lymphoma Malignant
 - Dilation Mild
 - Galactocele
 - Hyperplasia Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 866

TRT#: 4

SEX: Female

DAY ON TEST: 713

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-866

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
Note: Approximately one-half of Level 3 available for evaluation.			
* Ovary		Lymphoma Malignant	
* Pancreas		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 2,6-6,20]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 4-4]		
* Salivary Glands	Parotid GI	Atrophy	Moderate
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 1-12]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Lymphoma Malignant	
		Ulcer	Minimal
* Stomach, Glandular		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 5-14]		
* Thymus		Lymphoma Malignant	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Urinary Bladder		Lymphoma Malignant	
* Uterus		Lymphoma Malignant	

PRIMARY CAUSE OF DEATH - Spleen Lymphoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 868

TRT#: 4

SEX: Female

DAY ON TEST: 737

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-868

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Lung
- Skeletal Muscle
- * Stomach, Glandular

MISSING

- * Mammary Gland

INSUFFICIENT TISSUE

- * Nerve Trigeminal Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex Degeneration Cystic, Mild
- Hemorrhage Moderate
- Hypertrophy Minimal
- Vacuolation, Cytoplasmic Minimal
- [Hemorrhage TGLs = 3-7]
- * Clitoral Gland Inflammation Chronic Active, Marked
- [Inflammation TGLs = 1-16]
- * Harderian Gland Atrophy Mild
- Inflammation Granulomatous, Minimal
- * Kidney Nephropathy Chronicprogr, Minimal
- * Liver Serosa Adenocarcinoma Metastatic (Uterus)
- Bile Duct Hyperplasia Minimal
- * Lymph Node, Mandibular Proliferation Plasma Cell, Minimal
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Marked
- * Ovary Cyst
- Note: One of pair available for evaluation.
- * Pancreas Adenocarcinoma Metastatic (Uterus)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 868

TRT#: 4

SEX: Female

DAY ON TEST: 737

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-868

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenocarcinoma TGLs = 4-6]

* Peripheral Nerve, Sciatic

Degeneration

Minimal

* Peripheral Nerve, Tibial

Degeneration

Minimal

* Pituitary Gland

Pars Distalis

Adenoma

[Adenoma TGLs = 5-4]

* Spinal Cord, Lumbar

Nerve

Degeneration

Minimal

* Spinal Cord, Thoracic

Degeneration

Mild

* Spleen

Extramedullary Hematopoiesis

Minimal

* Thymus

Cyst

* Thyroid Gland

C Cell

Hyperplasia

Minimal

* Uterus

Adenocarcinoma

[Adenocarcinoma TGLs = 2-16,20]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 869

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-869

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Liver
- Skeletal Muscle
- * Aorta
- * Esophagus
- * Lymph Node, Mesenteric
- * Skin
- * Bone
- * Intestine Large, Colon
- * Pancreas
- * Thyroid Gland
- * Bone Marrow
- * Intestine Large, Rectum
- * Parathyroid Gland
- * Trachea

MISSING

- * Lymph Node, Mandibular
- * Salivary Glands
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Small, Jejunum
- * Intestine Large, Cecum
- * Islets, Pancreatic
- * Intestine Small, Duodenum
- * Stomach, Glandular
- * Intestine Small, Ileum
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
- * Clitoral Gland
- * Harderian Gland
- * Heart
- * Kidney
- * Lung
- [Infiltration Cellular TGLs = 3-10]
- * Mammary Gland
- [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
- * Nose
- Note: Level 3 damaged.
- * Ovary
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- [Adenoma TGLs = 2-4]
- Duct
- Alveolus
- Respirat Epith
- Olfactory Epi
- Pars Distalis
- Hyperplasia
- Dilation
- Inflammation
- Cardiomyopathy
- Nephropathy
- Congestion
- Infiltration Cellular
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Degeneration
- Adenoma
- Minimal
- Moderate
- Granulomatous, Minimal
- Mild
- Chronicprogr, Minimal
- Mild
- Histiocyte, Mild
- Mild
- Minimal
- Moderate
- Mild
- Mild
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 869

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-869

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
	Red Pulp	Atrophy	Mild
		Pigment	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thymus		Atrophy	Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 4 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 870

TRT#: 4

SEX: Female

DAY ON TEST: 332

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-870

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|-----------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney |
| * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Nerve Trigeminal |
| * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Sciatic | * Peripheral Nerve, Tibial |
| * Pituitary Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Spinal Cord, Lumbar | * Spinal Cord, Thoracic | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | | |

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|----------------------------------|---------------|-------------------------------|---------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Bone Marrow | | Hypercellularity | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| * Mammary Gland | | Adenocarcinoma | |
| | | Hyperplasia | Mild |
| [Adenocarcinoma TGLs = 1,2-20] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | Rete Ovarii | Hyperplasia | Minimal |
| * Spleen | | Extramedullary Hematopoiesis | Mild |

PRIMARY CAUSE OF DEATH

- Mammary Gland Adenocarcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 871

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-871

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Thoracic
- Trigeminal Ganglion
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - [Adenoma TGLs = 4,5-7]
 - * Adrenal Medulla
 - * Bone Marrow
 - * Kidney
 - * Liver
 - * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 6-10]
 - Lymph Node
 - Lumbar
 - Lumbar
 - [Proliferation TGLs = 9-22]
 - * Lymph Node, Mandibular
 - * Mammary Gland
 - [Fibroadenoma TGLs = 1,2,3-23,20,21]
 - * Nerve Trigeminal
 - * Nose
 - Olfactory Epi
 - * Ovary
 - * Peripheral Nerve, Sciatic
- | | | |
|--|-------------------------------|-------------------------|
| | Adenoma | |
| | Hypertrophy | Minimal |
| | Hyperplasia | Minimal |
| | Hypercellularity | Marked |
| | Nephropathy | Chronicprogr, Minimal |
| | Extramedullary Hematopoiesis | Minimal |
| | Mixed Cell Focus | |
| | Infiltration Cellular | Histiocyte, Mild |
| | Inflammation | Chronic Active, Minimal |
| | Hyperplasia | Lymphocyte, Minimal |
| | Proliferation | Plasma Cell, Mild |
| | Proliferation | Plasma Cell, Moderate |
| | Fibroadenoma | Multiple |
| | Hyperplasia | Minimal |
| | Degeneration | Mild |
| | Accumulation, Hyaline Droplet | Moderate |
| | Cyst | |
| | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 871

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-871

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Moderate
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 7,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 872

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-872

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Kidney | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|-----------------------------|---------------|---------------------------------|----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| | | Vacuolation, Cytoplasmic | Minimal |
| * Clitoral Gland | Duct | Dilation | Mild |
| | | Inflammation | Chronic Active, Mild |
| * Liver | | Eosinophilic Focus | |
| | | Mixed Cell Focus | |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | |
| | | Galactocele | |
| | | [Fibroadenoma TGLs = 1-9,9.1] | |
| | | [Galactocele TGLs = 2-21] | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Marked |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| * Spinal Cord, Cervical | | Degeneration | Minimal |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Moderate |
| * Spinal Cord, Thoracic | | Degeneration | Mild |
| * Spleen | | Extramedullary Hematopoiesis | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 872

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-872

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland	C Cell	Pigment	Moderate
Tissue NOS	Fat	Hyperplasia	Minimal
[Necrosis TGLs = 4-20]		Necrosis	Moderate
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
		Inflammation	Chronic Active, Moderate
	Epithelium	Metaplasia	Squamous, Minimal
	Cervix	Polyp Stromal	
[Polyp Stromal TGLs = 3-20]			

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 873

TRT#: 4

SEX: Female

DAY ON TEST: 123

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-873

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- * Ovary
- * Peripheral Nerve, Tibial
- * Spinal Cord, Cervical
- * Thymus
- * Urinary Bladder
- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Mammary Gland
- * Pancreas
- * Pituitary Gland
- * Spinal Cord, Thoracic
- * Thyroid Gland
- * Uterus
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lung
- * Nerve Trigeminal
- * Parathyroid Gland
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mandibular
- * Nose
- * Peripheral Nerve, Sciatic
- * Skeletal Muscle
- * Stomach, Glandular
- * Trigeminal Ganglion

OBSERVATIONS

- * Bone Marrow
- * Liver
- * Skin
- * Spinal Cord, Lumbar
- * Spleen
- Hypercellularity
- Infiltration Cellular
- Fibrosarcoma
- Degeneration
- Extramedullary Hematopoiesis
- Mild
- Mixed Cell, Minimal
- Subcut Tiss
- [Fibrosarcoma TGLs = 1 - 20]
- Nerve
- Minimal
- Minimal

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibrosarcoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 874

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-874

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- Skeletal Muscle
- * Stomach, Glandular
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Adrenal Medulla
 - Hyperplasia
- * Eye
 - Atrophy
- * Kidney
 - Nephropathy
- * Liver
 - Basophilic Focus
 - Clear Cell Focus
 - Mixed Cell Focus
- [Clear Cell Focus TGLs = 2-20]
- [Mixed Cell Focus TGLs = 3-12]
- * Lung
 - Congestion
- [Congestion TGLs = 4-10]
- * Lymph Node, Mandibular
 - Proliferation
- * Mammary Gland
 - Dilation
 - Fibroadenoma
- [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
 - Sex Cord Stromal Tumor, Benign

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 874

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-874

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
		Cyst	
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Marked
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 875

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-875

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Aorta | * Bone | * Brain | * Esophagus |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

MISSING

- * Clitoral Gland

OBSERVATIONS

- | | | | |
|---|---------------|------------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| Note: One of pair available for evaluation. | | | |
| * Bone Marrow | | Hypercellularity | Marked |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Eye | Retina | Atrophy | Minimal |
| * Heart | Ventricle Rgt | Cardiomyopathy | Minimal |
| | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Basophilic Focus | |
| | | Extramedullary Hematopoiesis | Mild |
| | | Fibrosis | Mild |
| | | Inflammation | Chronic, Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Mammary Gland | | Adenocarcinoma | |
| | Duct | Dilation | Minimal |
| | | Fibroadenoma | |
| | | Galactocele | |
| | | Hyperplasia | Mild |

[Adenocarcinoma TGLs = 2-21]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 875

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-875

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 1-20]

* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Marked
* Ovary		Atrophy	Marked
		Cyst	
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Hyperplasia	Mild
[Adenoma TGLs = 5-4]			
* Salivary Glands	Parotid GI	Atrophy	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Marked
[Extramedullary Hematopoiesis TGLs = 3-12]			
* Stomach, Forestomach		Edema	Mild
		Inflammation	Acute, Moderate
* Thymus		Atrophy	Moderate
		Cyst	
[Atrophy TGLs = 6-6]			
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal
		Polyp Stromal	
	Vein	Thrombus	Minimal

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 876

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-876

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skeletal Muscle
- * Trachea
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Cystic, Mild
 - Moderate
 - Mild
- [Degeneration TGLs = 4-7]
- * Adrenal Medulla
 - Hyperplasia
 - Mild
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 - Moderate
 - Chronic Active, Mild
- [Dilation TGLs = 2,3-16]
- * Eye
 - Retina
 - Atrophy
 - Mild
- * Heart
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Mild
- * Liver
 - Bile Duct
 - Cyst
 - Basophilic Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Mild
- [Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular
 - Proliferation
 - Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Hyperplasia
 - Mild
 - Minimal
- [Dilation TGLs = 1-9]
- * Nerve Trigeminal
 - Degeneration
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 876

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-876

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal

Experiment Number: 20105 - 59
Test Type: CHRONIC
Route: Whole Body Exposure
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
Time Report Requested: 11:58:55
First Dose M/F: 09/16/12 / 09/16/12
Lab: IIT

ANIMAL ID: 878

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-878

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Aorta	* Brain	* Esophagus	* Eye
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Pancreas	* Parathyroid Gland	* Salivary Glands	Skeletal Muscle
* Stomach, Forestomach	* Stomach, Glandular	* Trachea	Trigeminal Ganglion
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Minimal
* Adrenal Medulla		Hyperplasia	Minimal
* Bone		Fibrosis	Minimal
* Bone Marrow		Hypercellularity	Minimal
* Clitoral Gland		Inflammation	Chronic Active, Minimal
* Harderian Gland		Atrophy	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Minimal
* Liver		Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
	[Infiltration Cellular TGLs = 3-10]		
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
* Mammary Gland		Fibroadenoma	
	[Fibroadenoma TGLs = 2-21]	Hyperplasia	Moderate
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary	Rete Ovarii	Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
	Note: Longitudinal section available for evaluation.		
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Intermed	Cyst	
	Pars Distalis	Hyperplasia	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 878

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-878

ORGAN AND ACCOUNTABLE SITE STATUS

* Skin		Cyst Epithelial Inclusion	
	[Cyst Epithelial Inclusion TGLs = 1-20]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Adenoma	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 879

TRT#: 4

SEX: Female

DAY ON TEST: 699

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-879

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Skin
- * Trachea
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Pituitary Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Harderian Gland
- * Liver
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular
- * Mammary Gland
 - Duct
 - [Fibroadenoma TGLs = 1-20]
- Mesentery
 - [Necrosis TGLs = 5-21]
- * Nerve Trigeminal
- * Nose
- * Ovary
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- Hyperplasia
- Hypercellularity
- Inflammation
- Extramedullary Hematopoiesis
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Dilation
- Fibroadenoma
- Hyperplasia
- Necrosis
- Degeneration
- Accumulation, Hyaline Droplet
- Hyperplasia
- Degeneration
- Degeneration
- Degeneration
- Degeneration
- Minimal
- Marked
- Granulomatous, Minimal
- Minimal
- Histiocyte, Minimal
- Lymphocyte, Mild
- Plasma Cell, Mild
- Minimal
- Minimal
- Mild
- Moderate
- Moderate
- Minimal
- Minimal
- Minimal
- Minimal
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 879

TRT#: 4

SEX: Female

DAY ON TEST: 699

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-879

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Extramedullary Hematopoiesis	Marked
	[Extramedullary Hematopoiesis TGLs = 2-12]		
* Thymus		Lymphoma Malignant	
	Note: Granulopoiesis present.		
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 3 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 880

TRT#: 4

SEX: Female

DAY ON TEST: 696

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-880

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Pancreas | * Salivary Glands | * Skin | * Stomach, Glandular |
| * Urinary Bladder | | | |

MISSING

- * Thymus

OBSERVATIONS

- | | | | |
|---|---------------------------------------|-------------------------------|-----------------------|
| * Bone Marrow | | Hypercellularity | Marked |
| * Brain | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Heart | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| | Hepatocyte | Hypertrophy | Moderate |
| | Centrilobular, Hepatocyte | Necrosis | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 3-10] | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Mild |
| | [Fibroadenoma TGLs = 1-20] | Fibroadenoma | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| | | Inflammation | Suppurative, Mild |
| | Nasopharyn Dct | Inflammation | Chronic Active, Mild |
| Note: Approximately two-thirds of Level 3 available for evaluation. | | | |
| * Ovary | | Atrophy | Marked |
| | Rete Ovarii | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 880

TRT#: 4

SEX: Female

DAY ON TEST: 696

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-880

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland		Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Cyst	
Skeletal Muscle		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
		Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Marked
[Extramedullary Hematopoiesis	TGLs = 6-12]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Trachea	Epithelium	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Polyp Stromal	Multiple
		Thrombus	Moderate

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 2,4,5 = NCL (No Corresponding Lesion)

Animal Note: TGL 7 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 881

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-881

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Ovary
- * Salivary Glands
- * Stomach, Glandular
- * Uterus
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- Skeletal Muscle
- * Thyroid Gland
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Degeneration
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Clitoral Gland
 - Duct
 - Dilation
- * Islets, Pancreatic
 - Adenoma
- [Adenoma TGLs = 4-20]
- * Kidney
 - Nephropathy
- * Liver
 - Clear Cell Focus
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
- [Infiltration Cellular TGLs = 3-10]
- * Lymph Node, Mandibular
 - Proliferation
- * Mammary Gland
 - Fibroadenoma
 - Hyperplasia
- [Fibroadenoma TGLs = 1,2-20,21]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Spinal Cord, Cervical
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 881

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-881

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Marked
		Cyst	
		Ectopic Parathyroid Gland	
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 884

TRT#: 4

SEX: Female

DAY ON TEST: 464

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-884

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Spinal Cord, Lumbar
- * Thyroid Gland
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
[Adenoma TGLs = 3-7]
- * Bone Marrow
- * Clitoral Gland
- * Harderian Gland
- * Kidney
- * Liver
- * Lung
- * Lymph Node, Mandibular
- * Mammary Gland
- Note: Inflammation likely due to rupture of large galactocele.
[Fibroadenoma TGLs = 1-21]
[Galactocele TGLs = 2-20]
- * Nose
Note: Level 3 largely absent.
- * Ovary
- Adenoma
- Hypercellularity
- Dilation
- Inflammation
- Inflammation
- Nephropathy
- Eosinophilic Focus
- Extramedullary Hematopoiesis
- Mixed Cell Focus
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Fibroadenoma
- Galactocele
- Marked
- Moderate
- Chronic Active, Minimal
- Granulomatous, Minimal
- Chronicprogr, Minimal
- Minimal
- Histiocyte, Minimal
- Lymphocyte, Minimal
- Plasma Cell, Mild
- Minimal
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 884

TRT#: 4

SEX: Female

DAY ON TEST: 464

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-884

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Salivary Glands	Parotid GI	Atrophy	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Marked

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 885

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-885

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Thrombus
 Cystic, Minimal
Minimal
Mild
Minimal
- * Adrenal Medulla
 - Hyperplasia
 Minimal
- * Brain
 - [Compression TGLs = 5-2]
 - Compression
 Minimal
- * Kidney
 - Nephropathy
 Chronicprogr, Minimal
- * Liver
 - Eosinophilic Focus
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 3-10]
 - Infiltration Cellular
 Histiocyte, Mild
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 Lymphocyte, Minimal
Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Galactocele
 - Hyperplasia
 - [Fibroadenoma TGLs = 1-9]
 - [Galactocele TGLs = 2-9]
 Mild
Marked
- * Nerve Trigeminal
 - Degeneration
 Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 Mild
- * Ovary
 - Atrophy
 Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 885

TRT#: 4

SEX: Female

DAY ON TEST: 738

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-885

ORGAN AND ACCOUNTABLE SITE STATUS

		Cyst	
[Cyst TGLs = 6-16]			
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 4-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 887

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-887

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Pancreas |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|--|-----------|-----------------------------------|-----------------------|
| * Adrenal Cortex | | Accessory Adrenal Cortical Nodule | |
| | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | Duct | Dilation | Marked |
| [Dilation TGLs = 2-16] | | | |
| * Harderian Gland | | Atrophy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | Bile Duct | Basophilic Focus | |
| | | Cyst | |
| | | Eosinophilic Focus | |
| | | Mixed Cell Focus | |
| [Cyst TGLs = 6-12] | | | |
| [Eosinophilic Focus TGLs = 7,12-20,21] | | | |
| [Mixed Cell Focus TGLs = 13-23] | | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| [Infiltration Cellular TGLs = 8-10] | | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 887

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-887

ORGAN AND ACCOUNTABLE SITE STATUS

		Fibroadenoma	Multiple
	[Fibroadenoma TGLs = 3,10,11-21,22,23]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Ovary		Atrophy	Marked
	Rete Ovarii	Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 9-4]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
* Thymus		Atrophy	Minimal
Tissue NOS	Fat	Necrosis	Minimal
	[Necrosis TGLs = 4-20]		
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal
	[Polyp Stromal TGLs = 5-16]	Polyp Stromal	

Animal Note: TGL 1 = NST (No Section Taken)

Animal Note: TGL 14 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 888

TRT#: 4

SEX: Female

DAY ON TEST: 711

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-888

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Esophagus | * Eye |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Spinal Cord, Cervical | * Stomach, Glandular | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | * Uterus | |

OBSERVATIONS

- | | | | |
|---|---------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Bone | Vertebra | Increased Bone | Moderate |
| [Increased Bone TGLs = 9-21] | | | |
| * Bone Marrow | | Hypercellularity | Marked |
| * Brain | | Compression | Mild |
| * Clitoral Gland | Duct | Dilation | Marked |
| [Dilation TGLs = 2-16] | | | |
| * Harderian Gland | | Atrophy | Minimal |
| | | Inflammation | Acute, Minimal |
| * Kidney | Renal Tubule | Accumulation, Hyaline Droplet | Minimal |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| [Infiltration Cellular TGLs = 6-10] | | | |
| * Mammary Gland | Duct | Dilation | Minimal |
| [Fibroadenoma TGLs = 1,3-20,22] | | | |
| | | Fibroadenoma | Multiple |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Marked |
| * Pancreas | Acinus | Atrophy | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 888

TRT#: 4

SEX: Female

DAY ON TEST: 711

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-888

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 7-4]			
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
[Extramedullary Hematopoiesis TGLs = 8-12]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		Inflammation	Chronic Active, Moderate
		Ulcer	Moderate
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tissue NOS	Mediastinum	Paraganglioma	

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Animal Note: TGL 5 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 889

TRT#: 4

SEX: Female

DAY ON TEST: 650

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-889

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Stomach, Glandular
- * Uterus
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Skin
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Medulla
- * Bone Marrow
- * Clitoral Gland
- [Dilation TGLs = 4-16]
- * Heart
- * Kidney
- * Liver
- * Lung
- [Infiltration Cellular TGLs = 1-10]
- * Lymph Node, Mandibular
- * Mammary Gland
- [Fibroadenoma TGLs = 3-20]
- * Nose
- * Ovary
- [Cyst TGLs = 2-16]
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- Skeletal Muscle
- [Degeneration TGLs = 6-11]
- * Spinal Cord, Cervical
- Hyperplasia
- Hypercellularity
- Dilation
- Cardiomyopathy
- Nephropathy
- Extramedullary Hematopoiesis
- Infiltration Cellular
- Proliferation
- Fibroadenoma
- Hyperplasia
- Accumulation, Hyaline Droplet
- Cyst
- Degeneration
- Degeneration
- Hyperplasia
- Degeneration
- Degeneration
- Minimal
- Marked
- Mild
- Minimal
- Chronicprogr, Minimal
- Minimal
- Histiocyte, Minimal
- Plasma Cell, Moderate
- Moderate
- Mild
- Minimal
- Mild
- Minimal
- Mild
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 889

TRT#: 4

SEX: Female

DAY ON TEST: 650

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-889

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
[Extramedullary Hematopoiesis	TGLs = 5-12]		
* Stomach, Forestomach		Edema	Minimal
	Epithelium	Hyperplasia	Minimal
		Ulcer	Mild
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 890

TRT#: 4

SEX: Female

DAY ON TEST: 745

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-890

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Uterus
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Trachea

MISSING

- * Clitoral Gland

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - Cystic, Minimal
- * Adrenal Medulla
 - Hyperplasia
 - Minimal
- * Bone Marrow
 - Hypercellularity
 - Moderate
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Basophilic Focus
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 5-10]
 - Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular
 - Lymph Sinus
 - Ectasia
 - Hyperplasia
 - Proliferation
 - Fibroadenoma
 - Hyperplasia
 - Moderate
 - Lymphocyte, Mild
 - Plasma Cell, Mild
- * Mammary Gland
 - [Fibroadenoma TGLs = 2-20]
 - [Hyperplasia TGLs = 1-9]
 - Hyperplasia
 - Marked
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Minimal
- * Ovary
 - Cyst
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Mild
- * Peripheral Nerve, Tibial
 - Degeneration
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 890

TRT#: 4

SEX: Female

DAY ON TEST: 745

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-890

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Animal Note: TGLs 3,4,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 891

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-891

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Liver |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|---------------------------------------|----------------|-------------------------------|-----------------------|
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | | Compression | Minimal |
| [Compression TGLs = 3-2] | | | |
| * Clitoral Gland | Duct | Dilation | Mild |
| | | Hyperplasia | Focal, Mild |
| | | Metaplasia | Squamous, Mild |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Epithlm Alvlus | Hyperplasia | Moderate |
| | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| [Infiltration Cellular TGLs = 2-10] | | | |
| * Mammary Gland | | Adenoma | |
| | Duct | Dilation | Minimal |
| | | Fibroadenoma | |
| | | Hyperplasia | Minimal |
| [Fibroadenoma TGLs = 1-20] | | | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Marked |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 4-4] | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 891

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-891

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate
		Polyp Stromal	Multiple

[Polyp Stromal TGLs = 5,6-16]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 892

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-892

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea
- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Stomach, Glandular
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Bone Marrow
 - Hypercellularity
- * Brain
 - [Compression TGLs = 12-2]
 - Compression
- * Clitoral Gland
 - Duct
 - Dilation
- * Kidney
 - Nephropathy
 - Angiectasis
 - Eosinophilic Focus
- * Liver
 - [Angiectasis TGLs = 7-12]
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 11-10]
 - Infiltration Cellular
- Lymph Node
 - Iliac, Lymph Sinus
 - Ectasia
 - Iliac
 - Erythrophagocytosis
- [Ectasia TGLs = 8-21]
- [Erythrophagocytosis TGLs = 9-21]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Fibroadenoma
 - Galactocele
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 892

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-892

ORGAN AND ACCOUNTABLE SITE STATUS

	[Fibroadenoma TGLs = 2,4-20,21]			
	[Galactocoele TGLs = 3-9.1]			
* Nerve Trigeminal			Degeneration	Mild
* Nose	Olfactory Epi		Accumulation, Hyaline Droplet	Moderate
* Ovary			Atrophy	Marked
* Peripheral Nerve, Sciatic			Degeneration	Mild
* Peripheral Nerve, Tibial			Degeneration	Mild
* Pituitary Gland	Pars Distalis		Adenoma	
	[Adenoma TGLs = 13-4]			
* Spinal Cord, Lumbar	Nerve		Degeneration	Minimal
* Spinal Cord, Thoracic			Degeneration	Mild
* Spleen			Extramedullary Hematopoiesis	Mild
* Thymus			Atrophy	Minimal
			Cyst	
	[Atrophy TGLs = 10-6]			
Tissue NOS	Fat		Necrosis	Mild
	[Necrosis TGLs = 5-20]			
Trigeminal Ganglion			Degeneration	Minimal
* Uterus			Hemorrhage	Mild
			Polyp Stromal	
	[Hemorrhage TGLs = 6-16]			

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 893

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-893

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Salivary Glands
- * Stomach, Forestomach
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Adenoma
 - Vacuolation, Cytoplasmic
 - Minimal
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Brain
 - [Compression TGLs = 5-2]
 - Compression
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 7-10]
 - Infiltration Cellular
 - Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Hyperplasia
 - Lymphocyte, Minimal
- * Mammary Gland
 - Duct
 - Proliferation
 - Plasma Cell, Minimal
 - Dilation
 - Minimal
 - Hyperplasia
 - Minimal
 - Degeneration
 - Mild
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Mild
- * Ovary
 - Atrophy
 - Marked
 - Cyst
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Mild
- * Peripheral Nerve, Tibial
 - Degeneration
 - Mild
- * Pituitary Gland
 - Pars Distalis
 - Adenoma
 - Pars Distalis
 - Cyst
 - [Adenoma TGLs = 6-4]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 893

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-893

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Cyst	
		Polyp Stromal	Multiple

[Polyp Stromal TGLs = 1,2,3,4-16,20,21]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 894

TRT#: 4

SEX: Female

DAY ON TEST: 545

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-894

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Pancreas
- * Skin
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Peripheral Nerve, Tibial
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- Skeletal Muscle
- * Stomach, Forestomach
- Trigeminal Ganglion

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Kidney
- * Liver
- * Lung
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Mammary Gland
[Fibroadenoma TGLs = 3-20]
- * Nerve Trigeminal
- * Nose
Note: Level 3 largely absent.
- * Ovary
- * Peripheral Nerve, Sciatic
- * Pituitary Gland
- * Spinal Cord, Lumbar
- * Spleen
- Hyperplasia
- Hypercellularity
- Nephropathy
- Lymphoma Malignant
- Inflammation
- Hyperplasia
- Proliferation
- Proliferation
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Cyst
- Degeneration
- Extramedullary Hematopoiesis
- Lymphoma Malignant
- Minimal
- Marked
- Chronicprogr, Minimal
- Granulomatous, Minimal
- Lymphocyte, Minimal
- Plasma Cell, Minimal
- Plasma Cell, Minimal
- Mild
- Moderate
- Minimal
- Mild
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 894

TRT#: 4

SEX: Female

DAY ON TEST: 545

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-894

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Mild

Hyperplasia

Epithelial, Mild

* Uterus

Endometrium

Hyperplasia

Cystic, Mild

Epithelium

Metaplasia

Squamous, Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 1,2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 896

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-896

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Stomach, Forestomach
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Trachea
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Harderian Gland
- * Kidney
- * Liver
- * Lung
 - [Eosinophilic Focus TGLs = 6-12]
 - [Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular
- * Mammary Gland
 - [Fibroadenoma TGLs = 1,2,3-9,20,21]
- * Nerve Trigeminal
- * Nose
- * Ovary
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- * Skin
- Alveolus
- Olfactory Epi
- Rete Ovarii
- Pars Distalis
- Subcut Tiss
- Hyperplasia
- Hypercellularity
- Atrophy
- Inflammation
- Nephropathy
- Basophilic Focus
- Eosinophilic Focus
- Extramedullary Hematopoiesis
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Hyperplasia
- Degeneration
- Degeneration
- Adenoma
- Fibroma
- Mild
- Marked
- Minimal
- Granulomatous, Minimal
- Chronicprogr, Minimal
- Minimal
- Histiocyte, Minimal
- Lymphocyte, Minimal
- Plasma Cell, Minimal
- Multiple
- Mild
- Minimal
- Moderate
- Minimal
- Mild
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 896

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-896

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroma TGLs = 4-22]

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal
		Polyp Stromal	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 897

TRT#: 4

SEX: Female

DAY ON TEST: 480

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-897

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Esophagus
- * Harderian Gland
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Islets, Pancreatic
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Ovary
- * Pancreas
- * Parathyroid Gland
- * Salivary Glands
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- * Urinary Bladder
- * Uterus

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Brain
 - Compression
 - Mild
 - Schwannoma Malignant
 - Metastatic (Trigeminal Ganglion)
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 - Marked
 - Chronic Active, Minimal
- [Dilation TGLs = 2,3-16]
- * Eye
 - Retrobulbar
 - Schwannoma Malignant
 - Metastatic (Trigeminal Ganglion)
- * Heart
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Mild
- * Liver
 - Eosinophilic Focus
- * Lung
 - Bile Duct
 - Hyperplasia
 - Minimal
 - Congestion
 - Mild
 - Alveolus
 - Infiltration Cellular
 - Inflammation
 - Histiocyte, Mild
 - Chronic Active, Minimal
- [Infiltration Cellular TGLs = 7-10]
- * Mammary Gland
 - Fibroadenoma
 - Hyperplasia
 - Moderate
- [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
 - Schwannoma Malignant
 - Metastatic (Trigeminal Ganglion)
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 897

TRT#: 4

SEX: Female

DAY ON TEST: 480

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-897

ORGAN AND ACCOUNTABLE SITE STATUS

	Nerve, Olfactory Epi	Degeneration	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland		Schwannoma Malignant	Metastatic (Trigeminal Ganglion)
* Spleen	Red Pulp	Atrophy	Minimal
* Thymus		Atrophy	Mild
Trigeminal Ganglion		Schwannoma Malignant	

Note: Brain, Trigeminal Ganglion - Primary site of malignant schwannoma considered to be trigeminal ganglion based on gross observation (mass in calvarium)

[Schwannoma Malignant TGLs = 8,9,10,11-1,2,20,21]

PRIMARY CAUSE OF DEATH - Brain Schwannoma Malignant Trigeminal Ganglion

Animal Note: TGLs 4,5,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 899

TRT#: 4

SEX: Female

DAY ON TEST: 737

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-899

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Pancreas
- * Skin
- * Urinary Bladder
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex Hyperplasia Minimal
- * Brain Compression Minimal
 - [Compression TGLs = 8-2]
- * Clitoral Gland Duct
 - [Dilation TGLs = 4-16]
 Dilation Moderate
 - Inflammation Chronic Active, Mild
- * Eye Retina Atrophy Minimal
- * Heart Cardiomyopathy Minimal
- * Islets, Pancreatic Carcinoma
- * Kidney Nephropathy Chronicprogr, Minimal
- * Liver Eosinophilic Focus
- * Lung Alveolus Infiltration Cellular Histiocyte, Minimal
 - [Infiltration Cellular TGLs = 7-10]
- * Lymph Node, Mandibular Lymph Sinus Ectasia Minimal
 - Hyperplasia Lymphocyte, Minimal
 - Proliferation Plasma Cell, Mild
- * Mammary Gland Duct
 - [Fibroadenoma TGLs = 1,2,3-20,21,22]
 Dilation Minimal
 - Fibroadenoma Multiple
- * Nerve Trigeminal Degeneration Mild
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Moderate
- * Ovary Atrophy Marked
- * Peripheral Nerve, Sciatic Degeneration Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 899

TRT#: 4

SEX: Female

DAY ON TEST: 737

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-899

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Hyperplasia	Moderate
	[Adenoma TGLs = 9-4]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Cyst	
	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

Note: Cyst filled with hemorrhagic exudate.

[Cyst TGLs = 6-20]

[Hyperplasia TGLs = 5-16]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 900

TRT#: 4

SEX: Female

DAY ON TEST: 597

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-900

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Rectum
- * Nerve Trigeminal
- Skeletal Muscle
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Islets, Pancreatic
- * Pancreas
- * Skin
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Lymph Node, Mandibular
- * Peripheral Nerve, Sciatic
- * Spinal Cord, Cervical
- * Trachea
- * Brain
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- * Peripheral Nerve, Tibial
- * Spinal Cord, Thoracic
- Trigeminal Ganglion

MISSING

- * Parathyroid Gland

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Small, Jejunum
- * Intestine Large, Cecum
- * Thyroid Gland
- * Intestine Small, Duodenum
- * Intestine Small, Ileum

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Necrosis
 - [Degeneration TGLs = 2-7]
- * Bone Marrow
 - Hypercellularity
- * Heart
 - Cardiomyopathy
- * Kidney
 - Renal Tubule
 - Necrosis
- * Liver
 - Hepatocyte
 - Necrosis
 - [Necrosis TGLs = 5-12]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - [Infiltration Cellular TGLs = 8-10]
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Hyperplasia
 - [Fibroadenoma TGLs = 7,9-9,20]
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 900

TRT#: 4

SEX: Female

DAY ON TEST: 597

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-900

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 1-4]			
* Salivary Glands	Parotid GI	Atrophy	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
* Thymus		Atrophy	Marked
* Uterus		Dilation	Marked
		Hemorrhage	Marked
		Inflammation	Suppurative, Moderate
[Dilation TGLs = 3-16]			

PRIMARY CAUSE OF DEATH - Liver Hepatocyte Necrosis

CONTRIBUTORY CAUSE OF DEATH - Uterus Hemorrhage

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Animal Note: TGL 4 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 901

TRT#: 4

SEX: Female

DAY ON TEST: 699

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-901

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Skin
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Spinal Cord, Thoracic
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - [Adenoma TGLs = 19-7]
 - * Adrenal Medulla
 - * Bone
 - Vertebra
 - [Inflammation TGLs = 13-25RT]
 - * Bone Marrow
 - * Kidney
 - [Carcinoma TGLs = 1-13]
 - * Liver
 - Hepatocyte
 - [Carcinoma TGLs = 5,6-12,22]
 - [Hypertrophy TGLs = 4-12]
 - * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 8-10]
 - Lymph Node
 - Lymph Sinus, Renal
 - Lumbar, Lymph Sinus
 - Renal
 - Lumbar
- | | | |
|--|------------------------------|-------------------------------------|
| | Adenoma | |
| | Extramedullary Hematopoiesis | Minimal |
| | Hyperplasia | Minimal |
| | Inflammation | Chronic Active, Marked |
| | Hypercellularity | Marked |
| | Carcinoma | Metastatic (Uncertain Primary Site) |
| | Carcinoma | Metastatic (Uncertain Primary Site) |
| | Extramedullary Hematopoiesis | Minimal |
| | Hypertrophy | Mild |
| | Mixed Cell Focus | |
| | Carcinoma | Metastatic (Uncertain Primary Site) |
| | Infiltration Cellular | Histiocyte, Mild |
| | Inflammation | Chronic Active, Mild |
| | Ectasia | Mild |
| | Ectasia | Minimal |
| | Inflammation | Chronic Active, Marked |
| | Inflammation | Chronic Active, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 901

TRT#: 4

SEX: Female

DAY ON TEST: 699

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-901

ORGAN AND ACCOUNTABLE SITE STATUS

	[Inflammation TGLs = 2-20]			
	[Inflammation TGLs = 3-21]			
* Mammary Gland		Duct	Dilation Fibroadenoma Galactocele	Mild Multiple
	[Fibroadenoma TGLs = 12,16,17-20,21,22]			
* Nerve Trigeminal			Degeneration	Moderate
* Nose		Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary			Atrophy	Moderate
	Note: One of pair available for evaluation.			
* Pancreas			Carcinoma	Metastatic (Uncertain Primary Site)
	[Carcinoma TGLs = 10-6]			
* Parathyroid Gland			Fibrosis	Minimal
* Peripheral Nerve, Sciatic			Degeneration	Mild
* Peripheral Nerve, Tibial			Degeneration	Mild
* Pituitary Gland		Pars Distalis	Adenoma	
	[Adenoma TGLs = 9-4]			
* Salivary Glands		Parotid GI	Atrophy	Mild
Skeletal Muscle		Diaphragm	Carcinoma	Metastatic (Uncertain Primary Site)
	[Carcinoma TGLs = 14,15-23,24.1]			
* Spinal Cord, Lumbar		Nerve	Degeneration	Moderate
* Spleen			Extramedullary Hematopoiesis	Marked
	[Extramedullary Hematopoiesis TGLs = 7-12]			
* Stomach, Forestomach		Epithelium	Hyperplasia Inflammation Ulcer	Moderate Chronic Active, Mild Mild
* Thymus			Atrophy	Moderate
			Hyperplasia	Epithelial, Minimal
* Thyroid Gland		C Cell	Hyperplasia	Minimal
Trigeminal Ganglion			Degeneration	Minimal
* Uterus			Cyst	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 901

TRT#: 4

SEX: Female

DAY ON TEST: 699

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-901

ORGAN AND ACCOUNTABLE SITE STATUS

[Cyst TGLs = 20-16]

[Inflammation TGLs = 11-16]

Epithelium

Dilation

Fibrosis

Inflammation

Metaplasia

Marked

Moderate

Suppurative, Marked

Squamous, Marked

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 18 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 902

TRT#: 4

SEX: Female

DAY ON TEST: 493

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-902

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Liver | * Lymph Node, Mesenteric |
| * Nerve Trigeminal | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Spinal Cord, Thoracic |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|---|---------------------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Bone Marrow | | Hypercellularity | Marked |
| * Brain | Pineal Gland | Mineral | Minimal |
| | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Clitoral Gl | | | |
| Note: One of pair available for evaluation. | | | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 3-10] | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | Multiple |
| | | Hyperplasia | Minimal |
| | [Fibroadenoma TGLs = 4,5-20,21] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Moderate |
| | | Cyst | |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 902

TRT#: 4

SEX: Female

DAY ON TEST: 493

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-902

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Angiectasis	Mild
		Dilation	Marked
		Inflammation	Chronic Active, Mild
	Epithelium	Metaplasia	Squamous, Marked
		Pigment	Mild

[Angiectasis TGLs = 2-16]

[Dilation TGLs = 1-16]

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 904

TRT#: 4

SEX: Female

DAY ON TEST: 722

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-904

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Skin
- * Uterus
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Stomach, Forestomach
- * Bone
- * Harderian Gland
- * Intestine Small, Ileum
- * Pituitary Gland
- * Stomach, Glandular
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- Skeletal Muscle
- * Trachea

MISSING

- * Thymus

AUTO PRECLUDES DIAG.

- * Intestine Small, Duodenum

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 6-7]
 - [Hyperplasia TGLs = 6-7]
 - * Adren Medulla
 - Note: One of pair available for evaluation.
 - * Bone Marrow
 - Hypercellularity
 - * Clitoral Gland
 - Duct
 - [Dilation TGLs = 1-16]
 - * Heart
 - Cardiomyopathy
 - * Kidney
 - Inflammation
 - Necrosis
 - [Inflammation TGLs = 8,11,12-13]
 - [Necrosis TGLs = 14-13]
 - * Liver
 - Basophilic Focus
 - Eosinophilic Focus
 - Inflammation
- Cystic, Moderate
Moderate
Minimal
- Marked
Minimal
- Mild
Chronic Active, Marked
Marked
- Acute, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 904

TRT#: 4

SEX: Female

DAY ON TEST: 722

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-904

ORGAN AND ACCOUNTABLE SITE STATUS

	[Inflammation TGLs = 7-20]		
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	[Infiltration Cellular TGLs = 9-22]		
* Lymph Node, Mandibular		Proliferation	Plasma Cell, Marked
* Mammary Gland		Fibroadenoma	Multiple
		Hyperplasia	Marked
	[Fibroadenoma TGLs = 15,16,17-20,21,22]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Cyst	
		Rete Ovarii	Mild
	[Cyst TGLs = 2-16]		
* Pancreas	Artery	Inflammation	Chronic Active, Mild
		Inflammation	Acute, Mild
* Parathyroid Gland		Hypertrophy	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Salivary Glands	Parotid GI	Atrophy	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
	[Extramedullary Hematopoiesis TGLs = 13,20-12]		
* Thyroid Gland	Bilateral, C Cell	Adenoma	Multiple
	[Adenoma TGLs = 3-23]		
Trigeminal Ganglion		Degeneration	Minimal
* Urinary Bladder	Urothelium	Carcinoma	
	[Carcinoma TGLs = 22-13]		
Vagina		Exudate	Moderate
	Note: Large blood clot in lumen.		
	[Exudate TGLs = 23,24-22]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 904

TRT#: 4

SEX: Female

DAY ON TEST: 722

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-904

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Kidney Necrosis

CONTRIBUTORY CAUSE OF DEATH

- Kidney Inflammation

- Urinary Bladder Urothelium Carcinoma

Animal Note: TGLs 4,10,19,21 = NCL (No Corresponding Lesion)

Animal Note: TGL 5 = NCL (No Corresponding Lesion) Tissue not present for evaluation

Animal Note: TGL 18 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 905

TRT#: 4

SEX: Female

DAY ON TEST: 578

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-905

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Pancreas | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Spinal Cord, Lumbar | * Spinal Cord, Thoracic | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

MISSING

Trigeminal Ganglion

INSUFFICIENT TISSUE

- | | |
|---------------------|-----------------|
| * Parathyroid Gland | * Thyroid Gland |
|---------------------|-----------------|

OBSERVATIONS

- | | | | |
|------------------------------|---------------|-------------------------------|-------------------------|
| * Adrenal Cortex | | Hyperplasia | Moderate |
| | | Hypertrophy | Minimal |
| * Bone Marrow | | Hypercellularity | Marked |
| * Clitoral Gland | Duct | Dilation | Marked |
| [Dilation TGLs = 2-16] | | | |
| * Harderian Gland | | Inflammation | Chronic Active, Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | Hepatocyte | Hypertrophy | Mild |
| | | Mixed Cell Focus | |
| * Mammary Gland | | Fibroadenoma | |
| | | Galactocele | |
| | | Hyperplasia | Minimal |
| [Fibroadenoma TGLs = 6-21] | | | |
| [Galactocele TGLs = 4-20] | | | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 905

TRT#: 4

SEX: Female

DAY ON TEST: 578

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-905

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Moderate
Note: One of pair available for evaluation.			
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 3-4]			
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Minimal
Tissue NOS	Fat	Necrosis	Mild
[Necrosis TGLs = 5-20]			
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate
[Hyperplasia TGLs = 1-16]			

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 907

TRT#: 4

SEX: Female

DAY ON TEST: 654

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-907

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Salivary Glands
- * Stomach, Glandular
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Nose
- * Skin
- * Urinary Bladder
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Pancreas
- * Stomach, Forestomach

MISSING

- * Parathyroid Gland
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - Cystic, Mild
 - Mild
- * Brain
 - [Compression TGLs = 2-2]
 - Compression
 - Mild
- * Clitoral Gland
 - Duct
 - Dilation
 - Moderate
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 3-10]
 - Infiltration Cellular
 - Histiocyte, Mild
- * Mammary Gland
 - Duct
 - Dilation
 - Galactocele
 - Hyperplasia
 - Mild
 - Moderate
- Note: Galactocele ruptured with granulomatous inflammation.
 - [Galactocele TGLs = 5-20]
- * Nerve Trigeminal
 - Degeneration
 - Minimal
- * Ovary
 - Atrophy
 - Moderate
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Minimal
- * Peripheral Nerve, Tibial
 - Degeneration
 - Minimal
- * Pituitary Gland
 - Pars Distalis
 - Adenoma
- * Spinal Cord, Cervical
 - [Adenoma TGLs = 1-4]
 - Degeneration
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 907

TRT#: 4

SEX: Female

DAY ON TEST: 654

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-907

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	Red Pulp	Atrophy	Minimal
		Pigment	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Minimal
		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 4 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 908

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-908

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Lymph Node, Mesenteric	* Pancreas
* Salivary Glands	Skeletal Muscle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thyroid Gland	* Trachea	Trigeminal Ganglion
* Urinary Bladder			

MISSING

* Thymus

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Minimal
* Adren Medulla			
Note: One of pair available for evaluation.			
* Brain		Compression	Mild
[Compression TGLs = 8-2]			
* Clitoral Gland	Duct	Dilation	Moderate
		Inflammation	Chronic Active, Mild
[Dilation TGLs = 2,3-16]			
* Eye	Retina	Atrophy	Minimal
* Harderian Gland		Atrophy	Minimal
* Liver	Hepatocyte	Basophilic Focus	
		Hypertrophy	Mild
		Mixed Cell Focus	
		Pigment	Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
[Infiltration Cellular TGLs = 6-10]			
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Minimal
* Mammary Gland	Duct	Dilation	Minimal
		Fibroadenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 909

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-909

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lung
- Skeletal Muscle
- * Stomach, Glandular
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex Hypertrophy Mild
- Vacuolation, Cytoplasmic Mild
- * Bone Marrow Hypercellularity Marked
- * Clitoral Gland Duct Dilation Minimal
- * Liver Basophilic Focus
- Eosinophilic Focus
- Hepatocyte Hypertrophy Minimal
- Leukemia Mononuclear
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Minimal
- Proliferation Plasma Cell, Minimal
- * Lymph Node, Mesenteric Infiltration Cellular Histocyte, Minimal
- * Mammary Gland Duct Dilation Mild
- Fibroadenoma Multiple
- Galactocele
- [Fibroadenoma TGLs = 1,2-20,21]
- * Nerve Trigeminal Degeneration Moderate
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Mild
- * Ovary Atrophy Marked
- Rete Ovarii Hyperplasia Mild
- * Peripheral Nerve, Sciatic Degeneration Minimal
- * Peripheral Nerve, Tibial Degeneration Minimal
- * Pituitary Gland Pars Intermed Cyst

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 909

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-909

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Pars Distalis	Hyperplasia	Minimal
* Spinal Cord, Thoracic	Nerve	Degeneration	Minimal
* Spleen		Degeneration	Minimal
* Thymus		Extramedullary Hematopoiesis	Moderate
		Atrophy	Mild
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate
		Inflammation	Suppurative, Minimal
	Epithelium	Metaplasia	Squamous, Mild

[Hyperplasia TGLs = 4-16]

Animal Note: TGL 3 = NST (No Section Taken)

Animal Note: TGLs 5,6,7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 910

TRT#: 4

SEX: Female

DAY ON TEST: 737

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-910

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone
- * Eye
- * Intestine Small, Duodenum
- * Lung
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- Skeletal Muscle
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
- * Clitoral Gland
- [Dilation TGLs = 3,4-16]
- * Harderian Gland
- * Heart
- * Kidney
- Note: Ectopic liver tissue.
- [Ectopic Tissue TGLs = 6-20,13]
- * Liver
- * Lymph Node, Mesenteric
- * Mammary Gland
- [Adenoma TGLs = 2-9]
- [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
- * Nose
- * Ovary
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- Duct
- Bile Duct
- Olfactory Epi
- Hypertrophy
- Dilation
- Inflammation
- Cardiomyopathy
- Ectopic Tissue
- Nephropathy
- Clear Cell Focus
- Hyperplasia
- Erythrophagocytosis
- Adenoma
- Fibroadenoma
- Hyperplasia
- Degeneration
- Accumulation, Hyaline Droplet
- Cyst
- Degeneration
- Degeneration
- Minimal
- Marked
- Chronic, Minimal
- Minimal
- Chronicprogr, Minimal
- Minimal
- Mild
- Marked
- Moderate
- Moderate
- Minimal
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 910

TRT#: 4

SEX: Female

DAY ON TEST: 737

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-910

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	
[Adenoma TGLs = 7-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Moderate
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal
* Uterus		Dilation	Moderate
[Dilation TGLs = 5-16]			

Experiment Number: 20105 - 59
Test Type: CHRONIC
Route: Whole Body Exposure
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
Time Report Requested: 11:58:55
First Dose M/F: 09/16/12 / 09/16/12
Lab: IIT

ANIMAL ID: 911

TRT#: 4

SEX: Female

DAY ON TEST: 493

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-911

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Aorta	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Lymph Node, Mesenteric
* Nerve Trigeminal	* Pancreas	* Parathyroid Gland	* Peripheral Nerve, Sciatic
* Pituitary Gland	* Salivary Glands	Skeletal Muscle	* Skin
* Spinal Cord, Cervical	* Spinal Cord, Thoracic	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Trachea	Trigeminal Ganglion	* Urinary Bladder
* Uterus			

MISSING

* Thymus

OBSERVATIONS

* Liver	Hepatocyte	Vacuolation, Cytoplasmic	Minimal
* Lung		Inflammation	Chronic Active, Minimal
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Mild
* Mammary Gland		Fibroadenoma	Multiple
		Hyperplasia	Mild
	[Fibroadenoma TGLs = 1,2-20]		
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary	Interstit Cell	Hyperplasia	Moderate
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 912

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-912

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Salivary Glands
- * Stomach, Forestomach
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skin
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Pancreas
- * Spinal Cord, Cervical
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 Minimal
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 Minimal
Chronic Active, Minimal
- * Heart
 - Ventricl Rgt
 - [Cardiomyopathy TGLs = 7-11]
 - Cardiomyopathy
 Minimal
- * Kidney
 - Nephropathy
 Chronicprogr, Minimal
- * Liver
 - Angiectasis
 - Bile Duct
 - Cyst
 - [Angiectasis TGLs = 4-12]
 Mild
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 6-10,20]
 - Infiltration Cellular
 Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Proliferation
 Plasma Cell, Minimal
- * Lymph Node, Mesenteric
 - Erythrophagocytosis
 - Hemorrhage
 - [Erythrophagocytosis TGLs = 2,3-15]
 Moderate
Mild
- * Mammary Gland
 - Duct
 - [Fibroadenoma TGLs = 1-20]
 - Dilation
 - Fibroadenoma
 Minimal
- * Nerve Trigeminal
 - Degeneration
 Minimal
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 912

TRT#: 4

SEX: Female

DAY ON TEST: 744

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-912

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Marked
	Rete Ovarii	Hyperplasia	Mild
* Parathyroid Gland		Cyst	
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thymus		Atrophy	Mild
		Cyst	
		Thymoma Benign	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate
	Epithelium	Metaplasia	Squamous, Minimal

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 913

TRT#: 4

SEX: Female

DAY ON TEST: 696

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-913

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland | Skeletal Muscle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|------------------------------|--|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Brain | | Congestion | Mild |
| * Eye | | | |
| Note: One cornea incomplete. | | | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Hepatocellular Carcinoma | |
| | [Hepatocellular Carcinoma TGLs = 1-12] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 4-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Moderate |
| | | Proliferation | Plasma Cell, Moderate |
| * Mammary Gland | Duct | Dilation | Minimal |
| | [Fibroadenoma TGLs = 3-20] | Fibroadenoma | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 2-4] | | |
| * Salivary Glands | Parotid GI | Atrophy | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 913

TRT#: 4

SEX: Female

DAY ON TEST: 696

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-913

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	Red Pulp	Atrophy	Moderate
		Extramedullary Hematopoiesis	Minimal
		Pigment	Moderate
[Atrophy TGLs = 5-12]			
* Thyroid Gland	C Cell	Hyperplasia	Marked
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 6 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 914

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-914

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- Skeletal Muscle
- * Trachea
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skin
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Stomach, Forestomach

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Cystic, Minimal
 - Mild
 - Minimal
- [Degeneration TGLs = 5-7]
- * Brain
 - Compression
 - Inflammation
 - Minimal
 - Chronic Active, Minimal
- * Clitoral Gland
 - Inflammation TGLs = 3-16]
- * Eye
 - Retina
 - Atrophy
 - Minimal
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Ventricl Rgt
 - Cardiomyopathy
 - Minimal
- * Liver
 - Nephropathy
 - Chronicprogr, Minimal
 - Mixed Cell Focus
- [Mixed Cell Focus TGLs = 7-12]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal
- [Infiltration Cellular TGLs = 8-10]
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Minimal
- [Dilation TGLs = 2-9]
- [Fibroadenoma TGLs = 1-20]
- Mesentery
 - Necrosis
 - Moderate
- [Necrosis TGLs = 4-21]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 914

TRT#: 4

SEX: Female

DAY ON TEST: 739

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-914

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
Note: Pars distalis available for evaluation. [Hyperplasia TGLs = 9,10,11-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	Follicle	Cyst	
	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 916

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-916

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Salivary Glands
- * Stomach, Forestomach
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Parathyroid Gland
- * Skin
- * Trachea
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 9-7]
- * Clitoral Gland
 - [Dilation TGLs = 3-16]
- * Eye
- * Heart
- * Kidney
- * Liver
 - [Mixed Cell Focus TGLs = 5-20]
- * Lung
 - [Infiltration Cellular TGLs = 8-10]
- * Mammary Gland
 - [Fibroadenoma TGLs = 1,2,4-20,21,22]
- * Nose
- * Ovary
- * Peripheral Nerve, Sciatic

- Degeneration
- Hypertrophy
- Vacuolation, Cytoplasmic
- Dilation
- Inflammation
- Atrophy
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Basophilic Focus
- Mixed Cell Focus
- Infiltration Cellular
- Dilation
- Fibroadenoma
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Cystic, Minimal
- Mild
- Mild
- Marked
- Chronic Active, Minimal
- Minimal
- Minimal
- Minimal
- Chronicprogr, Minimal
- Histiocyte, Minimal
- Minimal
- Moderate
- Marked
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 916

TRT#: 4

SEX: Female

DAY ON TEST: 740

DOSE: 1.5W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-916

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
* Thyroid Gland	C Cell	Adenoma	
[Adenoma TGLs = 7-8]			
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Mild

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 917

TRT#: 4

SEX: Female

DAY ON TEST: 531

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-917

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Pancreas | * Pituitary Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Spinal Cord, Lumbar | * Spinal Cord, Thoracic |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|---|---------------------------------------|-------------------------------|-------------------------|
| * Bone Marrow | | Hypercellularity | Marked |
| * Brain | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Infarct | Mild |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic Active, Minimal |
| | [Infiltration Cellular TGLs = 2-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | |
| | | Hyperplasia | Mild |
| | [Fibroadenoma TGLs = 1-20] | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 917

TRT#: 4

SEX: Female

DAY ON TEST: 531

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-917

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Moderate

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 918

TRT#: 4

SEX: Female

DAY ON TEST: 631

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-918

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Bone
- * Brain
- * Esophagus
- * Eye
- * Harderian Gland
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Islets, Pancreatic
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Pancreas
- * Parathyroid Gland
- * Pituitary Gland
- * Salivary Glands
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Spinal Cord, Thoracic
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- Trigeminal Ganglion
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

INSUFFICIENT TISSUE

- * Nerve Trigeminal

OBSERVATIONS

- | | | | |
|------------------|---|--------------------------|------------------------|
| * Adrenal Cortex | | Necrosis | Mild |
| | | Vacuolation, Cytoplasmic | Mild |
| * Aorta | | Mineral | Minimal |
| * Bone Marrow | | Hypercellularity | Marked |
| * Clitoral Gland | Duct | Dilation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Moderate |
| | Renal Tubule | Pigment | Moderate |
| * Liver | Hepatocyte | Congestion | Mild |
| | | Necrosis | Minimal |
| | [Congestion TGLs = 6-12] | | |
| * Lung | Alveolus | Congestion | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | [Congestion TGLs = 4-10] | | |
| | [Infiltration Cellular TGLs = 3-10] | | |
| Lymph Node | Mediastinal | Erythrophagocytosis | Moderate |
| | [Erythrophagocytosis TGLs = 1,2-20.1] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 918

TRT#: 4

SEX: Female

DAY ON TEST: 631

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-918

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland		Fibroadenoma	
	[Fibroadenoma TGLs = 8-20.1]		
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Minimal
		Extramedullary Hematopoiesis	Marked
	[Extramedullary Hematopoiesis TGLs = 7-12]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
* Thymus		Atrophy	Marked
		Hemorrhage	Mild
* Uterus		Dilation	Marked
		Hemorrhage	Marked
		Inflammation	Suppurative, Mild
	Epithelium	Metaplasia	Squamous, Marked
		Thrombus	Moderate

Note: Bacterial colonies present.

[Hemorrhage TGLs = 9-21]

PRIMARY CAUSE OF DEATH - Uterus Hemorrhage

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59
Test Type: CHRONIC
Route: Whole Body Exposure
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
Time Report Requested: 11:58:55
First Dose M/F: 09/16/12 / 09/16/12
Lab: IIT

ANIMAL ID: 919

TRT#: 4

SEX: Female

DAY ON TEST: 584

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-919

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Aorta	* Bone
* Bone Marrow	* Brain	* Esophagus	* Harderian Gland
* Intestine Large, Rectum	* Islets, Pancreatic	* Liver	* Lymph Node, Mesenteric
* Mammary Gland	* Nerve Trigeminal	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	Skeletal Muscle	* Skin
* Spinal Cord, Cervical	* Spinal Cord, Thoracic	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	Trigeminal Ganglion	* Urinary Bladder

AUTO PRECLUDES DIAG.

* Eye	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Uterus	

OBSERVATIONS

* Clitoral Gland	Duct	Dilation Inflammation	Mild Chronic Active, Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Minimal
* Lung		Foreign Body Inflammation	Suppurative, Marked
Note: Hair, keratin and plant material present consistent with aspiration pneumonia. [Inflammation TGLs = 1,2,4-10]			
* Lymph Node, Mandibular		Erythrophagocytosis	Mild
* Nose		Inflammation	Suppurative, Marked
* Ovary		Atrophy	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Moderate
		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
* Thymus		Atrophy	Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 919

TRT#: 4

SEX: Female

DAY ON TEST: 584

DOSE: 1.5W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-919

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Lung Inflammation

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 920

TRT#: 4

SEX: Female

DAY ON TEST: 699

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-920

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Kidney | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | Skeletal Muscle |
| * Spinal Cord, Cervical | * Stomach, Glandular | * Trachea | |

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--|---------------------------------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Moderate |
| * Bone Marrow | | Hypercellularity | Marked |
| * Clitoral Gland | | Hyperplasia | Focal, Mild |
| Note: A portion of one gland available for evaluation. | | | |
| * Islets, Pancreatic | | Adenoma | |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 8-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | Multiple |
| | | Hyperplasia | Minimal |
| | [Fibroadenoma TGLs = 3,9-20,21] | | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Moderate |
| | | Cyst | |
| | Rete Ovarii | Hyperplasia | Minimal |
| | [Cyst TGLs = 6-16] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 920

TRT#: 4

SEX: Female

DAY ON TEST: 699

DOSE: 1.5W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-920

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Skin		Inflammation	Acute, Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
[Extramedullary Hematopoiesis	TGLs = 2-12]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Inflammation	Chronic Active, Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal
* Urinary Bladder		Edema	Mild
		Hemorrhage	Minimal
	Urothelium	Hyperplasia	Mild
[Edema TGLs = 7-13]			
* Uterus	Epithelium	Metaplasia	Squamous, Moderate

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 4,5 = NCL (No Corresponding Lesion)

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1026

TRT#: 6

SEX: Female

DAY ON TEST: 489

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1026

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric |
| * Nerve Trigeminal | * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Tibial |
| * Salivary Glands | * Skin | * Spinal Cord, Cervical | * Spinal Cord, Lumbar |
| * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

MISSING

- * Clitoral Gland

OBSERVATIONS

- | | | | |
|---|---------------------------------------|-------------------------------|------------------------------------|
| * Bone Marrow | | Hypercellularity | Marked |
| * Heart | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Inflammation | Chronic Active, Minimal |
| * Lung | Alveolus | Mixed Cell Focus | |
| | [Infiltration Cellular TGLs = 5-10] | Infiltration Cellular | Histiocyte, Moderate |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | |
| | | Galactocele | |
| Note: Some galactoceles are ruptured with granulomatous inflammation. | | | |
| | | | [Fibroadenoma TGLs = 2-22] |
| | | | [Galactocele TGLs = 1,3-9,20,21] |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| Note: Level 3 damaged. | | | |
| * Ovary | | Atrophy | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Cyst | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1026

TRT#: 6

SEX: Female

DAY ON TEST: 489

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1026

ORGAN AND ACCOUNTABLE SITE STATUS

Note: Pars distalis available for evaluation.

Skeletal Muscle	Degeneration	Minimal
* Spleen	Extramedullary Hematopoiesis	Mild
* Thymus	Atrophy	Mild
	Hyperplasia	Epithelial, Minimal
* Uterus	Epithelium Metaplasia	Squamous, Moderate

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 4,6,7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1027

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1027

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Thymus

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - [Degeneration TGLs = 4-7]
- * Adrenal Medulla
 - Hyperplasia
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 - [Dilation TGLs = 1-16]
- * Kidney
 - Nephropathy
- * Liver
 - Bile Duct
 - Clear Cell Focus
 - Cyst
 - Extramedullary Hematopoiesis
 - Mixed Cell Focus
 - [Clear Cell Focus TGLs = 5-12]
 - [Mixed Cell Focus TGLs = 5-12]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - [Infiltration Cellular TGLs = 6-10]
- * Lymph Node, Mandibular
 - Proliferation
- * Mammary Gland
 - Duct
 - Dilation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1027

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1027

ORGAN AND ACCOUNTABLE SITE STATUS

		Hyperplasia	Minimal
[Dilation TGLs = 2-9]			
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Ovary		Atrophy	Mild
		Cyst	
[Cyst TGLs = 3-16]			
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Dilation	Moderate

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1028

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1028

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Skeletal Muscle
- * Stomach, Glandular
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Skin
- * Thyroid Gland
- * Esophagus
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- * Spinal Cord, Cervical
- * Trachea

AUTO PRECLUDES DIAG.

- * Intestine Small, Ileum

OBSERVATIONS

- | | | | |
|--|---|---|---|
| <ul style="list-style-type: none"> * Adrenal Cortex * Adrenal Medulla * Bone Marrow * Brain * Harderian Gland * Islets, Pancreatic * Kidney <li style="padding-left: 20px;">[Nephropathy TGLs = 16-13] * Liver <li style="padding-left: 20px;">[Degeneration TGLs = 12,13-12] * Lung * Lymph Node, Mandibular * Mammary Gland | <ul style="list-style-type: none"> Hepatocyte Sinusoid Bile Duct Epithlm Alvlus Duct | <ul style="list-style-type: none"> Degeneration Hypertrophy Hyperplasia Hypercellularity Compression Mineral Inflammation Hyperplasia Nephropathy Degeneration Dilation Hyperplasia Infiltration Cellular Hyperplasia Proliferation Adenocarcinoma Dilation Fibroadenoma Galactocele | <ul style="list-style-type: none"> Cystic, Minimal Mild Mild Marked Minimal Minimal Granulomatous, Minimal Moderate Chronicprogr, Mild Mild Mild Minimal Histiocyte, Moderate Moderate Plasma Cell, Moderate Moderate Multiple |
|--|---|---|---|

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1028

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1028

ORGAN AND ACCOUNTABLE SITE STATUS

Note: Some galactoceles are ruptured with granulomatous inflammation.

[Adenocarcinoma TGLs = 5,21-21,20]

[Dilation TGLs = 4-22]

[Fibroadenoma TGLs = 2,6-9,20]

[Galactocele TGLs = 4,21-20,22]

* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Minimal
* Pancreas	Artery	Inflammation	Chronic Active, Mild
* Parathyroid Gland		Fibrosis	Minimal
		Hyperplasia	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Intermed	Cyst	
	[Adenoma TGLs = 20-4]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Accessory Spleen	Moderate
		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
	[Accessory Spleen TGLs = 18-21]		
	[Extramedullary Hematopoiesis TGLs = 17-12]		
* Thymus		Schwannoma Malignant	
	[Schwannoma Malignant TGLs = 7-6]		
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Adenocarcinoma	
	Epithelium	Metaplasia	Squamous, Marked
	[Adenocarcinoma TGLs = 10-16.1]		

PRIMARY CAUSE OF DEATH - Thymus Schwannoma Malignant

Animal Note: TGLs 3,8,9,11,14,15 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1028

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1028

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: TGL 19 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1029

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1029

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Stomach, Forestomach
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Glandular
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Cystic, Moderate
 - Moderate
 - Moderate
- [Degeneration TGLs = 2-7]
- * Brain
 - Compression
 - Minimal
- Note: Olfactory bulbs unavailable for evaluation.
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Angiectasis
 - Basophilic Focus
 - Eosinophilic Focus
 - Mixed Cell Focus
 - Minimal
- [Angiectasis TGLs = 5-20]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Hyperplasia
 - Lymphocyte, Minimal
 - Proliferation
 - Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Mild
 - Hyperplasia
 - Minimal
- [Dilation TGLs = 1-9]
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Mild
- * Ovary
 - Atrophy
 - Marked
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1029

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1029

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Hyperplasia	Mild
	[Adenoma TGLs = 4-4]		
* Salivary Glands	Parotid GI	Atrophy	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Moderate
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1030

TRT#: 6

SEX: Female

DAY ON TEST: 727

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1030

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Cystic, Mild
 - Minimal
 - Moderate
- [Degeneration TGLs = 1-7]
- * Bone Marrow
 - Hypercellularity
 - Compression
 - Marked
- * Brain
 - Compression
 - Mild
- [Compression TGLs = 10-2]
- * Heart
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Eosinophilic Focus
- Note: Fibrosis and intestinal metaplasia of extrahepatic bile ducts near pancreas.
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Inflammation
 - Histiocyte, Mild
 - Chronic Active, Mild
- [Infiltration Cellular TGLs = 13-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Lymphocyte, Mild
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Hyperplasia
 - Plasma Cell, Moderate
 - Mild
 - Multiple
 - Marked
- [Fibroadenoma TGLs = 11,12-22,20]
- [Hyperplasia TGLs = 7-21]
- * Nerve Trigeminal
 - Degeneration
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1030

TRT#: 6

SEX: Female

DAY ON TEST: 727

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1030

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Mild
* Pancreas	Periductal	Cholangiofibrosis	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 9-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Mild
* Thyroid Gland	C Cell	Adenoma	
Tissue NOS	Fat	Necrosis	Moderate
[Necrosis TGLs = 5-20]			
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate
		Polyp Stromal	Multiple
[Hyperplasia TGLs = 4-16]			
[Polyp Stromal TGLs = 2-16]			

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 3,6,8,14 = NCL (No Corresponding Lesion)

Animal Note: TGL 15 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1031

TRT#: 6

SEX: Female

DAY ON TEST: 737

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1031

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Kidney | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Ovary |
| * Salivary Glands | Skeletal Muscle | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | * Uterus |

OBSERVATIONS

- | | | | |
|-----------------------------|--|-------------------------------|----------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| | | Hyperplasia | Mild |
| | | Hypertrophy | Mild |
| | [Degeneration TGLs = 5-7] | | |
| * Brain | | | |
| | Note: Olfactory bulbs unavailable for evaluation. | | |
| * Clitoral Gland | | Inflammation | Chronic Active, Mild |
| * Liver | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 6-10] | | |
| * Mammary Gland | | Hyperplasia | Moderate |
| Mesentery | | Necrosis | Mild |
| | [Necrosis TGLs = 2-21] | | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Periductal | Cholangiofibrosis | Moderate |
| * Parathyroid Gland | | Fibrosis | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| | Note: Longitudinal section available for evaluation. | | |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| * Skin | | Pilomatrixoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1031

TRT#: 6

SEX: Female

DAY ON TEST: 737

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1031

ORGAN AND ACCOUNTABLE SITE STATUS

[Pilomatrixoma TGLs = 1-20]

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
* Thymus		Atrophy	Mild
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal

Animal Note: TGLs 3,4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1032

TRT#: 6

SEX: Female

DAY ON TEST: 636

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1032

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Clitoral Gland
- * Intestine Small, Jejunum
- * Ovary
- * Skin
- * Stomach, Glandular
- * Uterus
- * Bone
- * Esophagus
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Lymph Node, Mandibular
- * Salivary Glands
- * Spinal Cord, Thoracic
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Small, Ileum
- * Intestine Large, Cecum
- * Trachea
- * Intestine Large, Colon
- * Intestine Small, Duodenum

OBSERVATIONS

- * Adrenal Cortex Hypertrophy Minimal
- * Adren Medulla
- Note: One of a pair present for evaluation.
- * Brain
- Note: Olfactory bulbs not available for evaluation.
- * Heart Cardiomyopathy Minimal
- * Kidney Nephropathy Chronicprogr, Minimal
- * Liver Angiectasis Mild
- Hepatocyte Necrosis Mild
- [Angiectasis TGLs = 6-12]
- * Lung Infiltration Cellular Histiocyte, Moderate
- Alveolus Inflammation Granulomatous, Minimal
- [Infiltration Cellular TGLs = 4-10]
- Lymph Node Renal Erythrophagocytosis Moderate
- Note: Iliac lymph node is normal.
- [Erythrophagocytosis TGLs = 3-21]
- * Mammary Gland Fibroadenoma Minimal
- [Fibroadenoma TGLs = 5-20.1] Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1032

TRT#: 6

SEX: Female

DAY ON TEST: 636

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1032

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Periductal	Cholangiofibrosis	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Cyst	
* Spinal Cord, Lumbar		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Mild
		Extramedullary Hematopoiesis	Mild
* Thymus		Atrophy	Marked

PRIMARY CAUSE OF DEATH - UNCERTAIN

Animal Note: TGLs 1,2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1033

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1033

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Aorta | * Bone | * Brain | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Parathyroid Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|---|--|---|
| * Adrenal Cortex | | Degeneration
Hypertrophy | Cystic, Mild
Mild |
| | [Degeneration TGLs = 6-7] | | |
| * Adrenal Medulla | | Hyperplasia
Pheochromocytoma Benign | Moderate |
| * Bone Marrow | | Hypercellularity | Mild |
| * Brain | | | |
| | Note: Olfactory bulbs unavailable for evaluation. | | |
| * Clitoral Gland | Duct | Dilation
Inflammation | Moderate
Chronic Active, Mild |
| | [Dilation TGLs = 1-16] | | |
| * Harderian Gland | | Atrophy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Clear Cell Focus
Mixed Cell Focus | |
| | [Clear Cell Focus TGLs = 7,10-12] | | |
| | [Mixed Cell Focus TGLs = 7,10-12] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 8-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia
Proliferation | Lymphocyte, Minimal
Plasma Cell, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1033

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1033

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland		Adenocarcinoma	
	Duct	Dilation	Mild
		Fibroadenoma	Multiple
		Hyperplasia	Marked
Note: Carcinoma arising with a fibroadenoma.			
	[Adenocarcinoma	TGLs = 4-21]	
	[Fibroadenoma	TGLs = 3,5-20,22]	
	[Hyperplasia	TGLs = 2-9]	
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
	Bursa	Dilation	Minimal
* Pancreas	Acinus	Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma	TGLs = 9-4]	
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
* Thymus		Atrophy	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1034

TRT#: 6

SEX: Female

DAY ON TEST: 439

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1034

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Heart
- * Liver
- * Nerve Trigeminal
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thymus
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Lymph Node, Mandibular
- * Pancreas
- Skeletal Muscle
- * Spleen
- * Thyroid Gland
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Skin
- * Stomach, Forestomach
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Islets, Pancreatic
- * Mammary Gland
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Medulla
 - Note: Tumor has focal capsular invasion
 - [Pheochromocytoma Complex TGLs = 1-7]
 - * Clitoral Gland
 - Duct
 - * Kidney
 - * Lung
 - Alveolus
 - [Congestion TGLs = 5-10]
 - [Inflammation TGLs = 2,3,4-10]
 - * Nose
 - Olfactory Epi
 - * Ovary
 - * Peripheral Nerve, Sciatic
 - * Peripheral Nerve, Tibial
 - * Spinal Cord, Thoracic
 - * Uterus
 - Epithelium
- Pheochromocytoma Complex
- Dilation
- Inflammation
- Nephropathy
- Congestion
- Infiltration Cellular
- Inflammation
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Degeneration
- Degeneration
- Metaplasia
- Minimal
- Chronic Active, Mild
- Chronicprogr, Minimal
- Mild
- Histocyte, Minimal
- Granulomatous, Mild
- Mild
- Moderate
- Minimal
- Minimal
- Minimal
- Squamous, Minimal

PRIMARY CAUSE OF DEATH - Adrenal Medulla Pheochromocytoma Complex

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1035

TRT#: 6

SEX: Female

DAY ON TEST: 724

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1035

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Brain
- * Esophagus
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Liver
- * Lymph Node, Mesenteric
- * Pancreas
- * Parathyroid Gland
- * Salivary Glands
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Thoracic
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- * Urinary Bladder
- * Trigeminal Ganglion

MISSING

- * Mammary Gland

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Large, Cecum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum

OBSERVATIONS

- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 - Inflammation
 - Cardiomyopathy
 - Cardiomyopathy
 - Nephropathy
 - Congestion
 - Infiltration Cellular
 - Alveolus
 - Erythrophagocytosis
 - Degeneration
 - Accumulation, Hyaline Droplet
 - Atrophy
 - Degeneration
 - Degeneration
 - Adenoma
- * Harderian Gland
- * Heart
- * Kidney
- * Lung
 - Ventricl Rgt
 - Marked
 - Chronic Active, Mild
 - Granulomatous, Minimal
 - Minimal
 - Minimal
 - Chronicprogr, Minimal
 - Mild
 - Histiocyte, Minimal
 - Alveolus
 - Mild
 - Minimal
 - Mild
 - Moderate
 - Minimal
 - Minimal
- * Lymph Node, Mandibular
 - [Congestion TGLs = 2-10]
- * Nerve Trigeminal
- * Nose
- * Ovary
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
 - Pars Distalis
 - [Adenoma TGLs = 1-4]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1035

TRT#: 6

SEX: Female

DAY ON TEST: 724

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1035

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Hemorrhage	Moderate
* Uterus	Epithelium	Metaplasia	Squamous, Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1036

TRT#: 6

SEX: Female

DAY ON TEST: 720

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1036

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- Trigeminal Ganglion
- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Salivary Glands
- * Thyroid Gland
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Vacuolation, Cytoplasmic
 - Cystic, Moderate
- * Bone Marrow
 - Hypercellularity
 - Minimal
- * Brain
 - Meninges
 - Hyperplasia
 - Gran Cell, Moderate
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 - Mild
 - Chronic Active, Mild
- [Dilation TGLs = 3-16]
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Extramedullary Hematopoiesis
 - Mixed Cell Focus
 - Minimal
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal
- Lymph Node
 - Mediastinal
 - Erythrophagocytosis
 - Minimal
 - Mediastinal
 - Hyperplasia
 - Lymphocyte, Minimal
 - Mediastinal
 - Proliferation
 - Plasma Cell, Mild
- [Erythrophagocytosis TGLs = 10-21]
- [Proliferation TGLs = 9-21]
- * Mammary Gland
 - Fibroadenoma
 - Multiple
 - Hyperplasia
 - Mild
- Note: Fibrosarcoma arising within a fibroadenoma.
 - [Fibroadenoma TGLs = 1,2-20+21]
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1036

TRT#: 6

SEX: Female

DAY ON TEST: 720

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1036

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Cyst	
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
	[Extramedullary Hematopoiesis TGLs = 4-12]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thymus		Atrophy	Moderate
		Cyst	
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 5,7,8 = NCL (No Corresponding Lesion)

Animal Note: TGL 11 = NST (No Section Taken)

Animal Note: TGL 6 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1037

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1037

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Pancreas
- * Skin
- Trigeminal Ganglion
- * Aorta
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Nerve Trigeminal
- * Salivary Glands
- * Stomach, Glandular
- * Uterus
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lung
- * Ovary
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Cystic, Minimal
 - Minimal
 - Moderate
 - Minimal
- [Degeneration TGLs = 2-7]
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Eye
 - Retina
 - Atrophy
 - Minimal
- * Heart
 - Ventricle Rgt
 - Cardiomyopathy
 - Cardiomyopathy
 - Myocardium
 - Schwannoma Malignant
 - Minimal
 - Minimal
- [Cardiomyopathy TGLs = 7-20]
- [Schwannoma Malignant TGLs = 6-21]
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Clear Cell Focus
 - Eosinophilic Focus
 - Mixed Cell Focus
 - [Clear Cell Focus TGLs = 4-20]
 - [Eosinophilic Focus TGLs = 3-20]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1037

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1037

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland		Hyperplasia	Minimal
Mesentery		Necrosis	Mild
[Necrosis TGLs = 1-21]			
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1038

TRT#: 6

SEX: Female

DAY ON TEST: 727

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1038

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|--------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Pancreas |
| * Parathyroid Gland | Skeletal Muscle | * Spinal Cord, Cervical | * Spinal Cord, Thoracic |
| * Stomach, Glandular | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum

OBSERVATIONS

- | | | | |
|---|---|-----------------------------------|-----------------------|
| * Adrenal Cortex | | Accessory Adrenal Cortical Nodule | |
| * Bone Marrow | | Hypercellularity | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Infiltration Cellular | Histiocyte, Mild |
| | Hepatocyte | Necrosis | Mild |
| * Lung | Epithlm Alvlus | Hyperplasia | Minimal |
| | [Squamous Cell Carcinoma TGLs = 2-10] | Squamous Cell Carcinoma | Metastatic (Skin) |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Mild |
| | | Hyperplasia | Moderate |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| Note: Approximately two-thirds of Level 3 available for evaluation. | | | |
| * Ovary | | Atrophy | Moderate |
| | Rete Ovarii | Hyperplasia | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1038

TRT#: 6

SEX: Female

DAY ON TEST: 727

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1038

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland [Adenoma TGLs = 3-4]	Pars Distalis	Adenoma	
* Salivary Glands	Submandibul GI	Atrophy	Moderate
* Skin [Squamous Cell Carcinoma TGLs = 1-21]		Squamous Cell Carcinoma	
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Pigment	Minimal
* Stomach, Forestomach		Ulcer	Mild
* Thymus		Atrophy	Moderate
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tooth [Dysplasia TGLs = 6-20]		Dysplasia	Moderate
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Skin Squamous Cell Carcinoma

Animal Note: TGLs 4,5 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1039

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1039

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- Skeletal Muscle
- * Trachea
- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Skin
- Trigeminal Ganglion
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Stomach, Glandular
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Salivary Glands
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Cystic, Minimal
- * Bone Marrow
 - Hypertrophy
 - Mild
- * Brain
 - Hypercellularity
 - Mild
- * Clitoral Gland
 - Compression
 - Minimal
- * Islets, Pancreatic
 - Inflammation
 - Chronic Active, Minimal
- * Kidney
 - Hyperplasia
 - Minimal
- * Liver
 - Nephropathy
 - Chronicprogr, Minimal
- * Lung
 - Basophilic Focus
 - Bile Duct
 - Hyperplasia
 - Minimal
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal
- [Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Lymphocyte, Mild
- * Mammary Gland
 - Proliferation
 - Plasma Cell, Minimal
- Duct
 - Adenocarcinoma
 - Dilation
 - Mild
 - Galactocele
- [Adenocarcinoma TGLs = 2-21]
- [Galactocele TGLs = 1,3-20,9]
- * Nerve Trigeminal
 - Degeneration
 - Moderate
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Mild
- * Ovary
 - Atrophy
 - Moderate
 - Cyst
- [Cyst TGLs = 4-16]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1039

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1039

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Atrophy	Minimal
	Periductal	Cholangiofibrosis	Moderate
Note: Intestinal metaplasia of duct epithelium in regions of fibrosis.			
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	Multiple
[Adenoma TGLs = 6,7-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
* Thymus		Atrophy	Minimal
		Cyst	
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1040

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1040

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Bone
- * Brain
- * Esophagus
- * Eye
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Pancreas
- * Salivary Glands
- * Skeletal Muscle
- * Skin
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- * Urinary Bladder
- * Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Degeneration Cystic, Minimal
 - Hyperplasia Minimal
 - Hypertrophy Minimal
 - [Hypertrophy TGLs = 5-7]
- * Adrenal Medulla
 - Hyperplasia Minimal
- * Bone Marrow
 - Hypercellularity Marked
- * Clitoral Gland
 - Duct Dilation Mild
- * Harderian Gland
 - Atrophy Minimal
- * Heart
 - Cardiomyopathy Minimal
- * Kidney
 - Nephropathy Chronicprogr, Minimal
- * Liver
 - Eosinophilic Focus
- * Lung
 - Alveolus Infiltration Cellular Histiocyte, Minimal
 - [Infiltration Cellular TGLs = 11-10]
- Lymph Node
 - Iliac Erythrophagocytosis Moderate
 - Lumbar Erythrophagocytosis Mild
 - Mediastinal Erythrophagocytosis Minimal
 - Iliac Hyperplasia Lymphocyte, Minimal
 - Lumbar Infiltration Cellular Histiocyte, Mild
 - [Erythrophagocytosis TGLs = 9-22]
 - [Erythrophagocytosis TGLs = 13-23]
 - [Erythrophagocytosis TGLs = 7-6]
 - [Hyperplasia TGLs = 8-22]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1040

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1040

ORGAN AND ACCOUNTABLE SITE STATUS

[Infiltration Cellular TGLs = 12-23]

* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
* Lymph Node, Mesenteric		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland	Duct	Dilation	Minimal
		Fibroadenoma	Multiple

[Fibroadenoma TGLs = 2,3,4-20,21,16]

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild

[Hyperplasia TGLs = 14-4]

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thymus		Atrophy	Moderate
		Cyst	
		Hyperplasia	Epithelial, Minimal

[Atrophy TGLs = 6-6]

* Uterus	Epithelium	Metaplasia	Squamous, Minimal
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Animal Note: TGL 1 = NST (No Section Taken)

Animal Note: TGL 10 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1041

TRT#: 6

SEX: Female

DAY ON TEST: 745

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1041

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Aorta | * Bone | * Brain | * Esophagus |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Liver | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Bone Marrow | | Hypercellularity | Marked |
| * Clitoral Gland | Duct | Dilation | Mild |
| | [Dilation TGLs = 3-16] | | |
| * Eye | Retina | Atrophy | Minimal |
| * Harderian Gland | | Atrophy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Moderate |
| | [Infiltration Cellular TGLs = 8-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Lymph Node, Mesenteric | | Infiltration Cellular | Histiocyte, Minimal |
| * Mammary Gland | Duct | Dilation | Mild |
| | [Dilation TGLs = 4-9] | | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Marked |
| | | Cyst | |
| | Rete Ovarii | Hyperplasia | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |

Note: Longitudinal section available for evaluation.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1041

TRT#: 6

SEX: Female

DAY ON TEST: 745

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1041

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Mild
* Thyroid Gland	C Cell	Hyperplasia	Moderate
* Uterus		Dilation	Marked
		Inflammation	Chronic Active, Minimal

[Dilation TGLs = 5-16]

[Inflammation TGLs = 6-16]

Animal Note: TGLs 1,2 = NST (No Section Taken)

Animal Note: TGLs 7,9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1042

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1042

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Liver | * Lymph Node, Mesenteric | * Nerve Trigeminal | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|---|--|--|---|
| * Adrenal Cortex | | Degeneration
Hypertrophy | Cystic, Minimal
Mild |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Clitoral Gland | Duct | Dilation
Inflammation | Marked
Chronic Active, Mild |
| | [Dilation TGLs = 1-16,16.1] | | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Epithlm Alvlus
Alveolus
Alveolar Epith | Hyperplasia
Infiltration Cellular
Metaplasia | Minimal
Histocyte, Mild
Squamous, Minimal |
| | [Infiltration Cellular TGLs = 2-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia
Proliferation | Lymphocyte, Minimal
Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation
Hyperplasia | Mild
Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Marked |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1042

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1042

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
		Polyp Stromal	

[Polyp Stromal TGLs = 3-16]

Experiment Number: 20105 - 59
 Test Type: CHRONIC
 Route: Whole Body Exposure
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Cell Phone Radiation: GSM
 CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018
 Time Report Requested: 11:58:55
 First Dose M/F: 09/16/12 / 09/16/12
 Lab: IIT

ANIMAL ID: 1043

TRT#: 6

SEX: Female

DAY ON TEST: 634

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1043

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Esophagus	* Eye	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Parathyroid Gland
* Salivary Glands	Skeletal Muscle	* Skin	* Spinal Cord, Thoracic
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

Trigeminal Ganglion

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Brain		Compression	Moderate
[Compression TGLs = 7-2]			
* Clitoral Gland	Duct	Dilation	Marked
* Harderian Gland		Inflammation	Chronic Active, Minimal
* Kidney		Nephropathy	Chronicprogr, Minimal
* Liver		Basophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
[Infiltration Cellular TGLs = 2-10]			
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Mild
[Proliferation TGLs = 1-9]			
* Mammary Gland		Adenocarcinoma	
	Duct	Dilation	Minimal
		Galactocele	
		Hyperplasia	Moderate
[Adenocarcinoma TGLs = 8-20]			
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1043

TRT#: 6

SEX: Female

DAY ON TEST: 634

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1043

ORGAN AND ACCOUNTABLE SITE STATUS

	Bursa	Dilation	Minimal
	Rete Ovarii	Hyperplasia	Mild
[Dilation TGLs = 6-16.1]			
* Pancreas	Acinus	Adenocarcinoma	
	Periductal	Cholangiofibrosis	Moderate
[Adenocarcinoma TGLs = 5-6]			
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 9-4]			
* Spinal Cord, Cervical		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Pigment	Mild
* Thymus		Atrophy	Mild
		Cyst	
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGLs 3,4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1045

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1045

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Kidney
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- Skeletal Muscle
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 Minimal
- * Bone Marrow
 - Hypercellularity
 Moderate
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 Marked
Chronic Active, Mild
- [Dilation TGLs = 3,4-16]
- * Heart
 - Cardiomyopathy
 Minimal
- * Liver
 - Bile Duct
 - Cyst
 - Eosinophilic Focus
 - Hepatocellular Adenoma
 - Mixed Cell Focus
- [Cyst TGLs = 9-12]
- * Lung
 - Alveolus
 - Infiltration Cellular
 Histiocyte, Minimal
- [Infiltration Cellular TGLs = 10-10]
- Lymph Node
 - Iliac, Lymph Sinus
 - Ectasia
 - Pigment
 Minimal
Minimal
- [Ectasia TGLs = 7-21]
- [Pigment TGLs = 8-21]
- * Lymph Node, Mesenteric
 - Erythrophagocytosis
 Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 Mild
- [Dilation TGLs = 12-9]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1045

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1045

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 1-20]

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	

[Adenoma TGLs = 11-4]

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
* Uterus		Cyst	

Note: Cystic spaces filled with hemorrhage.

[Cyst TGLs = 5,6-16]

Animal Note: TGL 2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1046

TRT#: 6

SEX: Female

DAY ON TEST: 662

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1046

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Colon
- * Islets, Pancreatic
- Skeletal Muscle
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Skin
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Small, Duodenum
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Ileum
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Trachea

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex Hyperplasia Minimal
- * Clitoral Gland Duct Dilation Mild
- [Inflammation TGLs = 4-16] Inflammation Chronic Active, Marked
- * Heart Ventricl Rgt Cardiomyopathy Minimal
- * Kidney Nephropathy Chronicprogr, Minimal
- * Liver Basophilic Focus
- [Infiltration Cellular TGLs = 5-10] Eosinophilic Focus
- * Lung Alveolus Infiltration Cellular Histiocyte, Minimal
- * Lymph Node, Mandibular Proliferation Plasma Cell, Mild
- * Mammary Gland Duct Dilation Minimal
- [Fibroadenoma TGLs = 1,2-20,21] Fibroadenoma Multiple
- [Fibroadenoma TGLs = 1,2-20,21] Hyperplasia Minimal
- * Nerve Trigeminal Degeneration Mild
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Moderate
- * Ovary Atrophy Mild
- * Pancreas Acinus Atrophy Minimal
- [Fibroadenoma TGLs = 1,2-20,21] Periductal Cholangiofibrosis Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1046

TRT#: 6

SEX: Female

DAY ON TEST: 662

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1046

ORGAN AND ACCOUNTABLE SITE STATUS

* Parathyroid Gland		Fibrosis	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen	White Pulp	Atrophy	Mild
		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
* Uterus	Epithelium	Metaplasia	Squamous, Mild

PRIMARY CAUSE OF DEATH - UNCERTAIN

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1048

TRT#: 6

SEX: Female

DAY ON TEST: 671

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1048

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Brain
- * Clitoral Gland
- * Esophagus
- * Eye
- * Harderian Gland
- * Heart
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Skeletal Muscle
- * Skin
- * Stomach, Forestomach
- * Stomach, Glandular
- * Trachea
- Trigeminal Ganglion
- * Uterus

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Bone Marrow Hypercellularity Marked
- * Brain
- Note: Olfactory bulbs unavailable for evaluation.
- * Kidney Nephropathy Chronicprogr, Mild
 - [Nephropathy TGLs = 11-13]
- * Liver Extramedullary Hematopoiesis Minimal
- * Lung Hyperplasia Minimal
 - Epithlm Alvlus
 - Alveolus Infiltration Cellular Histocyte, Mild
 - [Infiltration Cellular TGLs = 10-10.1]
 - Lymph Node Ectasia Mild
 - Erythrophagocytosis Moderate
 - Proliferation Plasma Cell, Mild
 - [Ectasia TGLs = 17-6.1]
 - [Erythrophagocytosis TGLs = 18-6.1]
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Moderate
 - Proliferation Plasma Cell, Mild
- * Mammary Gland Dilation Minimal
 - Duct
 - Fibroadenoma
 - Hyperplasia Mild
 - [Fibroadenoma TGLs = 15-22]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1048

TRT#: 6

SEX: Female

DAY ON TEST: 671

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1048

ORGAN AND ACCOUNTABLE SITE STATUS

Mesentery		Schwannoma Malignant	Metastatic (Ovary)
[Schwannoma Malignant	TGLs = 7-14,15,21]		
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Schwannoma Malignant	
[Schwannoma Malignant	TGLs = 6,13-16,23]		
* Pancreas		Schwannoma Malignant	Metastatic (Ovary)
[Schwannoma Malignant	TGLs = 1-6.1]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma	TGLs = 8-4]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
[Extramedullary Hematopoiesis	TGLs = 14-12.1]		
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild
Tissue NOS	Fat	Necrosis	Moderate
[Necrosis	TGLs = 5-20]		
* Urinary Bladder		Schwannoma Malignant	Metastatic (Ovary)

PRIMARY CAUSE OF DEATH - Ovary Schwannoma Malignant

Animal Note: TGLs 3,9,12,16 = NCL (No Corresponding Lesion)

Animal Note: TGLs 2,4 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1050

TRT#: 6

SEX: Female

DAY ON TEST: 695

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1050

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Clitoral Gland
- * Intestine Large, Rectum
- * Parathyroid Gland
- * Bone
- * Esophagus
- * Islets, Pancreatic
- * Skin
- * Bone Marrow
- * Harderian Gland
- * Lymph Node, Mandibular
- * Trachea
- * Brain
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- Trigeminal Ganglion

MISSING

- * Thymus

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - * Adrenal Medulla
 - * Heart
 - * Intestine Large, Cecum
 - [Adenocarcinoma TGLs = 23-15]
 - * Kidney
 - [Dilation TGLs = 12-13]
 - [Nephropathy TGLs = 11-13]
 - * Liver
 - [Adenocarcinoma TGLs = 7,8,20-12,24,25]
 - * Lung
 - [Infiltration Cellular TGLs = 9-10]
 - Lymph Node
 - [Adenocarcinoma TGLs = 21-22]
 - [Congestion TGLs = 22-22]
 - * Mammary Gland
- Serosa
- Pelvis
- Alveolus
- Mediastinal
- Mediastinal
- Duct
- Adenocarcinoma
- Adenocarcinoma
- Cardiomyopathy
- Adenocarcinoma
- Dilation
- Nephropathy
- Adenocarcinoma
- Congestion
- Infiltration Cellular
- Adenocarcinoma
- Congestion
- Dilation
- Fibroadenoma
- Metastatic (Pancreas)
- Metastatic (Pancreas)
- Minimal
- Metastatic (Pancreas)
- Moderate
- Chronicprogr, Moderate
- Metastatic (Pancreas)
- Minimal
- Histiocyte, Minimal
- Metastatic (Pancreas)
- Moderate
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1050

TRT#: 6

SEX: Female

DAY ON TEST: 695

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1050

ORGAN AND ACCOUNTABLE SITE STATUS

Galactocele

[Fibroadenoma TGLs = 19-21]

Mesentery

Adenocarcinoma

Metastatic (Pancreas)

[Adenocarcinoma TGLs = 1,15-15,22]

* Nerve Trigeminal

Degeneration

Moderate

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

Olfactory Epi

Atrophy

Minimal

Respirat Epith

Hyperplasia

Mild

Inflammation

Acute, Minimal

* Ovary

Adenocarcinoma

Metastatic (Pancreas)

Atrophy

Mild

* Pancreas

Acinus

Adenocarcinoma

* Peripheral Nerve, Sciatic

Degeneration

Minimal

* Peripheral Nerve, Tibial

Degeneration

Minimal

* Pituitary Gland

Pars Distalis

Adenoma

* Salivary Glands

Parotid GI

Atrophy

Mild

Skeletal Muscle

Diaphragm

Adenocarcinoma

Metastatic (Pancreas)

[Adenocarcinoma TGLs = 5-24]

* Spinal Cord, Cervical

Degeneration

Minimal

* Spinal Cord, Lumbar

Degeneration

Mild

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

White Pulp

Atrophy

Mild

Red Pulp

Atrophy

Mild

Pigment

Moderate

[Atrophy TGLs = 14-12]

* Stomach, Forestomach

Epithelium

Hyperplasia

Moderate

* Stomach, Glandular

Serosa

Adenocarcinoma

Metastatic (Pancreas)

[Adenocarcinoma TGLs = 17-23]

* Thyroid Gland

C Cell

Adenoma

* Urinary Bladder

Serosa

Adenocarcinoma

Metastatic (Pancreas)

* Uterus

Adenocarcinoma

Metastatic (Pancreas)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1050

TRT#: 6

SEX: Female

DAY ON TEST: 695

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1050

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenocarcinoma TGLs = 10-16]

PRIMARY CAUSE OF DEATH - Pancreas Acinus Adenocarcinoma

Animal Note: TGL 6 = NST (No Section Taken)

Animal Note: TGLs 2,3,4,13,16 = NCL (No Corresponding Lesion)

Animal Note: TGL 18 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1051

TRT#: 6

SEX: Female

DAY ON TEST: 628

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1051

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Small, Duodenum
- * Liver
- * Salivary Glands
- * Stomach, Glandular
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Skin
- * Thyroid Gland
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Peripheral Nerve, Sciatic
- * Spinal Cord, Cervical
- * Trachea
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Spinal Cord, Thoracic
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Bone Marrow
- * Clitoral Gland
- [Inflammation TGLs = 11-16]
- * Harderian Gland
- * Heart
- * Kidney
- * Lung
- [Infiltration Cellular TGLs = 6-10]
- Lymph Node
- [Erythrophagocytosis TGLs = 5-6]
- * Lymph Node, Mandibular
- [Proliferation TGLs = 14-9]
- * Lymph Node, Mesenteric
- [Proliferation TGLs = 15-21]
- * Mammary Gland
- [Dilatation TGLs = 16-20]

- Hyperplasia
- Hyperplasia
- Hypercellularity
- Dilatation
- Inflammation
- Hyperplasia
- Cardiomyopathy
- Nephropathy
- Infiltration Cellular
- Inflammation
- Erythrophagocytosis
- Hyperplasia
- Proliferation
- Proliferation
- Dilatation
- Fibroadenoma
- Hyperplasia
- Mild
- Minimal
- Marked
- Moderate
- Chronic Active, Moderate
- Moderate
- Minimal
- Chronicprogr, Moderate
- Histiocyte, Mild
- Chronic Active, Mild
- Mild
- Lymphocyte, Minimal
- Plasma Cell, Mild
- Plasma Cell, Marked
- Mild
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1051

TRT#: 6

SEX: Female

DAY ON TEST: 628

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1051

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 16-20]

Mesentery

Inflammation

Chronic Active, Minimal

* Nerve Trigeminal

Degeneration

Minimal

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Moderate

* Ovary

Cyst

Note: One ovary present on slide 21.

[Cyst TGLs = 1-16]

* Pancreas

Inflammation

Chronic Active, Mild

* Peripheral Nerve, Tibial

Degeneration

Minimal

Skeletal Muscle

Degeneration

Minimal

* Spinal Cord, Lumbar

Degeneration

Minimal

* Spleen

Extramedullary Hematopoiesis

Marked

[Extramedullary Hematopoiesis TGLs = 12-12]

* Stomach, Forestomach

Edema

Mild

Epithelium

Hyperplasia

Mild

* Thymus

Atrophy

Moderate

Trigeminal Ganglion

Degeneration

Minimal

* Uterus

Dilation

Mild

Endometrium

Hyperplasia

Cystic, Mild

Inflammation

Suppurative, Mild

Schwannoma Malignant

[Schwannoma Malignant TGLs = 3+7+8-16,22]

PRIMARY CAUSE OF DEATH - Uterus Schwannoma Malignant

Animal Note: TGLs 2,4,9,10,13 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1052

TRT#: 6

SEX: Female

DAY ON TEST: 745

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1052

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Clitoral Gland | * Esophagus | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Liver | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | * Uterus | | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Eye | Retina | Atrophy | Minimal |
| * Islets, Pancreatic | | Hyperplasia | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 2-10] | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | | Hyperplasia | Mild |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Cyst | |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Spinal Cord, Cervical | | Degeneration | Minimal |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Mild |
| * Spinal Cord, Thoracic | | Degeneration | Mild |
| * Spleen | | Extramedullary Hematopoiesis | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1052

TRT#: 6

SEX: Female

DAY ON TEST: 745

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1052

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus		Pigment	Mild
* Thyroid Gland	C Cell	Atrophy	Mild
Tissue NOS	Fat	Hyperplasia	Minimal
		Necrosis	Mild

Note: Within periovarian tissue.
[Necrosis TGLs = 1-20]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1053

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1053

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Salivary Glands
- * Stomach, Glandular
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- Skeletal Muscle
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Skin
- Trigeminal Ganglion
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hypertrophy
- * Clitoral Gland
 - Duct
 - [Dilation TGLs = 3,4-16]
- * Heart
 - Cardiomyopathy
- * Islets, Pancreatic
 - Hyperplasia
- * Kidney
 - Nephropathy
- * Liver
 - Basophilic Focus
 - Eosinophilic Focus
 - Mixed Cell Focus
- * Lung
 - [Eosinophilic Focus TGLs = 7-20]
 - Alveolus
 - [Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular
 - Lymph Sinus
- * Mammary Gland
 - [Fibroadenoma TGLs = 1,2-9,20]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
- * Ovary
 - Accumulation, Hyaline Droplet
 - Atrophy
 - Cyst
- * Pancreas
 - Acinus
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1053

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1053

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Moderate
		Hemorrhage	Minimal
		Pigment	Mild
* Thymus		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Marked
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
		Inflammation	Suppurative, Minimal
	Epithelium	Metaplasia	Squamous, Mild

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1055

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1055

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skeletal Muscle
- * Thymus
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Cystic, Minimal
- * Bone Marrow
 - Hypertrophy
 - Mild
- * Clitoral Gland
 - Duct
 - Hypercellularity
 - Moderate
 - Dilation
 - Mild
 - Inflammation
 - Chronic Active, Minimal
- [Dilation TGLs = 2-16]
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Moderate
- [Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Lymphocyte, Minimal
 - Proliferation
 - Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Moderate
 - Hyperplasia
 - Minimal
- [Dilation TGLs = 1-9]
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate
 - Inflammation
 - Suppurative, Minimal
 - Olfactory Epi
 - Metaplasia
 - Respiratory, Minimal
- * Ovary
 - Atrophy
 - Marked
- * Parathyroid Gland
 - Fibrosis
 - Minimal
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1055

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1055

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	Multiple
	Pars Intermed	Cyst	
[Adenoma TGLs = 6,7-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Hyperplasia	Stromal, Mild
	Epithelium	Metaplasia	Squamous, Minimal
		Polyp Stromal	
[Polyp Stromal TGLs = 3-16]			

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1056

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1056

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Aorta
- * Eye
- * Intestine Small, Duodenum
- * Pancreas
- * Skin
- * Trachea
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Cystic, Marked
 - Mild
 - Mild
 - [Degeneration TGLs = 5-7]
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity
 - Moderate
- * Brain
 - Compression
 - Minimal
 - [Compression TGLs = 9-2]
- * Clitoral Gl
 - Note: One of pair available for evaluation.
- * Harderian Gland
 - Atrophy
 - Minimal
- * Heart
 - Ventricle Rgt
 - Cardiomyopathy
 - Minimal
- * Islets, Pancreatic
 - Carcinoma
 - [Carcinoma TGLs = 8-6]
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Basophilic Focus
 - Hepatocyte
 - Hypertrophy
 - Mild
 - [Hypertrophy TGLs = 6-12]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Hyperplasia
 - Lymphocyte, Minimal
 - Proliferation
 - Plasma Cell, Mild
- * Mammary Gland
 - Duct
 - Dilation
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1056

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1056

ORGAN AND ACCOUNTABLE SITE STATUS

		Fibroadenoma	Multiple
		Hyperplasia	Mild
[Dilation TGLs = 1-9]			
[Fibroadenoma TGLs = 2,3-20,21]			
[Hyperplasia TGLs = 4-22]			
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 10-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Marked
* Thyroid Gland	C Cell	Adenoma	
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Moderate

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1057

TRT#: 6

SEX: Female

DAY ON TEST: 661

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1057

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|--------------------------|---------------------------|--------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Pancreas |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | | |

AUTO PRECLUDES DIAG.

- * Intestine Small, Duodenum

OBSERVATIONS

- | | | | |
|---|---------------------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Necrosis | Moderate |
| * Bone Marrow | | Hypercellularity | Moderate |
| * Clitoral Gl | | | |
| Note: One of a pair available for evaluation. | | | |
| * Heart | Ventricle Rgt | Cardiomyopathy | Minimal |
| | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | Hepatocyte | Necrosis | Moderate |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 5-10] | | |
| | Lymph Node | Proliferation | Plasma Cell, Mild |
| | [Proliferation TGLs = 4-20] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | | Galactocele | |
| | [Fibroadenoma TGLs = 2,3-20,21] | | |
| | [Galactocele TGLs = 1-9] | | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Respiratory Epith | Accumulation, Hyaline Droplet | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1057

TRT#: 6

SEX: Female

DAY ON TEST: 661

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1057

ORGAN AND ACCOUNTABLE SITE STATUS

	Olfactory Epi	Accumulation, Hyaline Droplet	Marked
* Ovary		Atrophy	Moderate
* Parathyroid Gland		Hyperplasia	Focal, Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 6-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
* Uterus	Epithelium	Metaplasia	Squamous, Mild

PRIMARY CAUSE OF DEATH - Liver Hepatocyte Necrosis

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1058

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1058

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skeletal Muscle
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Brain
- * Clitoral Gland
- [Dilation TGLs = 4-16]
- [Inflammation TGLs = 5-16]
- * Eye
- * Heart
- * Kidney
- * Liver
- * Lung
- [Infiltration Cellular TGLs = 7-10]
- Lymph Node
- [Erythrophagocytosis TGLs = 6-20]
- * Lymph Node, Mandibular
- * Mammary Gland
- [Dilation TGLs = 2-9]
- Duct
- Retina
- Alveolus
- Pancreatic
- Duct
- Degeneration
- Hyperplasia
- Compression
- Dilation
- Inflammation
- Atrophy
- Cardiomyopathy
- Nephropathy
- Angiectasis
- Clear Cell Focus
- Infiltration Cellular
- Erythrophagocytosis
- Hyperplasia
- Proliferation
- Dilation
- Fibroadenoma
- Galactocele
- Hyperplasia
- Cystic, Mild
- Minimal
- Minimal
- Mild
- Chronic Active, Mild
- Minimal
- Minimal
- Chronicprogr, Minimal
- Minimal
- Histiocyte, Minimal
- Minimal
- Lymphocyte, Minimal
- Plasma Cell, Minimal
- Mild
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1058

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1058

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 1-21]

[Galactocele TGLs = 3-9]

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
* Parathyroid Gland		Fibrosis	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 8-4]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Mild
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal

Animal Note: TGL 9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1059

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1059

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Urinary Bladder
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Uterus

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Degeneration
 - Hyperplasia
 - Hypertrophy
- * Adrenal Medulla
 - Hyperplasia
- * Bone Marrow
 - Hypercellularity
- * Eye
 - Retina
 - Atrophy
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Cardiomyopathy
- * Kidney
 - Nephropathy
- * Liver
 - Bile Duct
 - Bile Duct
 - Cyst
 - Hyperplasia
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 4-10]
 - Infiltration Cellular
- * Lymph Node, Mandibular
 - Lymph Sinus
 - Ectasia
- * Mammary Gland
 - [Hyperplasia TGLs = 1-9]
 - Hyperplasia
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Bursa
 - Cyst
 - Dilation
 - [Dilation TGLs = 2-16]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1059

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1059

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 3-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1061

TRT#: 6

SEX: Female

DAY ON TEST: 593

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1061

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Peripheral Nerve, Sciatic
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- Skeletal Muscle
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Skin
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Vacuolation, Cytoplasmic
- * Bone Marrow
 - Hypercellularity
 - Nephropathy
- * Kidney
 - Eosinophilic Focus
- * Liver
 - Infiltration Cellular
- * Lung
 - Alveolus
 - Proliferation
- * Lymph Node, Mandibular
 - Dilation
- * Mammary Gland
 - Duct
 - Fibroadenoma
 - Hyperplasia
- [Fibroadenoma TGLs = 1-20]
- * Nerve Sciatic
 - Note: Longitudinal section available for evaluation.
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Hyperplasia
- * Spinal Cord, Lumbar
 - Nerve
 - Degeneration
- * Spleen
 - Extramedullary Hematopoiesis
 - TGLs = 2-12]
- [Extramedullary Hematopoiesis
- * Thymus
 - Atrophy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1061

TRT#: 6

SEX: Female

DAY ON TEST: 593

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1061

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Epithelium

Metaplasia

Squamous, Mild

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1062

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1062

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Forestomach
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Liver
- Skeletal Muscle
- * Stomach, Glandular

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Duct
 - [Dilation TGLs = 1-16]
- * Eye
 - Retina
- * Kidney
 - Nephropathy
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 3-10]
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Hyperplasia
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Bursa
 - Dilation
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1062

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1062

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 4-4]

* Salivary Glands	Sublingual GI	Metaplasia	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Inflammation	Suppurative, Mild
	Epithelium	Metaplasia	Squamous, Marked

Note: Epithelium of one horn is mucified.

[Inflammation TGLs = 5-16]

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1063

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1063

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- Skeletal Muscle
- * Trachea
- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 3-7]
- * Bone
 - [Degeneration TGLs = 3-7]
- * Bone Marrow
- * Brain
 - [Compression TGLs = 7-2]
- * Clitoral Gland
 - [Dilation TGLs = 9-16]
- * Heart
- * Kidney
- * Liver
 - [Infiltration Cellular TGLs = 6-10]
- * Lung
 - [Infiltration Cellular TGLs = 6-10]
- * Lymph Node, Mesenteric
 - [Erythrophagocytosis TGLs = 4-15]
- * Mammary Gland
 - [Fibroadenoma TGLs = 2-20]

- Degeneration
- Hypertrophy
- Vacuolation, Cytoplasmic
- Fibrous Osteodystrophy
- Hypercellularity
- Compression
- Dilation
- Inflammation
- Cardiomyopathy
- Nephropathy
- Cyst
- Infiltration Cellular
- Erythrophagocytosis
- Hemangiosarcoma
- Dilation
- Fibroadenoma
- Hyperplasia
- Cystic, Mild
- Moderate
- Mild
- Marked
- Minimal
- Mild
- Moderate
- Chronic Active, Mild
- Minimal
- Chronicprogr, Minimal
- Histiocyte, Mild
- Moderate
- Mild
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1063

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1063

ORGAN AND ACCOUNTABLE SITE STATUS

[Hyperplasia TGLs = 1-9]

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Ovary		Atrophy	Marked
	Rete Ovarii	Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 8-4]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Cyst	

[Cyst TGLs = 10-16]

Animal Note: TGL 5 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1064

TRT#: 6

SEX: Female

DAY ON TEST: 464

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1064

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Peripheral Nerve, Tibial
- * Skin
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Ovary
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- * Urinary Bladder
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Pancreas
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thyroid Gland
- * Uterus
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Adrenal Medulla
- * Bone Marrow
- * Clitoral Gland
- * Kidney
- * Liver
- [Mixed Cell Focus TGLs = 3-12]
- * Lung
- [Infiltration Cellular TGLs = 2-10]
- * Mammary Gland
- [Fibroadenoma TGLs = 1-20]
- * Nose
- Note: Approximately one half of level 3 absent.
- * Peripheral Nerve, Sciatic
- * Spleen
- * Thymus
- Hyperplasia
- Hyperplasia
- Hypercellularity
- Inflammation
- Inflammation
- Extramedullary Hematopoiesis
- Mixed Cell Focus
- Infiltration Cellular
- Fibroadenoma
- Hyperplasia
- Accumulation, Hyaline Droplet
- Degeneration
- Extramedullary Hematopoiesis
- Atrophy
- Minimal
- Minimal
- Marked
- Chronic Active, Minimal
- Chronic Active, Minimal
- Minimal
- Histiocyte, Minimal
- Minimal
- Minimal
- Mild
- Minimal
- Moderate
- Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1065

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1065

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Aorta
- * Bone
- * Esophagus
- * Eye
- * Heart
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Salivary Glands
- * Skeletal Muscle
- * Skin
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Mild
- * Bone Marrow
 - Hypertrophy
 - Minimal
- * Brain
 - Pineal Gland
 - Hypercellularity
 - Moderate
 - Mineral
 - Minimal
- * Clitoral Gland
 - Inflammation
 - Chronic Active, Minimal
- * Harderian Gland
 - Atrophy
 - Minimal
- * Islets, Pancreatic
 - Inflammation
 - Granulomatous, Minimal
 - Adenoma
- * Kidney
 - [Adenoma TGLs = 15-6]
 - Renal Tubule
 - Cyst
 - Nephropathy
 - Chronicprogr, Minimal
 - Basophilic Focus
 - Eosinophilic Focus
- * Liver
 - [Eosinophilic Focus TGLs = 8-12]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - TGLs = 10-10
 - Histiocyte, Minimal
- * Mammary Gland
 - Fibroadenoma
 - Multiple
 - Galactocele
 - Hyperplasia
 - Marked
 - [Fibroadenoma TGLs = 1,2,3,4,5,6,12,13-9,20,21,22,23,24,25,26]
- * Nerve Trigeminal
 - Degeneration
 - Moderate
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate
- * Ovary
 - Atrophy
 - Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1065

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1065

ORGAN AND ACCOUNTABLE SITE STATUS

		Cyst	
	Rete Ovarii	Hyperplasia	Moderate
* Pancreas	Acinus	Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 11-4]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
	[Atrophy TGLs = 9-6]	Hyperplasia	Epithelial, Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Sarcoma Stromal	
	[Sarcoma Stromal TGLs = 7-16]		

Animal Note: TGL 14 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1066

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1066

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- Skeletal Muscle
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Skin
- * Urinary Bladder
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Pituitary Gland
- * Stomach, Forestomach

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Cystic, Mild
- * Brain
 - Hypertrophy
 - Minimal
- * Clitoral Gland
 - Pineal Gland
 - Vacuolation, Cytoplasmic
 - Minimal
 - Duct
 - Dilation
 - Moderate
- * Kidney
 - [Dilation TGLs = 4,5-16]
 - Nephropathy
 - Chronicprogr, Minimal
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal
- * Lymph Node
 - [Infiltration Cellular TGLs = 9-10]
 - Ectasia
 - Mild
- * Lymph Node, Mandibular
 - [Ectasia TGLs = 10-20]
 - Iliac, Lymph Sinus
 - Hyperplasia
 - Lymphocyte, Minimal
 - Proliferation
 - Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Minimal
 - Fibroadenoma
 - Multiple
- * Nerve Trigeminal
 - [Fibroadenoma TGLs = 1,2,3-9,20,21]
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Mild
- * Ovary
 - Bursa
 - Atrophy
 - Moderate
 - Dilation
 - Mild
- * Peripheral Nerve, Sciatic
 - [Dilation TGLs = 8-16]
 - Degeneration
 - Mild
- * Peripheral Nerve, Tibial
 - Degeneration
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1066

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1066

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tissue NOS	Fat	Necrosis	Moderate
[Necrosis TGLs = 6,7-20,21]			
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Inflammation	Suppurative, Minimal
	Epithelium	Metaplasia	Squamous, Minimal
		Polyp Stromal	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1067

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1067

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | * Uterus |

MISSING

- | | |
|--------------------|---------------------|
| * Nerve Trigeminal | Trigeminal Ganglion |
|--------------------|---------------------|

INSUFFICIENT TISSUE

- * Thymus

OBSERVATIONS

- | | | | |
|--------------------------|---|-----------------------|-----------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| | [Degeneration TGLs = 2-7] | | |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | | | |
| | Note: Olfactory bulbs unavailable for evaluation. | | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 3-10] | | |
| * Lymph Node, Mandibular | Lymph Sinus | Ectasia | Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | | Hyperplasia | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1067

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1067

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 1-20]

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 4-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1068

TRT#: 6

SEX: Female

DAY ON TEST: 737

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1068

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|---|---------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Clitoral Gland | Duct | Dilation | Mild |
| | | Inflammation | Chronic Active, Mild |
| * Islets, Pancreatic | | Carcinoma | |
| [Carcinoma TGLs = 3-6] | | | |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| [Infiltration Cellular TGLs = 4-10,20] | | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Fibroadenoma | |
| | | Hyperplasia | Minimal |
| [Fibroadenoma TGLs = 1-20] | | | |
| [Hyperplasia TGLs = 2-21] | | | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Atrophy | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1068

TRT#: 6

SEX: Female

DAY ON TEST: 737

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1068

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Moderate
* Uterus		Dilation	Mild

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1069

TRT#: 6

SEX: Female

DAY ON TEST: 545

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1069

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Skin
- * Thyroid Gland
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Parathyroid Gland
- * Spinal Cord, Thoracic
- * Trachea
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Peripheral Nerve, Sciatic
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex [Hyperplasia TGLs = 3-7] Hyperplasia Moderate
- * Adrenal Medulla Hyperplasia Minimal
- * Brain Compression Moderate
- * Clitoral Gland Duct Dilation Moderate
- Inflammation Chronic Active, Minimal
- * Kidney Nephropathy Chronicprogr, Minimal
- * Lung Alveolus Infiltration Cellular TGLs = 5-10] Histiocyte, Mild
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Minimal
- Proliferation Plasma Cell, Minimal
- * Mammary Gland Lymphatic Dilation Moderate
- Duct Dilation Minimal
- Fibroadenoma
- Hyperplasia Minimal
- [Dilation TGLs = 1-9,20]
- [Fibroadenoma TGLs = 2-20]
- * Nose Respirat Epith Accumulation, Hyaline Droplet Minimal
- Olfactory Epi Accumulation, Hyaline Droplet Moderate
- * Ovary Atrophy Moderate
- * Peripheral Nerve, Tibial Degeneration Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1069

TRT#: 6

SEX: Female

DAY ON TEST: 545

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1069

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland [Adenoma TGLs = 6-4]	Pars Distalis	Adenoma	
* Salivary Glands	Parotid GI	Atrophy	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Pigment	Mild
* Thymus		Atrophy	Minimal
* Uterus [Hyperplasia TGLs = 4-16]	Endometrium Epithelium	Hyperplasia Metaplasia	Cystic, Moderate Squamous, Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1070

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1070

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Compression
 Cystic, Minimal
Mild
Minimal
Mild
- * Brain
 - [Compression TGLs = 7-2]
 Nephropathy
Mixed Cell Focus
Compression
Chronicprogr, Minimal
- * Kidney
 - Nephropathy
 Chronicprogr, Minimal
- * Liver
 - Mixed Cell Focus
- * Lung
 - Hemorrhage
 - Infiltration Cellular
 Minimal
Histiocyte, Mild
- Alveolus
 - [Infiltration Cellular TGLs = 5-10]
- Lymph Node
 - [Pigment TGLs = 1-9]
 Inguinal
Pigment
Minimal
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 Lymphocyte, Mild
Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 Dilation
Mild
- * Nerve Trigeminal
 - Degeneration
 Moderate
- * Nose
 - Olfactory Epi
 Accumulation, Hyaline Droplet
Moderate
- * Ovary
 - Atrophy
 - Cyst
 Marked
- [Cyst TGLs = 3-16]
 - Degeneration
 Minimal
- * Peripheral Nerve, Sciatic
 - Degeneration
 Minimal
- * Peripheral Nerve, Tibial
 - Degeneration
 Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1070

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1070

ORGAN AND ACCOUNTABLE SITE STATUS

Note: Longitudinal section available for evaluation.

* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 6-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Moderate
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Moderate
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Mild

Animal Note: TGLs 2,4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1071

TRT#: 6

SEX: Female

DAY ON TEST: 621

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1071

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pituitary Gland
- * Stomach, Forestomach
- * Uterus
- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Ovary
- * Skin
- * Trachea
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 9,10-7]
 - * Bone Marrow
 - * Brain
 - [Leukemia Mononuclear TGLs = 15-2]
 - * Clitoral Gland
 - Duct
 - [Dilation TGLs = 8-16]
 - * Islets, Pancreatic
 - * Kidney
 - * Liver
 - Hepatocyte
 - [Vacuolation, Cytoplasmic TGLs = 13-12]
 - * Lung
 - Alveolus
 - [Leukemia Mononuclear TGLs = 14-10]
 - * Lymph Node, Mandibular
- Degeneration
 - Hypercellularity
 - Leukemia Mononuclear
 - Dilation
 - Inflammation
 - Adenoma
 - Nephropathy
 - Extramedullary Hematopoiesis
 - Leukemia Mononuclear
 - Vacuolation, Cytoplasmic
 - Hemorrhage
 - Infiltration Cellular
 - Inflammation
 - Leukemia Mononuclear
 - Erythrophagocytosis
 - Hyperplasia
 - Proliferation
- Cystic, Moderate
 - Marked
 - Marked
 - Acute, Moderate
 - Chronicprogr, Minimal
 - Minimal
 - Moderate
 - Minimal
 - Histiocyte, Minimal
 - Chronic Active, Minimal
 - Mild
 - Lymphocyte, Minimal
 - Plasma Cell, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1071

TRT#: 6

SEX: Female

DAY ON TEST: 621

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1071

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland	Duct	Dilation Fibroadenoma Hyperplasia	Minimal Multiple Mild
	[Fibroadenoma TGLs = 3,4,5-20,21,22]		
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Pancreas	Acinus	Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
	Note: Longitudinal section available for evaluation.		
* Salivary Glands	Parotid GI	Atrophy	Mild
* Spinal Cord, Lumbar		Degeneration	Moderate
	Nerve	Degeneration	Moderate
		Leukemia Mononuclear	
* Spinal Cord, Thoracic		Degeneration	Mild
		Leukemia Mononuclear	
* Spleen		Extramedullary Hematopoiesis Leukemia Mononuclear	Marked
	[Extramedullary Hematopoiesis TGLs = 6-12]		
	[Leukemia Mononuclear TGLs = 6,7-12]		
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Urinary Bladder		Hemorrhage Inflammation	Marked Acute, Marked
	[Hemorrhage TGLs = 12-13]		

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

Animal Note: TGLs 1,2,11 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1074

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1074

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Clitoral Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skeletal Muscle
- * Stomach, Glandular

INSUFFICIENT TISSUE

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 3-7]
 - * Adren Medulla
 - Note: One of pair available for evaluation.
 - * Bone
 - * Brain
 - [Compression TGLs = 7-2]
 - * Eye
 - * Harderian Gland
 - * Heart
 - * Kidney
 - * Liver
 - * Lung
 - [Infiltration Cellular TGLs = 5-10]
 - * Lymph Node, Mandibular
 - * Mammary Gland
 - [Dilation TGLs = 1-9]
- | | | |
|--------|--|---|
| | Degeneration
Hypertrophy | Cystic, Minimal
Mild |
| | Fibrous Osteodystrophy
Compression | Minimal
Minimal |
| Retina | Atrophy
Atrophy
Inflammation | Minimal
Minimal
Granulomatous, Minimal |
| | Cardiomyopathy
Nephropathy
Eosinophilic Focus
Infiltration Cellular | Minimal
Chronicprogr, Mild

Histiocyte, Mild |
| | Hyperplasia
Proliferation
Dilation
Hyperplasia | Lymphocyte, Mild
Plasma Cell, Mild
Moderate
Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1074

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1074

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Marked
	Bursa	Dilation	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 6-4]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Tissue NOS	Fat	Necrosis	Mild
	[Necrosis TGLs = 4-20]		
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Sarcoma Stromal	
	[Sarcoma Stromal TGLs = 2-16]		

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1075

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1075

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pituitary Gland
- * Stomach, Forestomach
- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Ovary
- * Salivary Glands
- * Stomach, Glandular
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Pancreas
- Skeletal Muscle
- * Trachea
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Skin
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Vacuolation, Cytoplasmic
 - Cystic, Minimal
 - Moderate
 - Mild
- * Bone Marrow
 - Hypercellularity
 - Moderate
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Duct
 - [Dilation TGLs = 1-16]
 - Dilation
 - Moderate
- * Eye
 - Retina
 - Atrophy
 - Minimal
- * Islets, Pancreatic
 - Hyperplasia
 - Marked
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - [Angiectasis TGLs = 2-20]
 - Angiectasis
 - Minimal
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 3-10]
 - Infiltration Cellular
 - Histiocyte, Mild
- * Lymph Node, Mandibular
 - Lymph Sinus
 - Ectasia
 - Mild
 - Hyperplasia
 - Lymphocyte, Moderate
 - Proliferation
 - Plasma Cell, Minimal
- * Lymph Node, Mesenteric
 - Erythrophagocytosis
 - Minimal
- * Mammary Gland
 - Hyperplasia
 - Moderate
- * Nerve Trigeminal
 - Degeneration
 - Moderate
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1075

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1075

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Moderate
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Dilation	Minimal

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1076

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1076

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex Mineral Mild
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland Duct Dilation Minimal
- * Kidney Nephropathy Chronicprogr, Minimal
- * Liver Basophilic Focus
- Clear Cell Focus
- Mixed Cell Focus
- * Lung Carcinoma Metastatic (Thyroid Gland)
- Alveolus Infiltration Cellular Histiocyte, Minimal
- [Infiltration Cellular TGLs = 6-10]
- Lymph Node Iliac, Lymph Sinus Ectasia Minimal
- [Ectasia TGLs = 7-20]
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Minimal
- Proliferation Plasma Cell, Minimal
- * Mammary Gland Fibroadenoma
- Hyperplasia Mild
- [Fibroadenoma TGLs = 2-20]
- * Nerve Trigeminal Degeneration Mild
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Mild
- * Ovary Atrophy Moderate
- Cyst

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1076

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1076

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Congestion	Minimal
		Extramedullary Hematopoiesis	Minimal
* Thymus		Atrophy	Minimal
[Atrophy TGLs = 4-6]			
* Thyroid Gland	C Cell	Carcinoma	
	C Cell	Hyperplasia	Mild
[Carcinoma TGLs = 5-8]			
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Fibrosis	Minimal
		Infiltration Cellular	Mononuclear CI, Minimal

Animal Note: TGL 1 = NST (No Section Taken)

Animal Note: TGLs 3,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1077

TRT#: 6

SEX: Female

DAY ON TEST: 578

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1077

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Ovary
- * Salivary Glands
- * Spinal Cord, Thoracic
- Trigeminal Ganglion
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Kidney
- * Pancreas
- Skeletal Muscle
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Skin
- * Stomach, Glandular
- * Uterus

MISSING

- * Clitoral Gland

OBSERVATIONS

- * Adrenal Cortex Hyperplasia Mild
- * Bone Marrow Thrombus Minimal
- * Heart Hypercellularity Marked
- * Liver Schwannoma Malignant
- * Lung Extramedullary Hematopoiesis Minimal
- [Infiltration Cellular TGLs = 2-10] Mixed Cell Focus
- * Lymph Node, Mandibular Infiltration Cellular Histiocyte, Mild
- * Mammary Gland Hyperplasia Lymphocyte, Minimal
- [Fibroadenoma TGLs = 1-20] Proliferation Plasma Cell, Moderate
- * Nose Fibroadenoma
- * Peripheral Nerve, Sciatic Hyperplasia Minimal
- * Peripheral Nerve, Tibial Degeneration Minimal
- * Spinal Cord, Lumbar Degeneration Minimal
- * Spleen Extramedullary Hematopoiesis Moderate
- * Thymus Atrophy Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1077

TRT#: 6

SEX: Female

DAY ON TEST: 578

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1077

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Moderate

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1078

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1078

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Eye |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | Skeletal Muscle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

OBSERVATIONS

* Brain

Note: Olfactory bulbs unavailable for evaluation.

* Clitoral Gland

Duct

Dilation

Moderate

Inflammation

Chronic Active, Mild

[Dilation TGLs = 4,5-16]

* Harderian Gland

Inflammation

Chronic, Minimal

* Heart

Cardiomyopathy

Minimal

* Liver

Bile Duct

Inflammation

Chronic Active, Minimal

* Lung

Alveolus

Infiltration Cellular

Histiocyte, Minimal

[Infiltration Cellular TGLs = 8-10]

* Mammary Gland

Adenoma

Fibroadenoma

Hyperplasia

Marked

[Adenoma TGLs = 1-20]

[Fibroadenoma TGLs = 2-21]

[Hyperplasia TGLs = 3-9]

* Nerve Trigeminal

Degeneration

Mild

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

* Peripheral Nerve, Sciatic

Degeneration

Mild

* Peripheral Nerve, Tibial

Degeneration

Mild

* Salivary Glands

Parotid GI

Atrophy

Minimal

* Spinal Cord, Cervical

Degeneration

Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1078

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1078

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Dilation	Mild

Animal Note: TGLs 6,7,9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1079

TRT#: 6

SEX: Female

DAY ON TEST: 606

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1079

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Kidney | * Lymph Node, Mesenteric | * Mammary Gland | * Nerve Trigeminal |
| * Nose | * Pancreas | * Pituitary Gland | Skeletal Muscle |
| * Skin | * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|--------------------------------------|--|--------------------------------|----------------------|
| * Bone Marrow | | Hypercellularity | Marked |
| * Brain | | | |
| Note: Olfactory bulbs not available. | | | |
| * Clitoral Gland | Duct | Dilation | Mild |
| | | Inflammation | Chronic Active, Mild |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Nose | | | |
| Note: Level 3 largely absent. | | | |
| * Ovary | | Granulosa Cell Tumor Malignant | |
| | [Granulosa Cell Tumor Malignant TGLs = 7-16] | | |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Salivary Glands | Parotid GI | Atrophy | Mild |
| * Spinal Cord, Cervical | | Degeneration | Minimal |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Minimal |
| * Spleen | | Extramedullary Hematopoiesis | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1079

TRT#: 6

SEX: Female

DAY ON TEST: 606

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1079

ORGAN AND ACCOUNTABLE SITE STATUS

[Extramedullary Hematopoiesis TGLs = 4-12]

* Thymus

* Thyroid Gland

* Uterus

C Cell

Serosa

Epithelium

Atrophy

Hyperplasia

Dilation

Fibrosis

Hemorrhage

Inflammation

Metaplasia

Marked

Minimal

Marked

Moderate

Mild

Chronic Active, Moderate

Squamous, Marked

[Dilation TGLs = 2-20]

[Fibrosis TGLs = 6-20]

PRIMARY CAUSE OF DEATH - Uterus Inflammation

CONTRIBUTORY CAUSE OF DEATH - Ovary Granulosa Cell Tumor Malignant

Animal Note: TGLs 1,5 = NCL (No Corresponding Lesion)

Animal Note: TGL 3 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1080

TRT#: 6

SEX: Female

DAY ON TEST: 713

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1080

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|---|---------------|-------------------------------|-------------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Mild |
| Note: One of pair available for evaluation. | | | |
| * Brain | | Compression | Mild |
| [Compression TGLs = 4-2] | | | |
| * Clitoral Gland | | Inflammation | Chronic Active, Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricle Rgt | Cardiomyopathy | Minimal |
| [Cardiomyopathy TGLs = 3-20] | | | |
| * Islets, Pancreatic | | Carcinoma | |
| [Carcinoma TGLs = 1-6] | | | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Eosinophilic Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| [Infiltration Cellular TGLs = 2-10,20] | | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Galactocele | |
| [Galactocele TGLs = 6-9] | | | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1080

TRT#: 6

SEX: Female

DAY ON TEST: 713

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1080

ORGAN AND ACCOUNTABLE SITE STATUS

	Rete Ovarii	Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 5-4]			
* Spinal Cord, Cervical		Degeneration	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Marked

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1081

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1081

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Forestomach
- * Bone
- * Eye
- * Intestine Small, Duodenum
- * Kidney
- * Salivary Glands
- * Stomach, Glandular
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Bone Marrow
 - Hypercellularity
- * Harderian Gland
 - Atrophy
- * Heart
 - Cardiomyopathy
- * Liver
 - Basophilic Focus
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 7-10
 - Iliac
 - Erythrophagocytosis
 - Proliferation
 - Iliac
 - [Erythrophagocytosis TGLs = 10-20]
 - [Proliferation TGLs = 9-20]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Fibroadenoma

Note: Additional fibroadenoma adjacent to clitoral gland.

 - [Fibroadenoma TGLs = 1,2,3,4-9,20,21,22]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1081

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1081

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Mild
		Cyst	
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal
[Adenoma TGLs = 8-8]			
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

Animal Note: TGLs 5,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1083

TRT#: 6

SEX: Female

DAY ON TEST: 578

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1083

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Skin
- * Thymus
- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Parathyroid Gland
- * Spinal Cord, Thoracic
- * Thyroid Gland
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Brain
- * Kidney
- * Lung
- * Lymph Node, Mandibular
- * Mammary Gland
- [Galactoceles TGLs = 1-20]
- * Nose
- * Ovary
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- [Adenoma TGLs = 2-4]
- * Spinal Cord, Cervical
- * Spinal Cord, Lumbar
- * Spleen
- Compression
- Nephropathy
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Dilation
- Galactoceles
- Hyperplasia
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Degeneration
- Adenoma
- Degeneration
- Degeneration
- Atrophy
- Pigment
- Mild
- Chronicprogr, Minimal
- Histiocyte, Minimal
- Lymphocyte, Minimal
- Plasma Cell, Mild
- Mild
- Minimal
- Mild
- Marked
- Minimal
- Minimal
- Minimal
- Mild
- Minimal
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1083

TRT#: 6

SEX: Female

DAY ON TEST: 578

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1083

ORGAN AND ACCOUNTABLE SITE STATUS

[Atrophy TGLs = 3-12]

* Uterus

Endometrium

Hyperplasia

Cystic, Minimal

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1084

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1084

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Liver
- * Salivary Glands
- * Stomach, Glandular
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Trachea
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Cystic, Minimal
- * Bone Marrow
 - Hyperplasia
 - Moderate
- * Clitoral Gland
 - Duct
 - Hypercellularity
 - Mild
 - Dilation
 - Marked
- * Eye
 - [Dilation TGLs = 1,2-16]
 - Atrophy
 - Minimal
- * Islets, Pancreatic
 - Hyperplasia
 - Moderate
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal
 - Inflammation
 - Chronic Active, Minimal
- * Lymph Node
 - [Infiltration Cellular TGLs = 7-10]
 - Mediastinal
 - Erythrophagocytosis
 - Minimal
 - [Erythrophagocytosis TGLs = 6-6]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Lymphocyte, Mild
 - Proliferation
 - Plasma Cell, Moderate
- * Mammary Gland
 - Duct
 - Adenocarcinoma
 - Dilation
 - Mild
 - Fibroadenoma
 - Hyperplasia
 - Mild
 - [Adenocarcinoma TGLs = 3-20]
 - [Fibroadenoma TGLs = 3-20]
- * Nerve Trigeminal
 - Degeneration
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1084

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1084

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
		Cyst	
	[Cyst TGLs = 4-16]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Hyperplasia	Moderate
	[Adenoma TGLs = 8,10-4]		
	[Hyperplasia TGLs = 9-4]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Cyst	
		Hyperplasia	Epithelial, Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Cyst	
		Squamous Cell Carcinoma	
	[Squamous Cell Carcinoma TGLs = 5-16]		

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1085

TRT#: 6

SEX: Female

DAY ON TEST: 737

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1085

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- Skeletal Muscle
- * Trachea
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Pancreas
- * Stomach, Glandular
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Mild
 - Minimal
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity
 - Minimal
- * Clitoral Gland
 - Duct
 - Dilation
 - Moderate
- [Dilation TGLs = 1-16]
- * Heart
 - Cardiomyopathy
 - Minimal
- * Islets, Pancreatic
 - Ectopic Tissue
 - Hyperplasia
 - Mild
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Basophilic Focus
 - Eosinophilic Focus
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
 - TGLs = 6-10]
 - Infiltration Cellular
 - Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Proliferation
 - Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Hyperplasia
 - Minimal
- [Fibroadenoma TGLs = 3-21]
- * Nerve Trigeminal
 - Degeneration
 - Moderate
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1085

TRT#: 6

SEX: Female

DAY ON TEST: 737

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1085

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Marked
		Cyst	
	Rete Ovarii	Hyperplasia	Minimal
	[Cyst TGLs = 4-16]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 8-4]		
* Salivary Glands		Myoepithelioma	
	[Myoepithelioma TGLs = 7-9.1]		
* Skin		Squamous Cell Papilloma	
	Note: Papilloma arising within an epithelial inclusion cyst.		
	[Squamous Cell Papilloma TGLs = 2-20.1]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Ectopic Parathyroid Gland	
		Hyperplasia	Epithelial, Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate
	Epithelium	Metaplasia	Squamous, Minimal
	[Hyperplasia TGLs = 5-16]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1086

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1086

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skeletal Muscle
- * Thyroid Gland
- * Aorta
- * Eye
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Trigeminal Ganglion
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 2-7]
- * Bone Marrow
- * Clitoral Gland
- * Harderian Gland
- * Heart
- * Kidney
- * Liver
 - [Eosinophilic Focus TGLs = 3-20]
- * Lung
 - [Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular
 - [Ectasia TGLs = 1-9]
- * Mammary Gland
- * Nerve Trigeminal
- * Nose
- * Ovary
- * Pancreas
- * Peripheral Nerve, Sciatic
- Duct
- Duct
- Bile Duct
- Alveolus
- Lymph Sinus
- Duct
- Olfactory Epi
- Acinus
- Degeneration
- Hypertrophy
- Hypercellularity
- Dilation
- Atrophy
- Inflammation
- Cardiomyopathy
- Nephropathy
- Eosinophilic Focus
- Hyperplasia
- Infiltration Cellular
- Ectasia
- Proliferation
- Dilation
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Hyperplasia
- Degeneration
- Cystic, Moderate
- Moderate
- Minimal
- Minimal
- Minimal
- Granulomatous, Minimal
- Minimal
- Chronicprogr, Minimal
- Mild
- Histiocyte, Minimal
- Moderate
- Plasma Cell, Minimal
- Minimal
- Moderate
- Moderate
- Marked
- Mild
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1086

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1086

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Marked
* Thymus		Cyst	
* Uterus	Cervix	Cyst	
	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal

[Cyst TGLs = 5-20]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1087

TRT#: 6

SEX: Female

DAY ON TEST: 737

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1087

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Aorta	* Bone	* Brain	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Pancreas	* Salivary Glands
Skeletal Muscle	* Skin	* Spinal Cord, Cervical	* Stomach, Forestomach
* Stomach, Glandular	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Minimal
* Adrenal Medulla		Pheochromocytoma Benign	
[Pheochromocytoma Benign	TGLs = 3-7]		
* Bone Marrow		Hypercellularity	Marked
* Clitoral Gland	Duct	Dilation	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Minimal
* Liver		Eosinophilic Focus	
		Extramedullary Hematopoiesis	Minimal
		Mixed Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Moderate
[Infiltration Cellular	TGLs = 4-10]		
* Lymph Node, Mandibular		Proliferation	Plasma Cell, Minimal
* Mammary Gland	Duct	Dilation	Minimal
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
		Cyst	
* Parathyroid Gland		Fibrosis	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1087

TRT#: 6

SEX: Female

DAY ON TEST: 737

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1087

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Moderate
		Cyst	
		Hyperplasia	Epithelial, Mild
* Thyroid Gland	C Cell	Hyperplasia	Moderate
* Uterus		Dilation	Marked
		Hemorrhage	Moderate
		Inflammation	Chronic Active, Minimal

Note: Most of intraluminal hemorrhage appears to have washed away during processing.

[Dilation TGLs = 1-16]

[Hemorrhage TGLs = 2-16]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1088

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1088

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone
- * Eye
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Cystic, Moderate
 - Mild
 - Moderate
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Inflammation
 - Chronic Active, Minimal
- * Harderian Gland
 - Inflammation
 - Granulomatous, Minimal
- * Heart
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Bile Duct
 - Clear Cell Focus
 - Cyst
 - Mixed Cell Focus
 - [Clear Cell Focus TGLs = 5-20]
 - [Cyst TGLs = 7-21]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Mild
 - [Infiltration Cellular TGLs = 6-10]
- * Lymph Node, Mandibular
 - Erythrophagocytosis
 - Mild
 - Hyperplasia
 - Lymphocyte, Moderate
 - Proliferation
 - Plasma Cell, Moderate
- * Mammary Gland
 - Duct
 - Dilation
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1088

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1088

ORGAN AND ACCOUNTABLE SITE STATUS

Fibroadenoma

Galactocele

[Dilation TGLs = 4-22]

[Fibroadenoma TGLs = 3-21]

[Galactocele TGLs = 1,2-9,20]

* Nerve Trigeminal

Degeneration

Mild

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Moderate

* Ovary

Rete Ovarii

Atrophy

Marked

* Peripheral Nerve, Sciatic

Hyperplasia

Minimal

* Peripheral Nerve, Tibial

Degeneration

Mild

* Spinal Cord, Lumbar

Nerve

Degeneration

Minimal

* Spinal Cord, Thoracic

Degeneration

Mild

* Spleen

Extramedullary Hematopoiesis

Mild

* Thymus

Pigment

Mild

* Thyroid Gland

C Cell

Atrophy

Minimal

* Uterus

Hyperplasia

Moderate

Endometrium

Dilation

Minimal

Epithelium

Hyperplasia

Cystic, Minimal

Metaplasia

Squamous, Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1091

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1091

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Forestomach
- * Bone Marrow
- * Eye
- * Intestine Small, Duodenum
- * Kidney
- * Salivary Glands
- * Stomach, Glandular
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 3-7]
 - [Vacuolation, Cytoplasmic TGLs = 3-7]
 - * Adrenal Medulla
 - * Harderian Gland
 - * Heart
 - Ventricl Rgt
 - [Cardiomyopathy TGLs = 9-21]
 - * Liver
 - [Angiectasis TGLs = 4-12]
 - [Mixed Cell Focus TGLs = 5-12]
 - * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 10-10]
 - Lymph Node
 - Iliac
 - Mediastinal
 - [Erythrophagocytosis TGLs = 6,7-21]
 - [Hyperplasia TGLs = 8-6.1]
 - * Lymph Node, Mandibular
- Degeneration
 Hypertrophy
 Vacuolation, Cytoplasmic
 Pheochromocytoma Benign
 Atrophy
 Cardiomyopathy
 Cardiomyopathy
 Angiectasis
 Mixed Cell Focus
 Infiltration Cellular
 Inflammation
 Erythrophagocytosis
 Hyperplasia
 Hyperplasia
- Cystic, Minimal
 Mild
 Mild
 Minimal
 Minimal
 Mild
 Minimal
 Minimal
 Histiocyte, Mild
 Chronic Active, Minimal
 Moderate
 Lymphocyte, Minimal
 Lymphocyte, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1091

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1091

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland	Duct	Proliferation Dilation Fibroadenoma Hyperplasia	Plasma Cell, Mild Mild Minimal
[Fibroadenoma TGLs = 1-20]			
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Marked
	Rete Ovarii	Cyst Hyperplasia Sex Cord Stromal Tumor, Benign	Mild
[Cyst TGLs = 2-16]			
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
Note: Pars distalis available for evaluation.			
[Adenoma TGLs = 11-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis Pigment	Mild Mild
* Thymus		Atrophy Cyst	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Marked
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Cyst Polyp Stromal	
[Cyst TGLs = 12-16]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1092

TRT#: 6

SEX: Female

DAY ON TEST: 656

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1092

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Kidney | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|-----------------------------|---|--|---|
| * Bone Marrow | | Hypercellularity | Marked |
| * Clitoral Gland | Duct | Dilation | Marked |
| * Liver | | Mixed Cell Focus | |
| * Lung | Epithlm Alvlus
Alveolus | Hyperplasia
Infiltration Cellular | Mild
Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 3-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia
Proliferation | Lymphocyte, Mild
Plasma Cell, Moderate |
| * Mammary Gland | Duct | Dilation
Fibroadenoma
Galactocele | Minimal |
| | Note: Galactocele ruptured with granulomatous inflammation. | | |
| | [Fibroadenoma TGLs = 2-21] | | |
| | [Galactocele TGLs = 1-20] | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Respirat Epith
Olfactory Epi | Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet
Inflammation | Minimal
Mild
Suppurative, Minimal |
| * Ovary | | Atrophy | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1092

TRT#: 6

SEX: Female

DAY ON TEST: 656

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1092

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Spinal Cord, Lumbar		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Moderate
		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 4 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1093

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1093

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Glandular
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Pancreas
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Stomach, Forestomach

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Cystic, Minimal
 - Moderate
 - Minimal
 - Mild
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity
 - Minimal
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 - Chronic Active, Marked
- [Inflammation TGLs = 1,2-16]
- * Harderian Gland
 - Atrophy
 - Mild
- * Islets, Pancreatic
 - Hyperplasia
 - Mild
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Mixed Cell Focus
- * Lung
 - Bronchiole
 - Hyperplasia
 - Mild
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Mild
 - Inflammation
 - Granulomatous, Minimal
- [Infiltration Cellular TGLs = 11-10]
- Lymph Node
 - Iliac
 - Infiltration Cellular
 - Histiocyte, Mild
 - Mediastinal
 - Proliferation
 - Plasma Cell, Minimal
- [Infiltration Cellular TGLs = 7-20]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1093

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1093

ORGAN AND ACCOUNTABLE SITE STATUS

[Proliferation TGLs = 9-6]

* Lymph Node, Mandibular

Hyperplasia

Lymphocyte, Mild

Proliferation

Plasma Cell, Mild

* Mammary Gland

Duct

Dilation

Minimal

Fibroadenoma

Multiple

[Fibroadenoma TGLs = 4,5-20,21]

* Nerve Trigeminal

Degeneration

Minimal

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

* Ovary

Atrophy

Marked

Cyst

Note: Cysts contain hemorrhage.

[Cyst TGLs = 6-16]

* Peripheral Nerve, Sciatic

Degeneration

Minimal

* Peripheral Nerve, Tibial

Degeneration

Minimal

* Pituitary Gland

Pars Distalis

Hyperplasia

Moderate

* Skin

Subcut Tiss

Fibroma

[Fibroma TGLs = 3-22]

* Spinal Cord, Lumbar

Nerve

Degeneration

Moderate

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

Extramedullary Hematopoiesis

Mild

Pigment

Minimal

* Thymus

Atrophy

Minimal

Cyst

[Atrophy TGLs = 8-6]

* Thyroid Gland

C Cell

Hyperplasia

Minimal

* Uterus

Epithelium

Cyst

Metaplasia

Squamous, Mild

Polyp Stromal

Animal Note: TGL 10 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1096

TRT#: 6

SEX: Female

DAY ON TEST: 383

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1096

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Brain
- * Clitoral Gland
- * Esophagus
- * Eye
- * Harderian Gland
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Nerve Trigeminal
- * Pancreas
- * Parathyroid Gland
- * Peripheral Nerve, Tibial
- * Salivary Glands
- * Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thymus
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- * Bone Marrow
 - * Heart
 - * Kidney
 - * Liver
 - * Lung
 - * Mammary Gland
 - * Nose
 - * Ovary
 - * Peripheral Nerve, Sciatic
 - * Pituitary Gland
 - * Spleen
- Ventricl Rgt
- Alveolus
- [Infiltration Cellular TGLs = 2-10]
- Duct
- [Fibroadenoma TGLs = 1-20]
- Olfactory Epi
- Note: Approximately one-half of level 3 absent
- Pars Distalis

Hypercellularity

Cardiomyopathy

Cardiomyopathy

Nephropathy

Extramedullary Hematopoiesis

Infiltration Cellular

Dilation

Fibroadenoma

Hyperplasia

Accumulation, Hyaline Droplet

Atrophy

Degeneration

Hyperplasia

Extramedullary Hematopoiesis

Marked

Mild

Minimal

Chronicprogr, Minimal

Minimal

Histiocyte, Minimal

Minimal

Minimal

Mild

Moderate

Minimal

Minimal

Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1096

TRT#: 6

SEX: Female

DAY ON TEST: 383

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1096

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Epithelium

Metaplasia

Squamous, Mild

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1097

TRT#: 6

SEX: Female

DAY ON TEST: 383

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1097

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| Lymph Node | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Nerve Trigeminal |
| * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Tibial | * Pituitary Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|---|---------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Mild |
| * Bone Marrow | | Hypercellularity | Marked |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| Lymph Node | | | |
| Note: Iliac lymph node. | | | |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | |
| [Fibroadenoma TGLs = 2-21] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| Note: Approximately one-half of level 3 available for evaluation. | | | |
| * Ovary | | Atrophy | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Minimal |
| * Spleen | | Extramedullary Hematopoiesis | Mild |
| * Uterus | Epithelium | Metaplasia | Squamous, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 1 = NCL (No Corresponding Lesion)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1098

TRT#: 6

SEX: Female

DAY ON TEST: 464

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1098

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thyroid Gland
- * Uterus
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Peripheral Nerve, Sciatic
- * Skin
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Ovary
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Bone Marrow
 - Hypercellularity
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
- * Heart
 - Cardiomyopathy
- * Kidney
 - Nephropathy
- * Liver
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 3,4-20]
- * Lymph Node, Mandibular
 - Proliferation
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Hyperplasia
 - [Fibroadenoma TGLs = 1-21]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- Note: Level 3 largely absent.
- * Peripheral Nerve, Tibial
 - Degeneration
- * Spleen
 - Developmental Malformation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1098

TRT#: 6

SEX: Female

DAY ON TEST: 464

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1098

ORGAN AND ACCOUNTABLE SITE STATUS

Extramedullary Hematopoiesis

Moderate

[Developmental Malformation TGLs = 2-20]

Atrophy

Mild

* Thymus

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1099

TRT#: 6

SEX: Female

DAY ON TEST: 383

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1099

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|-----------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Nerve Trigeminal | * Ovary |
| * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Sciatic | * Peripheral Nerve, Tibial |
| * Pituitary Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Spinal Cord, Lumbar | * Spinal Cord, Thoracic | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|---|------------------------------|-------------------------------|-------------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Bone Marrow | | Hypercellularity | Marked |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| | | Infiltration Cellular | Mixed Cell, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic Active, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Spleen | | Extramedullary Hematopoiesis | Moderate |
| * Uterus | | Dilation | Mild |
| | [Dilation TGLs = 2-16] | | |

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1100

TRT#: 6

SEX: Female

DAY ON TEST: 450

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1100

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skin
- * Urinary Bladder
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Stomach, Glandular
- * Uterus
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Peripheral Nerve, Sciatic
- * Thyroid Gland
- Vagina
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Peripheral Nerve, Tibial
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
[Lymphoma Malignant TGLs = 2-7]
- * Bone
Increased Bone Mild
- * Bone Marrow
Lymphoma Malignant
- * Brain
Lymphoma Malignant
- * Heart
Ventricle Rgt
Cardiomyopathy Minimal
Cardiomyopathy Minimal
- * Kidney
Renal Tubule
Lymphoma Malignant
Lymphoma Malignant
- * Liver
[Lymphoma Malignant TGLs = 7-12]
- * Lung
Alveolus
Hemorrhage Mild
Infiltration Cellular Histiocyte, Minimal
Lymphoma Malignant
- [Hemorrhage TGLs = 12-20]
- [Lymphoma Malignant TGLs = 11-10]
- Lymph Node Iliac
[Lymphoma Malignant TGLs = 14-20]
- * Lymph Node, Mandibular
Lymphoma Malignant
- [Lymphoma Malignant TGLs = 15-9]
- * Lymph Node, Mesenteric
Lymphoma Malignant
- [Lymphoma Malignant TGLs = 13-15]
- * Mammary Gland Duct
Dilation Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1100

TRT#: 6

SEX: Female

DAY ON TEST: 450

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1100

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal			Hyperplasia	Mild
* Nose	Olfactory Epi		Lymphoma Malignant	
			Accumulation, Hyaline Droplet	Mild
			Foreign Body	
			Inflammation	Suppurative, Minimal
	Respirat Epith		Lymphoma Malignant	
* Ovary			Metaplasia	Squamous, Minimal
			Lymphoma Malignant	
	[Lymphoma Malignant	TGLs = 4-16]		
* Pancreas			Lymphoma Malignant	
	[Lymphoma Malignant	TGLs = 9-6]		
* Pituitary Gland			Lymphoma Malignant	
	[Lymphoma Malignant	TGLs = 10-4]		
* Salivary Glands	Parotid GI		Atrophy	Marked
Skeletal Muscle			Degeneration	Minimal
* Spinal Cord, Cervical			Lymphoma Malignant	
* Spinal Cord, Lumbar			Lymphoma Malignant	
* Spinal Cord, Thoracic			Lymphoma Malignant	
* Spleen			Lymphoma Malignant	
	[Lymphoma Malignant	TGLs = 3-12]		
* Stomach, Forestomach	Epithelium		Hyperplasia	Mild
			Ulcer	Moderate
* Thymus			Lymphoma Malignant	
	[Lymphoma Malignant	TGLs = 8-6]		
Trigeminal Ganglion			Lymphoma Malignant	

PRIMARY CAUSE OF DEATH - Spleen Lymphoma Malignant

Animal Note: TGLs 1,5 = NCL (No Corresponding Lesion)

Animal Note: TGL 6 = NST (No Section Taken)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1101

TRT#: 6

SEX: Female

DAY ON TEST: 669

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1101

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- Trigeminal Ganglion
- * Bone
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Extramedullary Hematopoiesis Minimal
 - Hypertrophy Minimal
 - Vacuolation, Cytoplasmic Minimal
- * Adrenal Medulla
 - Hyperplasia Minimal
- * Bone Marrow
 - Hypercellularity Marked
- * Brain
 - Meninges
 - Pineal Gland
 - Granular Cell Tumor Benign TGLs = 4-2]
 - Mineral Minimal
- * Clitoral Gland
 - Inflammation Chronic Active, Minimal
- * Eye
 - Sclera Acute, Minimal
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy Minimal
 - Cardiomyopathy Minimal
 - [Cardiomyopathy TGLs = 6-11,20]
- * Kidney
 - Nephropathy Chronicprogr, Moderate
- * Liver
 - Extramedullary Hematopoiesis Mild
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 1-10]
 - Histiocyte, Mild
- Lymph Node
 - Iliac
 - Hyperplasia Lymphocyte, Mild
 - Iliac Proliferation Plasma Cell, Moderate
 - [Proliferation TGLs = 2-20]
- * Lymph Node, Mandibular
 - Inflammation Chronic Active, Mild
 - Proliferation Plasma Cell, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1101

TRT#: 6

SEX: Female

DAY ON TEST: 669

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1101

ORGAN AND ACCOUNTABLE SITE STATUS

Note: Pyogranuloma present.

* Mammary Gland	Duct	Adenocarcinoma	
		Dilation	Mild
	[Adenocarcinoma TGLs = 5-20]		
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Minimal
		Extramedullary Hematopoiesis	Marked
	[Extramedullary Hematopoiesis TGLs = 3-12]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
		Squamous Cell Papilloma	
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Hyperplasia	Marked
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

PRIMARY CAUSE OF DEATH - Mammary Gland Adenocarcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1102

TRT#: 6

SEX: Female

DAY ON TEST: 489

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1102

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Ileum
- * Nerve Trigeminal
- * Peripheral Nerve, Tibial
- * Skin
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Pancreas
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Parathyroid Gland
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thyroid Gland
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Peripheral Nerve, Sciatic
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Trachea

OBSERVATIONS

- * Adrenal Cortex Hyperplasia Mild
- * Bone Marrow Hypercellularity Marked
- * Clitoral GI
- Note: One of pair available for evaluation.
- * Intestine Large, Rectum Epithelium Metaplasia Squamous, Mild
- Note: Polypoid structure composed of squamous epithelium extending into lumen.
- * Kidney Renal Tubule Accumulation, Hyaline Droplet Moderate
- * Liver Extramedullary Hematopoiesis Minimal
- * Lung Alveolus Infiltration Cellular Histocyte, Minimal
- [Infiltration Cellular TGLs = 3-10]
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Moderate
- Proliferation Plasma Cell, Mild
- * Mammary Gland Adenocarcinoma
- Galactocele
- [Adenocarcinoma TGLs = 1-9,21]
- [Galactocele TGLs = 5-9,20]
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Mild
- * Ovary Atrophy Moderate
- Note: One of pair available for evaluation.
- [Atrophy TGLs = 4-16,16.1]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1102

TRT#: 6

SEX: Female

DAY ON TEST: 489

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1102

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

Extramedullary Hematopoiesis

Marked

* Thymus

Hyperplasia

Epithelial, Minimal

* Uterus

Epithelium

Metaplasia

Squamous, Mild

PRIMARY CAUSE OF DEATH - Mammary Gland Adenocarcinoma

Animal Note: TGL 2 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1103

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1103

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pituitary Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Glandular
- * Uterus
- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Kidney
- Skeletal Muscle
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- Trigeminal Ganglion

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
- * Eye
 - Retina
 - Atrophy
 - Cardiomyopathy
 - Hyperplasia
- * Heart
 - Hyperplasia
- * Islets, Pancreatic
 - Hyperplasia
- * Liver
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
 - Hepatocyte
 - Necrosis
 - Alveolus
 - Infiltration Cellular
- * Lung
 - [Infiltration Cellular TGLs = 3-10]
- * Lymph Node, Mandibular
 - Lymph Sinus
 - Ectasia
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Hyperplasia
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - [Cyst TGLs = 1-16]
- * Pancreas
 - Acinus
 - Atrophy
 - Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1103

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1103

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary G1			
Note: Pars distalis available for evaluation.			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1104

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1104

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Esophagus |
| * Eye | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|-----------------------|------------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hyperplasia | Mild |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | | Compression | Minimal |
| * Clitoral Gland | Duct | Dilation | Mild |
| | | Inflammation | Chronic Active, Mild |
| * Harderian Gland | | Atrophy | Minimal |
| | | Inflammation | Granulomatous, Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Hyperplasia | Marked |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | | Eosinophilic Focus | |
| | [Eosinophilic Focus TGLs = 5-12] | | |
| * Lung | | Congestion | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Moderate |
| | [Infiltration Cellular TGLs = 3-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Adenocarcinoma | |
| | Duct | Dilation | Mild |
| | | Fibroadenoma | |
| | | Hyperplasia | Mild |

Note: Carcinoma arising within a fibroadenoma.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1104

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1104

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenocarcinoma TGLs = 1-20]

[Dilation TGLs = 4-9]

[Fibroadenoma TGLs = 1-20]

* Nerve Trigeminal		Degeneration	Mild
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Ovary		Atrophy	Marked
	Rete Ovarii	Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 2-4]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Ectopic Parathyroid Gland	
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Cyst	
	Endometrium	Hyperplasia	Cystic, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1105

TRT#: 6

SEX: Female

DAY ON TEST: 492

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1105

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Kidney | * Liver | * Lymph Node, Mesenteric | * Nerve Trigeminal |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Spinal Cord, Thoracic | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | | |

OBSERVATIONS

- | | | | |
|--|---------------------------------------|-------------------------------|----------------------|
| * Bone Marrow | | Hypercellularity | Marked |
| * Heart | | Cardiomyopathy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Moderate |
| | [Infiltration Cellular TGLs = 5-10] | Inflammation | Chronic Active, Mild |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | |
| | | Galactocele | |
| | | Inflammation | Granulomatous, Mild |
| Note: Granulomatous inflammation likely secondary to a ruptured galactocele. | | | |
| | [Fibroadenoma TGLs = 4-23,24RT] | | |
| | [Galactocele TGLs = 3-9,22] | | |
| | [Inflammation TGLs = 2-20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| Note: Approximately one-half of level 3 absent. | | | |
| * Ovary | | Atrophy | Moderate |
| * Pancreas | Periductal | Cholangiofibrosis | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1105

TRT#: 6

SEX: Female

DAY ON TEST: 492

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1105

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
Tissue NOS	Fat	Necrosis	Moderate
[Necrosis TGLs = 1-21]			
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Mild

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1107

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1107

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Trachea | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|---------------------------------------|---------------|-------------------------------|--------------------------|
| * Adrenal Cortex | | Cyst | |
| | | Hypertrophy | Minimal |
| [Cyst TGLs = 7-7] | | | |
| * Clitoral Gland | Duct | Dilation | Marked |
| | | Inflammation | Chronic Active, Moderate |
| [Dilation TGLs = 4,5-16] | | | |
| [Inflammation TGLs = 3-16] | | | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Eosinophilic Focus | |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Moderate |
| [Infiltration Cellular TGLs = 9-10] | | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Adenoma | |
| | | Dilation | Minimal |
| | | Fibroadenoma | |
| [Adenoma TGLs = 1-20] | | | |
| [Fibroadenoma TGLs = 2-21] | | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Marked |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1107

TRT#: 6

SEX: Female

DAY ON TEST: 738

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1107

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 10-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Cyst	
		Inflammation	Suppurative, Minimal
[Cyst TGLs = 6-16]			

Animal Note: TGL 8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1108

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1108

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Kidney
- * Salivary Glands
- * Stomach, Glandular
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Trachea
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hypertrophy Minimal
- * Bone
 - Fibrosis Minimal
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Duct
 - Dilation Marked
 - [Dilation TGLs = 2,3-16.1]
- * Heart
 - Cardiomyopathy Minimal
- * Islets, Pancreatic
 - Adenoma
- * Liver
 - Basophilic Focus
 - Eosinophilic Focus
- * Lung
 - Alveolus
 - Infiltration Cellular Histiocyte, Minimal
 - Inflammation Chronic Active, Minimal
 - [Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular
 - Hyperplasia Lymphocyte, Minimal
- * Mammary Gland
 - Duct
 - Dilation Minimal
 - Fibroadenoma Multiple
 - [Fibroadenoma TGLs = 1-20,9]
- * Nerve Trigeminal
 - Degeneration Moderate
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet Moderate
 - Inflammation Chronic Active, Mild
 - Respirat Epith
 - Metaplasia Squamous, Mild
 - Atrophy Marked
- * Ovary

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1108

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1108

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Mild
Note: Pars distalis available for evaluation.			
Note: Cyst contains hemorrhage.			
[Cyst TGLs = 6-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
		Inflammation	Suppurative, Mild
	Epithelium	Metaplasia	Squamous, Mild
[Inflammation TGLs = 4-16.1]			

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1109

TRT#: 6

SEX: Female

DAY ON TEST: 744

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1109

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1110

TRT#: 6

SEX: Female

DAY ON TEST: 493

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1110

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Brain | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Nerve Trigeminal |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Spinal Cord, Lumbar |
| * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

MISSING

- * Clitoral Gland

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 2-10] | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1-16,20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Spleen | | Extramedullary Hematopoiesis | Moderate |
| * Thymus | | Atrophy | Mild |
| * Uterus | Epithelium | Metaplasia | Squamous, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1111

TRT#: 6

SEX: Female

DAY ON TEST: 699

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1111

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Liver | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Stomach, Glandular | * Trachea | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|--|----------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Bone Marrow | | Hypercellularity | Moderate |
| * Clitoral Gland | Duct | Dilation | Mild |
| [Dilation TGLs = 1-16] | | | |
| * Islets, Pancreatic | | Carcinoma | |
| [Carcinoma TGLs = 3-22] | | | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| [Infiltration Cellular TGLs = 2-10] | | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Minimal |
| [Fibroadenoma TGLs = 4,6,7-20,21,22] | | Fibroadenoma | Multiple |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Atrophy | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Intermed | Hyperplasia | Mild |
| [Adenoma TGLs = 9-4] | | | |
| * Spinal Cord, Cervical | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1111

TRT#: 6

SEX: Female

DAY ON TEST: 699

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1111

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thymus		Atrophy	Mild
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Moderate
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Mild

[Hyperplasia TGLs = 5-16]

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 8 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1112

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1112

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea
- * Aorta
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- Trigeminal Ganglion
- * Bone
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Clitoral Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Hypercellularity
 - Cystic, Moderate
 - Marked
- * Bone Marrow
 - Hypertrophy
 - Hypercellularity
 - Moderate
- * Brain
 - Meninges
 - Granular Cell Tumor Benign
- * Eye
 - Retina
 - Atrophy
 - Minimal
- * Harderian Gland
 - Atrophy
 - Minimal
- * Heart
 - Inflammation
 - Granulomatous, Minimal
- * Kidney
 - Cardiomyopathy
 - Minimal
- * Liver
 - Nephropathy
 - Chronicprogr, Minimal
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 2-10]
 - Eosinophilic Focus
 - Infiltration Cellular
 - Histiocyte, Minimal
- * Lymph Node, Mandibular
 - Hyperplasia
 - Lymphocyte, Minimal
- * Mammary Gland
 - Duct
 - Proliferation
 - Plasma Cell, Mild
 - Dilation
 - Minimal
 - Fibroadenoma
 - Hyperplasia
 - Moderate
- * Nerve Trigeminal
 - [Fibroadenoma TGLs = 1-20]
 - Degeneration
 - Moderate
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate
- * Ovary
 - Atrophy
 - Marked
 - Cyst

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1112

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1112

ORGAN AND ACCOUNTABLE SITE STATUS

[Cyst TGLs = 4-16]			
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 3-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
		Polyp Stromal	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1113

TRT#: 6

SEX: Female

DAY ON TEST: 720

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1113

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Kidney
- * Parathyroid Gland
- * Skin
- * Thyroid Gland
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 Mild
Moderate
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity
 Marked
- * Brain
 - Glial Cell
 Hyperplasia
 Marked
- * Clitoral Gland
 - Duct
 Dilation
 Minimal
- * Heart
 - Cardiomyopathy
 Minimal
- * Liver
 - Eosinophilic Focus
 - Extramedullary Hematopoiesis
 - Mixed Cell Focus
 Minimal
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 5-10]
 Infiltration Cellular
 Histiocyte, Mild
- * Mammary Gland
 - [Fibroadenoma TGLs = 4-20]
 Fibroadenoma
- * Nerve Trigeminal
 - Degeneration
 Moderate
- * Nose
 - Olfactory Epi
 Accumulation, Hyaline Droplet
 Minimal
 - Note: Approximately one-half of Level 3 available for evaluation.
- * Ovary
 - Atrophy
 Moderate
- * Peripheral Nerve, Sciatic
 - Degeneration
 Mild
- * Peripheral Nerve, Tibial
 - Degeneration
 Mild
- * Spinal Cord, Lumbar
 - Nerve
 - Degeneration
 Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1113

TRT#: 6

SEX: Female

DAY ON TEST: 720

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1113

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Thoracic

* Spleen

* Thymus

Trigeminal Ganglion

* Uterus

[Polyp Stromal TGLs = 6-16]

Degeneration

Extramedullary Hematopoiesis

Atrophy

Cyst

Hyperplasia

Degeneration

Polyp Stromal

Mild

Moderate

Moderate

Epithelial, Minimal

Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 2,3 = NCL (No Corresponding Lesion)

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1114

TRT#: 6

SEX: Female

DAY ON TEST: 619

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1114

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Islets, Pancreatic
- * Pancreas
- * Spinal Cord, Thoracic
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Kidney
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Ovary
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Uterus

AUTO PRECLUDES DIAG.

- * Adrenal Cortex
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Bone Marrow
- * Heart
- * Liver
- * Lung
- [Infiltration Cellular TGLs = 6-10]
- * Lymph Node, Mandibular
- * Mammary Gland
- [Fibroadenoma TGLs = 1,2,4-20,21,22]
- * Nerve Trigeminal
- * Nose
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- Hypercellularity
- Cardiomyopathy
- Cardiomyopathy
- Necrosis
- Hemorrhage
- Infiltration Cellular
- Inflammation
- Hyperplasia
- Proliferation
- Fibroadenoma
- Hyperplasia
- Degeneration
- Accumulation, Hyaline Droplet
- Fibrosis
- Degeneration
- Degeneration
- Vacuolation, Cytoplasmic
- Vacuolation, Cytoplasmic
- Marked
- Minimal
- Minimal
- Minimal
- Minimal
- Histiocyte, Minimal
- Chronic Active, Minimal
- Lymphocyte, Minimal
- Plasma Cell, Moderate
- Multiple
- Mild
- Mild
- Moderate
- Mild
- Mild
- Mild
- Mild
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1114

TRT#: 6

SEX: Female

DAY ON TEST: 619

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1114

ORGAN AND ACCOUNTABLE SITE STATUS

* Skin	Subcut Tiss	Edema	Mild
	Subcut Tiss	Inflammation	Chronic Active, Mild
[Edema TGLs = 9-9]			
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Moderate

PRIMARY CAUSE OF DEATH - UNCERTAIN

Animal Note: TGLs 3,5,7,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1115

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1115

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Glandular
- * Uterus
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Pancreas
- * Skin
- Trigeminal Ganglion
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - Cystic, Mild
 - Moderate
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Clitoral Gland
 - Duct
 - Dilation
 - Marked
 - [Dilation TGLs = 2-16]
- * Eye
 - Retina
 - Atrophy
 - Minimal
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Cardiomyopathy
 - Minimal
- * Islets, Pancreatic
 - Hyperplasia
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Mild
- * Liver
 - Bile Duct
 - Hyperplasia
 - Minimal
 - Mixed Cell Focus
 - [Mixed Cell Focus TGLs = 7-12]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal
 - [Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular
 - Proliferation
 - Plasma Cell, Minimal
- * Mammary Gland
 - Fibroadenoma
 - Hyperplasia
 - Mild
 - [Fibroadenoma TGLs = 3-20]
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1115

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1115

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Cyst	
		Cystadenoma	
	Rete Ovarii	Hyperplasia	Moderate
[Cyst TGLs = 1-16]			
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Adenoma	
[Adenoma TGLs = 5-8]			

Animal Note: TGL 6 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1116

TRT#: 6

SEX: Female

DAY ON TEST: 545

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1116

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Liver |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Nerve Trigeminal | * Pancreas |
| * Pituitary Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|-----------------------------|------------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Mild |
| * Clitoral Gland | Duct | Dilation | Marked |
| | | Inflammation | Chronic Active, Mild |
| | [Dilation TGLs = 2-16] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Minimal |
| * Spleen | | Extramedullary Hematopoiesis | Mild |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |
| | Epithelium | Metaplasia | Squamous, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1116

TRT#: 6

SEX: Female

DAY ON TEST: 545

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1116

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1117

TRT#: 6

SEX: Female

DAY ON TEST: 737

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1117

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Salivary Glands
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Liver
- Skeletal Muscle
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Stomach, Forestomach
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Stomach, Glandular

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - [Adenoma TGLs = 4-7]
 - [Degeneration TGLs = 5-7]
 - * Clitoral Gland
 - [Dilation TGLs = 3-16]
 - * Lung
 - [Infiltration Cellular TGLs = 7-10.1]
 - * Lymph Node, Mandibular
 - * Mammary Gland
 - [Fibroadenoma TGLs = 1-20]
 - * Nerve Trigeminal
 - * Nose
 - * Ovary
- | | | |
|--|-------------------------------|-------------------------|
| | Adenoma | |
| | Degeneration | Cystic, Minimal |
| | Dilation | Marked |
| | Inflammation | Chronic Active, Minimal |
| | Infiltration Cellular | Histiocyte, Minimal |
| | Pigment | Minimal |
| | Hyperplasia | Lymphocyte, Minimal |
| | Proliferation | Plasma Cell, Minimal |
| | Dilation | Minimal |
| | Fibroadenoma | |
| | Hyperplasia | Minimal |
| | Degeneration | Moderate |
| | Accumulation, Hyaline Droplet | Moderate |
| | Atrophy | Marked |
| | Hyperplasia | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1117

TRT#: 6

SEX: Female

DAY ON TEST: 737

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1117

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Skin	Subcut Tiss	Fibroma	
	Subcut Tiss	Lipoma	
	[Fibroma TGLs = 1-20]		
	[Lipoma TGLs = 2-21]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal
	[Adenoma TGLs = 6-8]		
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate
	Epithelium	Metaplasia	Squamous, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1118

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1118

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lung | Lymph Node |
| * Lymph Node, Mesenteric | * Parathyroid Gland | Skeletal Muscle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|--------------------------|-----------------------------------|--------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hyperplasia | Mild |
| | | Vacuolation, Cytoplasmic | Mild |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | | Compression | Minimal |
| | [Compression TGLs = 10-2.1] | | |
| * Clitoral Gland | Duct | Dilation | Marked |
| | [Dilation TGLs = 4-16] | | |
| * Harderian Gland | | Atrophy | Minimal |
| * Liver | | Angiectasis | Minimal |
| | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | [Angiectasis TGLs = 7-12] | | |
| Lymph Node | | | |
| | Note: Mediastinal lymph node. | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Marked |
| * Mammary Gland | Duct | Dilation | Mild |
| | | Fibroadenoma | Multiple |
| | | Hyperplasia | Minimal |
| | [Fibroadenoma TGLs = 1,2-20,21] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1118

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1118

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
		Cyst	
	[Cyst TGLs = 5-16]		
* Pancreas	Acinus	Atrophy	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	Multiple
	[Adenoma TGLs = 11,12-4]		
* Salivary Glands	Parotid GI	Adenoma	
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Marked
Tissue NOS		Chemodectoma Benign	
Note: Located in tissue adjacent to thyroid gland.			
* Uterus		Cyst	
		Leiomyosarcoma	
	[Leiomyosarcoma TGLs = 6-16]		

Animal Note: TGL 8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1119

TRT#: 6

SEX: Female

DAY ON TEST: 450

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1119

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Liver
- * Peripheral Nerve, Sciatic
- * Skin
- * Stomach, Glandular
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Thymus
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Nerve Trigeminal
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Thyroid Gland
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Pancreas
- Skeletal Muscle
- * Stomach, Forestomach
- * Trachea

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Harderian Gland
- * Lung
 - [Infiltration Cellular TGLs = 3-10]
- * Lymph Node, Mandibular
- * Mammary Gland
 - [Fibroadenoma TGLs = 1,2,4-20,21,22]
- * Nose
- * Ovary
- * Peripheral Nerve, Tibial
- * Spinal Cord, Lumbar
- * Spleen
- * Uterus
- Alveolus
- Olfactory Epi
- Nerve
- Epithelium
- Hyperplasia
- Hypercellularity
- Inflammation
- Infiltration Cellular
- Proliferation
- Fibroadenoma
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Degeneration
- Extramedullary Hematopoiesis
- Metaplasia
- Minimal
- Marked
- Chronic Active, Minimal
- Histiocyte, Minimal
- Plasma Cell, Mild
- Multiple
- Moderate
- Moderate
- Minimal
- Minimal
- Minimal
- Squamous, Mild

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1120

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1120

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- Skeletal Muscle
- * Thyroid Gland
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 6-7]
- * Bone Marrow
- * Eye
- * Kidney
- * Liver
 - [Mixed Cell Focus TGLs = 7,11-12]
- * Lung
 - [Infiltration Cellular TGLs = 9-10]
- * Lymph Node, Mandibular
- * Mammary Gland
 - [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
- * Nose
- * Ovary
- Degeneration
- Hyperplasia
- Hypercellularity
- Atrophy
- Nephropathy
- Eosinophilic Focus
- Extramedullary Hematopoiesis
- Hypertrophy
- Mixed Cell Focus
- Infiltration Cellular
- Pigment
- Erythrophagocytosis
- Hyperplasia
- Proliferation
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Cystic, Moderate
- Moderate
- Marked
- Minimal
- Chronicprogr, Minimal
- Minimal
- Minimal
- Histiocyte, Mild
- Mild
- Mild
- Lymphocyte, Mild
- Plasma Cell, Mild
- Minimal
- Moderate
- Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1120

TRT#: 6

SEX: Female

DAY ON TEST: 739

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1120

ORGAN AND ACCOUNTABLE SITE STATUS

[Cyst TGLs = 10-16]	Periovarn Tiss	Cyst	
* Parathyroid Gland		Fibrosis	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
[Extramedullary Hematopoiesis TGLs = 5-12]			
* Thymus		Atrophy	Mild
		Cyst	
* Uterus		Cyst	
	Endometrium	Hyperplasia	Cystic, Mild
[Cyst TGLs = 3,4-16,20]			

Animal Note: TGL 2 = NST (No Section Taken)

Animal Note: TGL 8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1122

TRT#: 6

SEX: Female

DAY ON TEST: 142

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1122

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Eye | * Harderian Gland |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Islets, Pancreatic | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nerve Trigeminal | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Sciatic |
| * Peripheral Nerve, Tibial | * Pituitary Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Spinal Cord, Lumbar | * Spinal Cord, Thoracic |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | * Uterus |

AUTO PRECLUDES DIAG.

- | | | | |
|--------------------------|-----------------------------|--------------------------|----------------------------|
| * Intestine Large, Cecum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
|--------------------------|-----------------------------|--------------------------|----------------------------|

OBSERVATIONS

- | | | |
|--------------------------------|----------------|-----------------------|
| * Aorta | Dilation | Mild |
| | Mineral | Mild |
| * Brain | | |
| Note: One olfactory bulb | | |
| * Esophagus | Dilation | Moderate |
| [Dilation TGLs = 3-8] | | |
| * Heart | Cardiomyopathy | Mild |
| * Kidney | Nephropathy | Chronicprogr, Minimal |
| * Liver | Congestion | Moderate |
| * Lung | Congestion | Moderate |
| [Congestion TGLs = 2-10] | | |
| * Spleen | Pigment | Mild |
| Note: Red pulp is hypocellular | | |

Animal Note: TGL 1 = NCL

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1123

TRT#: 6

SEX: Female

DAY ON TEST: 640

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1123

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Brain

* Heart

* Lymph Node, Mesenteric

* Parathyroid Gland

* Skin

* Thyroid Gland

* Adrenal Medulla

* Esophagus

* Intestine Large, Colon

* Mammary Gland

* Pituitary Gland

* Spinal Cord, Lumbar

* Trachea

* Aorta

* Eye

* Intestine Small, Duodenum

* Nerve Trigeminal

* Salivary Glands

* Stomach, Forestomach

Trigeminal Ganglion

* Bone

* Harderian Gland

* Islets, Pancreatic

* Pancreas

Skeletal Muscle

* Stomach, Glandular

* Urinary Bladder

MISSING

* Clitoral Gland

AUTO PRECLUDES DIAG.

* Intestine Large, Cecum

* Intestine Large, Rectum

* Intestine Small, Ileum

* Intestine Small, Jejunum

OBSERVATIONS

* Bone Marrow

* Kidney

* Liver

* Lung

[Infiltration Cellular TGLs = 1-10]

* Lymph Node, Mandibular

* Nose

* Ovary

[Cyst TGLs = 11-16]

[Hemorrhage TGLs = 3-16]

* Peripheral Nerve, Sciatic

* Peripheral Nerve, Tibial

* Spinal Cord, Cervical

* Spinal Cord, Thoracic

* Spleen

Alveolus

Olfactory Epi

Periovarn Tiss

Hypercellularity

Nephropathy

Extramedullary Hematopoiesis

Infiltration Cellular

Proliferation

Accumulation, Hyaline Droplet

Atrophy

Cyst

Hemorrhage

Degeneration

Degeneration

Degeneration

Degeneration

Extramedullary Hematopoiesis

Marked

Chronicprogr, Minimal

Minimal

Histiocyte, Mild

Plasma Cell, Mild

Mild

Moderate

Mild

Mild

Minimal

Minimal

Minimal

Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1123

TRT#: 6

SEX: Female

DAY ON TEST: 640

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1123

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Hemorrhage

Minimal

[Hemorrhage TGLs = 7-6]

* Uterus

Dilation

Marked

Hemorrhage

Moderate

Inflammation

Chronic Active, Moderate

Epithelium

Metaplasia

Squamous, Marked

Squamous Cell Carcinoma

[Dilation TGLs = 4-16]

[Hemorrhage TGLs = 5-16]

[Inflammation TGLs = 10-16]

PRIMARY CAUSE OF DEATH - Uterus Dilation

Animal Note: TGLs 2,6,8,9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1124

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1124

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- Skeletal Muscle
- * Stomach, Glandular
- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Skin
- * Thyroid Gland
- * Aorta
- * Eye
- * Intestine Small, Duodenum
- * Kidney
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Bone Marrow Hypercellularity Marked
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland Duct
 - [Dilation TGLs = 2-16.1]Dilation Marked
Inflammation Chronic Active, Minimal
- * Harderian Gland Atrophy Minimal
- * Heart Epicardium
 - [Adenocarcinoma TGLs = 10-10]
 - [Infiltration Cellular TGLs = 6-10]Cardiomyopathy Mild
Paraganglioma
Extramedullary Hematopoiesis Minimal
Adenocarcinoma Metastatic (Uterus)
Hyperplasia Mild
Infiltration Cellular Histiocyte, Moderate
- * Liver
- * Lung Epithlm Alvlus
 - [Proliferation TGLs = 12-6]Hyperplasia Lymphocyte, Minimal
Proliferation Plasma Cell, Mild
- * Mammary Gland Duct
 - [Fibroadenoma TGLs = 1,3-20,21]Dilation Minimal
Fibroadenoma Multiple
- * Nose Olfactory Epi
 - [Fibroadenoma TGLs = 1,3-20,21]Accumulation, Hyaline Droplet Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1124

TRT#: 6

SEX: Female

DAY ON TEST: 741

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1124

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Marked
Note: One of pair available for evaluation.			
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Cyst	
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
Tissue NOS	Fat	Adenocarcinoma	Metastatic (Uterus)
	Fat	Necrosis	Mild
[Adenocarcinoma TGLs = 13-23]			
[Necrosis TGLs = 4-22]			
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Adenocarcinoma	
		Cyst	
[Adenocarcinoma TGLs = 7-22]			
[Cyst TGLs = 8-16.1]			

Animal Note: TGLs 5,9,11 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1125

TRT#: 6

SEX: Female

DAY ON TEST: 706

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1125

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 5-4]

* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen	Red Pulp	Atrophy	Mild
		Pigment	Mild

[Atrophy TGLs = 1-12]

* Thymus		Atrophy	Minimal
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGLs 4,7,8 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1127

TRT#: 6

SEX: Female

DAY ON TEST: 669

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1127

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Small, Ileum
- * Spinal Cord, Lumbar
- * Aorta
- * Heart
- * Islets, Pancreatic
- * Spinal Cord, Thoracic
- * Bone
- * Intestine Large, Rectum
- Skeletal Muscle
- * Thyroid Gland
- * Esophagus
- * Intestine Small, Duodenum
- * Skin

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia Mild
 - Hypertrophy Mild
 - Lymphoma Malignant
- * Aorta
 - Note: Malignant lymphoma present in adipose tissue surrounding aorta.
- * Bone Marrow
 - Hypercellularity Marked
- * Brain
 - Lymphoma Malignant
 - Mineral Minimal
- Pineal Gland
 - [Lymphoma Malignant TGLs = 7,8-1,2]
- * Clitoral Gland
 - Duct
 - Dilation Marked
 - Lymphoma Malignant
 - [Dilation TGLs = 1,2-16]
- * Harderian Gland
 - Lymphoma Malignant
- * Intestine Large, Cecum
 - Lymphoma Malignant
- * Intestine Large, Colon
 - Lymphoma Malignant
- * Intestine Small, Jejunum
 - Peyers Patch
 - Lymphoma Malignant
- * Kidney
 - Lymphoma Malignant
- * Liver
 - Lymphoma Malignant
- * Lung
 - Lymphoma Malignant
 - Mediastinum
 - Lymphoma Malignant
 - [Lymphoma Malignant TGLs = 6-10]
 - Lymph Node
 - Bronchial
 - Lymphoma Malignant
 - * Lymph Node, Mandibular
 - Lymphoma Malignant
 - * Lymph Node, Mesenteric
 - Lymphoma Malignant
 - * Mammary Gland
 - Duct
 - Dilation Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1127

TRT#: 6

SEX: Female

DAY ON TEST: 669

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1127

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Lymphoma Malignant Degeneration	Mild
* Nose	Respirat Epith Olfactory Epi	Lymphoma Malignant Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet Lymphoma Malignant	Minimal Moderate
Note: Approximately one-third of Level 3 available for evaluation.			
* Ovary		Lymphoma Malignant	
* Pancreas		Lymphoma Malignant	
* Parathyroid Gland		Fibrosis Hyperplasia	Minimal Focal, Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland		Lymphoma Malignant	
* Salivary Glands		Lymphoma Malignant	
* Spinal Cord, Cervical		Lymphoma Malignant	
* Spleen		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 3-12]		
* Stomach, Forestomach		Lymphoma Malignant	
* Stomach, Glandular		Lymphoma Malignant	
* Thymus		Lymphoma Malignant	
* Trachea		Lymphoma Malignant	
Trigeminal Ganglion		Lymphoma Malignant	
* Urinary Bladder		Lymphoma Malignant	
* Uterus		Inflammation Lymphoma Malignant	Chronic Active, Mild
	Epithelium	Metaplasia	Squamous, Marked
	[Lymphoma Malignant TGLs = 4,5-16]		

PRIMARY CAUSE OF DEATH - Thymus Lymphoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1128

TRT#: 6

SEX: Female

DAY ON TEST: 482

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1128

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- Trigeminal Ganglion
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Nerve Trigeminal
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thymus
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Pancreas
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Thyroid Gland
- * Brain
- * Harderian Gland
- * Islets, Pancreatic
- * Parathyroid Gland
- * Skin
- * Stomach, Forestomach
- * Trachea

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Kidney
- * Liver
- * Lung
- [Infiltration Cellular TGLs = 5-10]
- * Lymph Node, Mandibular
- * Mammary Gland
- * Nose
- Note: Approximately one half of level 3 absent.
- * Ovary
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Spleen
- * Uterus
- Bile Duct
- Alveolus
- Duct
- Olfactory Epi
- White Pulp
- Hemorrhage
- Hypertrophy
- Hypercellularity
- Nephropathy
- Hyperplasia
- Congestion
- Infiltration Cellular
- Proliferation
- Dilation
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Degeneration
- Atrophy
- Dilation
- Hemorrhage
- Inflammation
- Mild
- Mild
- Moderate
- Chronicprogr, Minimal
- Minimal
- Mild
- Histiocyte, Mild
- Plasma Cell, Minimal
- Mild
- Mild
- Moderate
- Minimal
- Minimal
- Mild
- Marked
- Mild
- Chronic Active, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1128

TRT#: 6

SEX: Female

DAY ON TEST: 482

DOSE: 3.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1128

ORGAN AND ACCOUNTABLE SITE STATUS

[Dilation TGLs = 1-16]

[Hemorrhage TGLs = 2-16]

PRIMARY CAUSE OF DEATH - Uterus Hemorrhage

Animal Note: TGLs 3,4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1129

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1129

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Peripheral Nerve, Tibial
- * Spinal Cord, Cervical
- * Trachea
- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Spinal Cord, Lumbar
- Trigeminal Ganglion
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Forestomach
- * Urinary Bladder
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Stomach, Glandular

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Mild
 - Minimal
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity
 - Moderate
- * Brain
 - [Compression TGLs = 6-2]
 - Compression
 - Minimal
- * Eye
 - Retina
 - Atrophy
 - Mild
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Eosinophilic Focus
 - Hepatodiaphragmatic Nodule
- * Lung
 - [Hepatodiaphragmatic Nodule TGLs = 4-21]
 - Alveolus
 - [Infiltration Cellular TGLs = 5-10]
 - Infiltration Cellular
 - Histiocyte, Mild
- * Lymph Node, Mandibular
 - Lymph Sinus
 - Ectasia
 - Minimal
 - Hyperplasia
 - Lymphocyte, Minimal
 - Proliferation
 - Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Mild
 - Fibroadenoma
 - Hyperplasia
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1129

TRT#: 6

SEX: Female

DAY ON TEST: 740

DOSE: 3.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1129

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 1-20]

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Marked
* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 7-4]		
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Adenoma	
* Uterus		Cyst	
	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Mild

[Hyperplasia TGLs = 3-16]

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1130

TRT#: 6

SEX: Female

DAY ON TEST: 579

DOSE: 3.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1130

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic	Rete Ovarii	Cyst Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Degeneration Adenoma	Minimal
[Adenoma TGLs = 5-4]			
* Spleen		Extramedullary Hematopoiesis	Minimal
* Thymus		Atrophy	Mild
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1237

TRT#: 8

SEX: Female

DAY ON TEST: 545

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1237

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Trachea
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Spinal Cord, Thoracic
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 Minimal
- * Bone Marrow
 - Hypercellularity
 Marked
- * Clitoral GI
 - Note: One of pair available for evaluation.
- * Heart
 - Cardiomyopathy
 Minimal
- * Kidney
 - Renal Tubule
 - Adenoma
 - Carcinoma
 - Hyperplasia
 Multiple
 - Renal Tubule
 - Adenoma TGLs = 10-22]
 - Carcinoma TGLs = 4, 7, 8, 9, 11-13, 20, 21, 23]
 Multiple
 - Renal Tubule
 - Hyperplasia
 Atypical, Mild
- * Liver
 - Extramedullary Hematopoiesis
 Minimal
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Inflammation
 Histiocyte, Moderate
 - [Infiltration Cellular TGLs = 12-10]
 - Inflammation
 Chronic Active, Minimal
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 Lymphocyte, Mild
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Galactocele
 Mild
 Multiple

Note: Multiple galactoceles are ruptured with granulomatous inflammation.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1237

TRT#: 8

SEX: Female

DAY ON TEST: 545

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1237

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 1,2-20,21]

* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Spleen		Extramedullary Hematopoiesis	Moderate
		Hemangiosarcoma	

[Hemangiosarcoma TGLs = 3-12]

* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Marked
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Animal Note: TGL 5 = NCL (No corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1238

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1238

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Glandular
- * Uterus
- * Aorta
- * Eye
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Trachea
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Ovary
- * Salivary Glands
- Trigeminal Ganglion
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Vacuolation, Cytoplasmic
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Meninges
 - Granular Cell Tumor Malignant
- * Harderian Gland
 - Atrophy
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
- * Kidney
 - Nephropathy
 - Eosinophilic Focus
- * Liver
 - Extramedullary Hematopoiesis
- * Lung
 - Alveolus
 - Alveolus
 - [Infiltration Cellular TGLs = 5-10]
 - Infiltration Cellular
 - Pigment
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Fibroadenoma
- * Mammary Gland
 - [Fibroadenoma TGLs = 1,2,6-20,21,22]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- Skeletal Muscle
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1238

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1238

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Marked
	[Extramedullary Hematopoiesis TGLs = 4-12]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
* Thymus		Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Mild

Animal Note: TGLs 3,7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1240

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1240

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Cyst	
		Inflammation	Suppurative, Minimal

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1241

TRT#: 8

SEX: Female

DAY ON TEST: 656

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1241

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Harderian Gland | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Pancreas | * Salivary Glands |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Spinal Cord, Thoracic |
| * Stomach, Glandular | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

INSUFFICIENT TISSUE

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|-----------------------------|---|-------------------------------|-----------------------|
| * Bone Marrow | | Hypercellularity | Marked |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | Centrilobular, Hepatocyte | Necrosis | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Moderate |
| | [Infiltration Cellular TGLs = 3-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Minimal |
| | [Fibroadenoma TGLs = 4-20] | Fibroadenoma | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | Note: Approximately two-thirds of Level 3 available for evaluation. | | |
| * Ovary | | Atrophy | Mild |
| | | Cyst | |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Cyst | |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1241

TRT#: 8

SEX: Female

DAY ON TEST: 656

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1241

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Extramedullary Hematopoiesis	Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Ulcer	Minimal
* Thymus		Atrophy	Marked
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild
* Uterus	Endometrium	Hyperplasia	Cystic, Mild

[Hyperplasia TGLs = 5-21RT]

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1242

TRT#: 8

SEX: Female

DAY ON TEST: 548

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1242

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Skin
- * Stomach, Glandular
- * Urinary Bladder
- * Adrenal Medulla
- * Clitoral Gland
- * Islets, Pancreatic
- * Pancreas
- * Spinal Cord, Cervical
- * Thymus
- * Aorta
- * Esophagus
- * Lymph Node, Mandibular
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Thyroid Gland
- * Bone
- * Heart
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Stomach, Forestomach
- * Trigeminal Ganglion

MISSING

- * Parathyroid Gland

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Small, Duodenum
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Intestine Large, Colon
- * Kidney
- * Intestine Large, Rectum
- * Trachea

OBSERVATIONS

- * Bone Marrow
- * Harderian Gland
- * Liver
 - [Necrosis TGLs = 4-12]
- * Lung
 - [Infiltration Cellular TGLs = 6-10]
- Lymph Node
 - [Pigment TGLs = 10-20]
- * Mammary Gland
 - Note: Some galactoceles ruptured with inflammation.
 - [Galactoceles TGLs = 9-20]
- * Nose
- * Ovary
- * Peripheral Nerve, Sciatic
- Hepatocyte
- Alveolus
- Iliac
- Duct
- Olfactory Epi
- Hypercellularity
- Inflammation
- Necrosis
- Infiltration Cellular
- Pigment
- Dilation
- Galactoceles
- Hyperplasia
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Marked
- Chronic Active, Minimal
- Mild
- Histiocyte, Minimal
- Mild
- Mild
- Minimal
- Mild
- Moderate
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1242

TRT#: 8

SEX: Female

DAY ON TEST: 548

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1242

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
	[Extramedullary Hematopoiesis TGLs = 5-12]		
* Uterus		Dilation	Marked
		Hemorrhage	Moderate
	[Dilation TGLs = 1-16]		
	[Hemorrhage TGLs = 2-16]		

PRIMARY CAUSE OF DEATH - Uterus Hemorrhage

CONTRIBUTORY CAUSE OF DEATH - Uterus Dilation

Animal Note: TGLs 3,7,8,11 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1243

TRT#: 8

SEX: Female

DAY ON TEST: 622

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1243

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- Skeletal Muscle
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Stomach, Glandular
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Spinal Cord, Thoracic
- Trigeminal Ganglion

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 1-7]
 - * Adrenal Medulla
 - * Bone Marrow
 - * Clitoral Gland
 - Duct
 - * Heart
 - * Kidney
 - * Liver
 - * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 3-10]
 - * Lymph Node, Mandibular
 - * Mammary Gland
 - Duct
 - * Nerve Trigeminal
 - * Nose
 - Olfactory Epi
 - * Ovary
 - * Pancreas
 - Acinus
 - Periductal
 - * Peripheral Nerve, Sciatic
- Degeneration
 - Hypertrophy
 - Hyperplasia
 - Hypercellularity
 - Dilation
 - Cardiomyopathy
 - Nephropathy
 - Extramedullary Hematopoiesis
 - Infiltration Cellular
 - Hyperplasia
 - Proliferation
 - Dilation
 - Degeneration
 - Accumulation, Hyaline Droplet
 - Atrophy
 - Atrophy
 - Cholangiofibrosis
 - Degeneration
 - Cystic, Minimal
 - Mild
 - Minimal
 - Marked
 - Mild
 - Minimal
 - Chronicprogr, Minimal
 - Minimal
 - Histiocyte, Mild
 - Lymphocyte, Minimal
 - Plasma Cell, Mild
 - Minimal
 - Minimal
 - Mild
 - Moderate
 - Minimal
 - Mild
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1243

TRT#: 8

SEX: Female

DAY ON TEST: 622

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1243

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Minimal
Note: Longitudinal section available for evaluation.			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Cervix	Schwannoma Malignant	

[Schwannoma Malignant TGLs = 2-21]

PRIMARY CAUSE OF DEATH - Uterus Cervix Schwannoma Malignant

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1244

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1244

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Nerve Trigeminal | * Ovary | * Pancreas |
| * Pituitary Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| Trigeminal Ganglion | * Urinary Bladder | * Uterus | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|---|---------------------------------------|-------------------------------|------------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| Note: One of pair available for evaluation. | | | |
| * Clitoral Gland | Duct | Dilation | Moderate |
| * Harderian Gland | | Atrophy | Mild |
| | | Inflammation | Granulomatous, Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Mild |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 2-10] | | |
| * Mammary Gland | | Hyperplasia | Moderate |
| | [Hyperplasia TGLs = 1-9] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Mild |
| * Spinal Cord, Thoracic | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1244

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1244

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Adenoma	
[Adenoma TGLs = 3-8]			

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1245

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1245

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Small, Duodenum
- * Pancreas
- * Spinal Cord, Cervical
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Stomach, Glandular
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Trachea

MISSING

- * Adrenal Medulla

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 6-7]
 - * Brain
 - [Compression TGLs = 7-2]
 - * Harderian Gland
 - * Heart
 - Ventricle Rgt
 - * Islets, Pancreatic
 - [Carcinoma TGLs = 5-6]
 - * Kidney
 - * Liver
 - [Eosinophilic Focus TGLs = 9-12]
 - * Lung
 - * Lymph Node, Mandibular
 - * Mammary Gland
 - Duct
 - [Fibroadenoma TGLs = 2,4-21,16]
- Degeneration
Hypertrophy
- Cystic, Mild
Moderate
- Compression
- Minimal
- Atrophy
Inflammation
- Chronic Active, Minimal
- Cardiomyopathy
- Minimal
- Cardiomyopathy
- Mild
- Carcinoma
- Nephropathy
- Chronicprogr, Minimal
- Eosinophilic Focus
- Inflammation
- Chronic Active, Minimal
- Proliferation
- Plasma Cell, Minimal
- Dilation
- Minimal
- Fibroadenoma
- Multiple
- Galactocele
- Hyperplasia
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1245

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1245

ORGAN AND ACCOUNTABLE SITE STATUS

[Galactocoele TGLs = 3-9]

* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
		Cyst	

[Cyst TGLs = 10-16]

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	

[Adenoma TGLs = 8-4]

* Skin		Keratoacanthoma	
--------	--	-----------------	--

[Keratoacanthoma TGLs = 1-20]

* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Adenoma	
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1246

TRT#: 8

SEX: Female

DAY ON TEST: 669

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1246

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Aorta | * Bone | * Bone Marrow | * Clitoral Gland |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung |
| * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Spinal Cord, Thoracic | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | Trigeminal Ganglion |

OBSERVATIONS

- | | | | |
|-----------------------------|---------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | | Glioma Malignant | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Basophilic Focus | |
| | Bile Duct | Cyst | |
| [Cyst TGLs = 2-12] | | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Moderate |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Galactocele | |
| [Galactocele TGLs = 1-9] | | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Atrophy | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Cyst | |
| | Pars Distalis | Hyperplasia | Moderate |
| * Spinal Cord, Cervical | | Degeneration | Minimal |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Mild |
| | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1246

TRT#: 8

SEX: Female

DAY ON TEST: 669

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1246

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen	Red Pulp	Atrophy	Mild
		Pigment	Mild
* Thymus		Atrophy	Marked
* Urinary Bladder		Infiltration Cellular	Mononuclear CI, Mild
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Brain Glioma Malignant

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1247

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1247

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
- * Brain
 - Cystic, Mild
 - Minimal
- * Eye
 - Note: Olfactory bulbs unavailable for evaluation.
 - Retina
 - Atrophy
- * Kidney
 - Nephropathy
- * Liver
 - Hepatocellular Adenoma TGLs = 3-12]
 - Hepatocellular Adenoma
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 5-10]
 - Infiltration Cellular
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - [Dilation TGLs = 6-9.1,22]
 - [Fibroadenoma TGLs = 1,2-20,21]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1247

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1247

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Mild

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1248

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1248

ORGAN AND ACCOUNTABLE SITE STATUS

Hyperplasia

Minimal

[Dilation TGLs = 1-9.1]

[Fibroadenoma TGLs = 2-20]

* Nerve Trigeminal

Degeneration

Minimal

* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Moderate

* Ovary

Atrophy

Marked

Rete Ovarii

Hyperplasia

Marked

* Peripheral Nerve, Sciatic

Degeneration

Minimal

* Peripheral Nerve, Tibial

Degeneration

Minimal

* Pituitary Gland

Pars Distalis

Hyperplasia

Mild

* Spinal Cord, Lumbar

Nerve

Degeneration

Mild

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

Extramedullary Hematopoiesis

Mild

Pigment

Minimal

* Thymus

Atrophy

Minimal

Cyst

* Thyroid Gland

C Cell

Hyperplasia

Mild

Trigeminal Ganglion

Degeneration

Minimal

* Uterus

Endometrium

Hyperplasia

Cystic, Mild

Epithelium

Metaplasia

Squamous, Minimal

Animal Note: TGLs 4,7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1249

TRT#: 8

SEX: Female

DAY ON TEST: 687

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1249

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Harderian Gland
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Thoracic
- Trigeminal Ganglion
- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Colon
- * Ovary
- Skeletal Muscle
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Parathyroid Gland
- * Skin
- * Thyroid Gland
- * Uterus
- * Bone
- * Eye
- * Lymph Node, Mandibular
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Islets, Pancreatic
- * Intestine Small, Duodenum
- * Pancreas
- * Intestine Small, Ileum
- * Stomach, Glandular
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity
 - Cardiomyopathy
 - Nephropathy
 - Necrosis
- * Heart
 - Mild
- * Kidney
 - Chronicprogr, Minimal
- * Liver
 - Hepatocyte
 - Necrosis
 - Moderate
- [Necrosis TGLs = 3-12]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Moderate
- [Infiltration Cellular TGLs = 2-10]
- Lymph Node
 - Iliac
 - Congestion
 - Mild
- [Congestion TGLs = 7-20]
- * Mammary Gland
 - Fibroadenoma
 - Hyperplasia
 - Multiple
 - Moderate
- [Fibroadenoma TGLs = 4,5,6-20,21,22]
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Marked
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Minimal
- * Peripheral Nerve, Tibial
 - Degeneration
 - Minimal
- * Spinal Cord, Lumbar
 - Degeneration
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1249

TRT#: 8

SEX: Female

DAY ON TEST: 687

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1249

ORGAN AND ACCOUNTABLE SITE STATUS

	Nerve	Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild

PRIMARY CAUSE OF DEATH - Liver Hepatocyte Necrosis

Animal Note: TGLs 1,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1250

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1250

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Liver
- Skeletal Muscle
- * Stomach, Glandular
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 6-7]
- * Adrenal Medulla
- * Bone Marrow
- * Clitoral Gland
 - [Dilation TGLs = 2,3-16]
- * Heart
 - Ventricl Rgt
- * Kidney
- * Lung
 - [Infiltration Cellular TGLs = 9-10]
 - [Inflammation TGLs = 9-10]
- Lymph Node
 - [Hyperplasia TGLs = 7-20]
- * Lymph Node, Mandibular
- * Mammary Gland
 - [Fibroadenoma TGLs = 1-21]
- * Nerve Trigeminal
- * Nose
- * Ovary
- Degeneration
- Hypertrophy
- Hyperplasia
- Hypercellularity
- Dilation
- Cardiomyopathy
- Cardiomyopathy
- Nephropathy
- Infiltration Cellular
- Inflammation
- Hyperplasia
- Proliferation
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Cystic, Moderate
- Minimal
- Minimal
- Marked
- Moderate
- Minimal
- Minimal
- Chronicprogr, Minimal
- Histiocyte, Minimal
- Chronic Active, Mild
- Lymphocyte, Minimal
- Plasma Cell, Mild
- Moderate
- Moderate
- Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1250

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1250

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Acinus	Cyst Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
Note: Longitudinal section available for evaluation.			
* Salivary Glands	Parotid GI	Inflammation	Acute, Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Adenocarcinoma	
	Endometrium	Hyperplasia	Cystic, Minimal

[Adenocarcinoma TGLs = 4-20]

Animal Note: TGLs 5,8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1251

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1251

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Marked
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1252

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1252

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skeletal Muscle
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Trigeminal Ganglion
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - Hyperplasia
 - Cystic, Minimal
 - Minimal
 - Marked
- * Adrenal Medulla
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Inflammation
 - Chronic Active, Mild
- * Eye
 - Retina
 - Atrophy
 - Minimal
- * Heart
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Eosinophilic Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
 - [Infiltration Cellular TGLs = 1-10]
 - Histiocyte, Marked
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Lymphocyte, Mild
 - Plasma Cell, Mild
- * Mammary Gland
 - Duct
 - Dilation
 - Minimal
- * Nerve Trigeminal
 - Degeneration
 - Minimal
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Mild
- * Ovary
 - Atrophy
 - Marked
- * Parathyroid Gland
 - Fibrosis
 - Minimal
- * Peripheral Nerve, Sciatic
 - Degeneration
 - Mild
- * Peripheral Nerve, Tibial
 - Degeneration
 - Mild
- * Pituitary Gland
 - Pars Distalis
 - Hyperplasia
 - Minimal
- * Spinal Cord, Cervical
 - Degeneration
 - Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1252

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1252

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal
		Polyp Stromal	

[Polyp Stromal TGLs = 2-16]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1253

TRT#: 8

SEX: Female

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1253

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- Skeletal Muscle
- * Thyroid Gland
- * Uterus
- * Aorta
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Skin
- * Trachea
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Pituitary Gland
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Vacuolation, Cytoplasmic
 Mild
Minimal
- * Bone Marrow
 - Hypercellularity
 Moderate
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 Moderate
Chronic Active, Mild
 - [Inflammation TGLs = 4-16]
- * Eye
 - Retina
 - Atrophy
 Minimal
- * Kidney
 - Nephropathy
 Chronicprogr, Minimal
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 8-10]
 Infiltration Cellular
 Histocyte, Moderate
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 Lymphocyte, Minimal
Plasma Cell, Minimal
- * Mammary Gland
 - Fibroadenoma
 - Hyperplasia
 Multiple
Mild
- [Fibroadenoma TGLs = 1,2,3-20,21,22]
- * Nerve Trigeminal
 - Degeneration
 Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 Mild
- * Ovary
 - Bilateral, Rete Ovarii
 - Adenoma
 - Atrophy
 Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1253

TRT#: 8

SEX: Female

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1253

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal

Animal Note: TGL 5 = NST (No Section Taken)

Animal Note: TGLs 6,7,9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1254

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1254

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Aorta	* Bone	* Brain	* Esophagus
* Eye	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Pancreas	* Salivary Glands	Skeletal Muscle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Trachea
Trigeminal Ganglion	* Urinary Bladder		

MISSING

* Parathyroid Gland

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Minimal
* Adrenal Medulla		Hyperplasia	Moderate
* Bone Marrow		Hypercellularity	Marked
* Clitoral Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Moderate
* Harderian Gland		Atrophy	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Minimal
* Liver		Extramedullary Hematopoiesis	Minimal
	Hepatocyte	Hypertrophy	Minimal
	Hepatocyte	Necrosis	Minimal
	[Hypertrophy TGLs = 8,9-12]		
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
	[Infiltration Cellular TGLs = 11-10]		
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Minimal
* Mammary Gland	Duct	Dilation	Mild
		Fibroadenoma	Multiple
	[Fibroadenoma TGLs = 1,2,3-20,21,22]	Hyperplasia	Mild
* Nerve Trigeminal		Degeneration	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1254

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1254

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
		Cyst	
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild
Tissue NOS	Fat	Necrosis	Moderate
	[Necrosis TGLs = 7-20]		
* Uterus		Dilation	Marked
		Inflammation	Suppurative, Mild
	Epithelium	Metaplasia	Squamous, Marked
		Polyp Stromal	
	[Dilation TGLs = 5-16]		
	[Inflammation TGLs = 6-16]		

Animal Note: TGLs 4,10 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1255

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1255

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|--------------------------|---------------------------|--------------------------|
| * Aorta | * Bone | * Bone Marrow | * Brain |
| * Clitoral Gland | * Esophagus | * Eye | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Mesenteric | * Pancreas |
| * Pituitary Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | Trigeminal Ganglion |
| * Urinary Bladder | * Uterus | | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|---------------------------------------|---------------|---|---|
| * Adrenal Cortex | | Hypertrophy
Vacuolation, Cytoplasmic | Mild
Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Harderian Gland | | Atrophy | Minimal |
| * Intestine Small, Duodenum | | Ectopic Tissue | |
| Note: Ectopic pancreas. | | | |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Mixed Cell Focus
Infiltration Cellular | Histiocyte, Mild |
| [Infiltration Cellular TGLs = 5-10] | | | |
| * Lymph Node, Mandibular | | Hyperplasia
Proliferation | Lymphocyte, Minimal
Plasma Cell, Minimal |
| * Mammary Gland | | Fibroadenoma
Hyperplasia | Mild |
| [Fibroadenoma TGLs = 1-21] | | | |
| Mesentery | | Necrosis | Moderate |
| [Necrosis TGLs = 2-20] | | | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1255

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1255

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary	Rete Ovarii	Hyperplasia	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild

Animal Note: TGLs 3,4,6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1256

TRT#: 8

SEX: Female

DAY ON TEST: 290

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1256

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Mammary Gland
- * Peripheral Nerve, Sciatic
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Trachea
- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Peripheral Nerve, Tibial
- * Skin
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Pancreas
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lung
- * Parathyroid Gland
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thyroid Gland

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- * Bone Marrow
- * Heart
- * Intestine Small, Ileum
- * Kidney
- * Liver
- * Lymph Node, Mandibular
- * Lymph Node, Mesenteric
- * Nose
- * Ovary
- * Spleen
- * Thymus
- * Uterus
- Myocardium
- Bile Duct
- Hepatocyte
- Olfactory Epi
- White Pulp
- Hypercellularity
- Necrosis
- Necrosis
- Nephropathy
- Hyperplasia
- Infiltration Cellular
- Necrosis
- Hyperplasia
- Proliferation
- Infiltration Cellular
- Necrosis
- Accumulation, Hyaline Droplet
- Atrophy
- Atrophy
- Pigment
- Necrosis
- Dilation
- Mild
- Minimal
- Lymphoid, Minimal
- Chronicprogr, Minimal
- Mild
- Mixed Cell, Minimal
- Minimal
- Lymphocyte, Minimal
- Plasma Cell, Mild
- Histiocyte, Mild
- Lymphocyte, Moderate
- Mild
- Moderate
- Mild
- Moderate
- Lymphocyte, Mild
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1256

TRT#: 8

SEX: Female

DAY ON TEST: 290

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1256

ORGAN AND ACCOUNTABLE SITE STATUS

Hyperplasia

Stromal, Mild

Inflammation

Acute, Minimal

[Dilation TGLs = 1 - 16]

PRIMARY CAUSE OF DEATH

- UNCERTAIN

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1257

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1257

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Forestomach
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Salivary Glands
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Adenoma
 - Hypertrophy
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - [Inflammation TGLs = 4-16]
- * Liver
 - Eosinophilic Focus
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 6-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
 - Cyst
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1257

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1257

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 9-4]			
* Skin	Subcut Tiss	Fibroma	
[Fibroma TGLs = 2-21]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Adenoma	
[Adenoma TGLs = 7,8-8]			
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Adenocarcinoma	
		Polyp Stromal	
[Adenocarcinoma TGLs = 5-16]			

Animal Note: TGL 3 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1258

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1258

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Urinary Bladder
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach

OBSERVATIONS

- * Adrenal Cortex
[Adenoma TGLs = 5-7]
- * Adrenal Medulla
- * Bone Marrow
- * Clitoral Gland
Note: One of pair available for evaluation.
- * Harderian Gland
- * Kidney
Artery
- * Liver
[Angiectasis TGLs = 10-21]
- * Lung
[Infiltration Cellular TGLs = 8-10]
- * Lymph Node, Mandibular
- * Mammary Gland
Duct
[Fibroadenoma TGLs = 1,2,3-20,21,22]
- Mesentery
Artery
- Adenoma
- Hyperplasia
- Pheochromocytoma Benign
- Hypercellularity
- Inflammation
- Atrophy
- Inflammation
- Nephropathy
- Angiectasis
- Basophilic Focus
- Mixed Cell Focus
- Infiltration Cellular
- Hyperplasia
- Proliferation
- Dilation
- Fibroadenoma
- Hyperplasia
- Inflammation
- Minimal
- Marked
- Chronic Active, Mild
- Minimal
- Chronic Active, Mild
- Chronicprogr, Minimal
- Minimal
- Histiocyte, Moderate
- Lymphocyte, Minimal
- Plasma Cell, Minimal
- Mild
- Multiple
- Marked
- Chronic Active, Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1258

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1258

ORGAN AND ACCOUNTABLE SITE STATUS

[Inflammation TGLs = 7-23]

* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
* Pancreas	Artery	Inflammation	Chronic Active, Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Mild

Note: Cyst is hemorrhagic.

[Cyst TGLs = 9-4]

* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Trachea	Artery	Inflammation	Chronic Active, Mild
		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Marked
	Artery	Inflammation	Chronic Active, Mild
	Epithelium	Metaplasia	Squamous, Minimal

[Hyperplasia TGLs = 4-20]

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1259

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1259

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Bone
- * Brain
- * Esophagus
- * Heart
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- * Pancreas
- * Parathyroid Gland
- * Salivary Glands
- Skeletal Muscle
- * Skin
- * Stomach, Forestomach
- * Stomach, Glandular
- * Trachea
- * Urinary Bladder

MISSING

- * Adrenal Medulla

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Cystic, Mild
 - Mild
 - Minimal
- [Hypertrophy TGLs = 7-7]
- * Bone Marrow
 - Hypercellularity
 - Marked
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 - Minimal
 - Chronic Active, Mild
- [Inflammation TGLs = 1-16]
- * Eye
 - Retina
 - Atrophy
 - Minimal
- * Harderian Gland
 - Atrophy
 - Minimal
- * Kidney
 - Renal Tubule
 - Cyst
 - Nephropathy
 - Chronicprogr, Mild
- [Nephropathy TGLs = 8-13.1,25RT]
- * Liver
 - Hepatocyte
 - Eosinophilic Focus
 - Hypertrophy
 - Mixed Cell Focus
 - Minimal
- [Eosinophilic Focus TGLs = 14-12]
- [Hypertrophy TGLs = 9-12]
- [Mixed Cell Focus TGLs = 15-20]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Mild
- [Infiltration Cellular TGLs = 12-10]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1259

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1259

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Mild
* Mammary Gland		Adenocarcinoma	
	Duct	Dilation	Minimal
		Fibroadenoma	Multiple
		Myoepithelioma	
Note: Myoepithelioma arising within a fibroadenoma.			
		[Adenocarcinoma TGLs = 2-21]	
		[Fibroadenoma TGLs = 3,4-22,23]	
		[Myoepithelioma TGLs = 5-24]	
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Ovary		Atrophy	Marked
		Cyst	
		[Cyst TGLs = 6-16]	
* Peripheral Nerve, Sciatic		Degeneration	Mild
Note: Longitudinal section available for evaluation.			
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
		[Adenoma TGLs = 13-4]	
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
* Thymus		Atrophy	Mild
		[Atrophy TGLs = 11-6.1]	
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
		Polyp Stromal	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1259

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1259

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: TGL 10 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1260

TRT#: 8

SEX: Female

DAY ON TEST: 489

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1260

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- * Urinary Bladder
- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thyroid Gland
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Skin
- * Stomach, Forestomach
- Trigeminal Ganglion

INSUFFICIENT TISSUE

- * Peripheral Nerve, Tibial

OBSERVATIONS

- * Bone Marrow
- * Clitoral Gland
- * Liver
- * Lung
 - [Infiltration Cellular TGLs = 1-10]
- * Lymph Node, Mandibular
- * Mammary Gland
 - [Adenocarcinoma TGLs = 3-20]
- * Nerve Trigeminal
- * Nose
- * Ovary
- * Peripheral Nerve, Sciatic
- * Spleen
 - [Extramedullary Hematopoiesis TGLs = 2-12]
- * Thymus
- * Uterus
- Alveolus
- Olfactory Epi
- Epithelium
- Hypercellularity
- Inflammation
- Extramedullary Hematopoiesis
- Infiltration Cellular
- Proliferation
- Adenocarcinoma
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Extramedullary Hematopoiesis
- Atrophy
- Metaplasia
- Marked
- Chronic Active, Mild
- Minimal
- Histiocyte, Minimal
- Plasma Cell, Mild
- Minimal
- Mild
- Moderate
- Minimal
- Moderate
- Minimal
- Squamous, Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Adenocarcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1261

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1261

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Uterus
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Trachea
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex [Hypertrophy TGLs = 4-7] Hypertrophy Minimal
- * Adrenal Medulla Hyperplasia Mild
- * Bone Marrow Hypercellularity Mild
- * Clitoral Gland Duct Dilation Moderate
- * Kidney Inflammation Chronic Active, Mild
- * Liver Nephropathy Chronicprogr, Minimal
- Angiectasis TGLs = 5-20] Angiectasis Minimal
- * Lung Alveolus Infiltration Cellular Hemorrhage Minimal
- [Hemorrhage TGLs = 7-10,21] Infiltration Cellular TGLs = 6-10] Infiltration Cellular Histiocyte, Mild
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Minimal
- * Mammary Gland Proliferation Plasma Cell, Mild
- Adenoma Fibroadenoma Hyperplasia Moderate
- [Adenoma TGLs = 2-20] [Fibroadenoma TGLs = 3-21]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1261

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1261

ORGAN AND ACCOUNTABLE SITE STATUS

[Hyperplasia TGLs = 1-9]

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Moderate
		Cyst	
	Rete Ovarii	Hyperplasia	Moderate

[Cyst TGLs = 8-16]

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Adenoma	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1262

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1262

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Parathyroid Gland
- * Stomach, Glandular
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- Skeletal Muscle
- * Trachea
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Skin
- Trigeminal Ganglion
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
- * Bone Marrow
 - Lymphoma Malignant
 - Hypercellularity
- * Brain
 - Compression
 - Lymphoma Malignant
- [Compression TGLs = 13-2]
- * Clitoral GI
 - Note: One of pair available for evaluation.
- * Eye
 - Lymphoma Malignant
- * Heart
 - Cardiomyopathy
- * Islets, Pancreatic
 - Adenoma
- * Kidney
 - Nephropathy
- * Liver
 - Lymphoma Malignant
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Lymphoma Malignant
- [Infiltration Cellular TGLs = 11-10]
- Lymph Node
 - Mediastinal
 - Pancreatic
 - Mediastinal
 - Erythrophagocytosis
 - Lymphoma Malignant
 - Lymphoma Malignant
- [Erythrophagocytosis TGLs = 9-21]
- [Lymphoma Malignant TGLs = 7-20]
- [Lymphoma Malignant TGLs = 8-21]
- * Lymph Node, Mandibular
 - Lymphoma Malignant
- * Lymph Node, Mesenteric
 - Lymphoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1262

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1262

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland	Duct	Dilation Hyperplasia	Minimal Moderate
[Dilation TGLs = 1-9]			
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Marked
* Ovary		Cyst Tubulostromal Carcinoma	
[Cyst TGLs = 2-16.1]			
* Pancreas		Lymphoma Malignant	
* Peripheral Nerve, Sciatic		Degeneration	Moderate
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 12-4]			
* Salivary Glands	Parotid GI Duct, Parotid GI	Atrophy Dilation	Moderate Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Lymphoma Malignant	
[Lymphoma Malignant TGLs = 4,5-12]			
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tissue NOS	Abdominal, Fat Fat	Lymphoma Malignant Necrosis	Moderate
[Necrosis TGLs = 6-20]			
* Uterus	Endometrium	Hyperplasia Inflammation Polyp Stromal	Cystic, Minimal Suppurative, Minimal
[Polyp Stromal TGLs = 3-16.1]			
Zymbal's Gland		Squamous Cell Papilloma	
[Squamous Cell Papilloma TGLs = 10-21]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1264

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1264

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 10-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
* Thyroid Gland	C Cell	Adenoma	
[Adenoma TGLs = 8-8]			

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1265

TRT#: 8

SEX: Female

DAY ON TEST: 624

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1265

ORGAN AND ACCOUNTABLE SITE STATUS

[Dilation TGLs = 1-16]

* Peripheral Nerve, Sciatic

Degeneration

Minimal

* Peripheral Nerve, Tibial

Degeneration

Minimal

* Pituitary Gland

Pars Distalis

Hyperplasia

Mild

* Spinal Cord, Cervical

Lymphoma Malignant

* Spinal Cord, Lumbar

Nerve

Degeneration

Mild

Degeneration

Minimal

* Spleen

Lymphoma Malignant

[Lymphoma Malignant TGLs = 2,3,6-12,20]

* Thymus

Lymphoma Malignant

PRIMARY CAUSE OF DEATH

- Spleen Lymphoma Malignant

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1266

TRT#: 8

SEX: Female

DAY ON TEST: 745

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1266

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- Skeletal Muscle
- * Stomach, Glandular
- * Aorta
- * Eye
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Trachea
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder

MISSING

- * Thymus

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Degeneration
 - Hypertrophy
 - Necrosis
 - Cystic, Marked
 - Mild
 - Minimal
 - [Degeneration TGLs = 8-7]
 - [Hypertrophy TGLs = 9-7]
- * Bone Marrow
 - Hypercellularity
 - Marked
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 - Moderate
 - Chronic Active, Minimal
 - [Dilation TGLs = 3-16]
- * Harderian Gland
 - Atrophy
 - Minimal
- * Heart
 - Cardiomyopathy
 - Mild
 - [Cardiomyopathy TGLs = 10-11]
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Eosinophilic Focus
 - Extramedullary Hematopoiesis
 - Minimal
 - Hepatocyte
 - Hypertrophy
 - Minimal
 - Inflammation
 - Acute, Minimal
 - Necrosis
 - Minimal
 - Hepatocyte
 - [Hypertrophy TGLs = 6-12]
 - [Inflammation TGLs = 7-12]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1266

TRT#: 8

SEX: Female

DAY ON TEST: 745

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1266

ORGAN AND ACCOUNTABLE SITE STATUS

	[Necrosis TGLs = 7-12]		
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	[Infiltration Cellular TGLs = 12-10]		
* Lymph Node, Mandibular		Proliferation	Plasma Cell, Minimal
* Mammary Gland	Duct	Dilation	Mild
		Fibroadenoma	Multiple
	[Fibroadenoma TGLs = 1,2-20,21,22RT]		
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Ovary		Atrophy	Marked
		Inflammation	Chronic Active, Marked
	[Inflammation TGLs = 4-16]		
* Pancreas	Acinus	Atrophy	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Intermed	Cyst	
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Marked
	[Extramedullary Hematopoiesis TGLs = 5-12]		
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus	Cervix	Malignant Mixed Mullerian Tumor	
	[Malignant Mixed Mullerian Tumor TGLs = 14-20]		

Animal Note: TGLs 11,13 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1267

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1267

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Uterus
- * Bone
- * Eye
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Ovary
- * Skeletal Muscle
- * Trachea
- * Brain
- * Heart
- * Intestine Small, Ileum
- * Pancreas
- * Spinal Cord, Cervical
- * Urinary Bladder

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Adrenal Medulla
 - Hyperplasia
- * Clitoral Gland
 - Duct
 - Dilation
- * Intestine Large, Rectum
 - [Dilation TGLs = 3,4-16]
 - Epithelium
 - Hyperplasia
 - Inflammation
 - Necrosis
- * Islets, Pancreatic
 - Hyperplasia
- * Kidney
 - Nephropathy
- * Liver
 - Basophilic Focus
 - Eosinophilic Focus
 - Hepatocellular Adenoma
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
 - [Hepatocellular Adenoma TGLs = 7-20]
 - [Mixed Cell Focus TGLs = 8-12]
- * Lung
 - Alveolus
 - Infiltration Cellular
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1267

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1267

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland		Adenocarcinoma	
		Fibroadenoma	Multiple
		Hyperplasia	Marked
	[Adenocarcinoma TGLs = 2-21]		
	[Fibroadenoma TGLs = 5-9,22]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Skin		Squamous Cell Carcinoma	
	[Squamous Cell Carcinoma TGLs = 1-23]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild

Animal Note: TGLs 6,9,10,11,12,13 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1268

TRT#: 8

SEX: Female

DAY ON TEST: 283

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1268

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|-----------------------------|--------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Harderian Gland | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Liver | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Nerve Trigeminal | * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Sciatic |
| * Peripheral Nerve, Tibial | * Pituitary Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Spinal Cord, Lumbar | * Spinal Cord, Thoracic |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|-----------------|--------------------------------|-------------------------------|-----------------------|
| * Bone Marrow | | Hypercellularity | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1 - 20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1270

TRT#: 8

SEX: Female

DAY ON TEST: 658

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1270

ORGAN AND ACCOUNTABLE SITE STATUS

	Bursa	Dilation	Moderate
	[Dilation TGLs = 1-16.1]		
* Peripheral Nerve, Sciatic		Degeneration	Minimal
Note: Longitudinal section available for evaluation.			
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 6-4]		
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Urinary Bladder		Infiltration Cellular	Histiocyte, Mild
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1271

TRT#: 8

SEX: Female

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1271

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal
		Polyp Stromal	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1272

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1272

ORGAN AND ACCOUNTABLE SITE STATUS

[Necrosis TGLs = 2-21]

* Uterus

Endometrium

Hyperplasia

Cystic, Moderate

Inflammation

Suppurative, Minimal

Epithelium

Metaplasia

Squamous, Moderate

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1273

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1273

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone
- * Eye
- * Intestine Small, Duodenum
- * Kidney
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea

MISSING

- * Adrenal Medulla

OBSERVATIONS

- * Adrenal Cortex
- * Clitoral Gland
- [Dilation TGLs = 1,5-16.1,20]
- [Inflammation TGLs = 1,4-16.1,20]
- * Harderian Gland
- * Heart
- * Liver
- [Cyst TGLs = 6-22]
- [Mixed Cell Focus TGLs = 7-12]
- * Lung
- * Lymph Node, Mandibular
- * Mammary Gland
- [Dilation TGLs = 3-9]
- [Fibroadenoma TGLs = 2-21]
- Vacuolation, Cytoplasmic
- Dilation
- Inflammation
- Atrophy
- Inflammation
- Cardiomyopathy
- Cyst
- Mixed Cell Focus
- Infiltration Cellular
- Proliferation
- Dilation
- Fibroadenoma
- Hyperplasia
- Minimal
- Marked
- Chronic Active, Marked
- Minimal
- Granulomatous, Minimal
- Minimal
- Histiocyte, Minimal
- Plasma Cell, Minimal
- Minimal
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1273

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1273

ORGAN AND ACCOUNTABLE SITE STATUS

* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Minimal
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Histiocytic Sarcoma	
	Cervix	Hyperplasia	Stromal, Mild
	Epithelium	Metaplasia	Squamous, Mild

[Hyperplasia TGLs = 9-23RT]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1274

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1274

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Nose
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Pancreas
- * Skin
- * Thyroid Gland
- * Uterus
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Hypercellularity
 - Inflammation
- * Bone Marrow
 - Cystic, Minimal
 - Mild
- * Clitoral Gland
 - Minimal
 - Moderate
 - Chronic Active, Mild
- Note: One of pair available for evaluation.
- * Harderian Gland
 - Atrophy
 - Mild
- * Liver
 - Eosinophilic Focus
 - Mixed Cell Focus
 - Infiltration Cellular
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 10-10]
 - Lymph Node
 - Iliac
 - Renal
 - Iliac
 - [Erythrophagocytosis TGLs = 6-24]
 - [Erythrophagocytosis TGLs = 8,9-25]
 - [Hyperplasia TGLs = 5-24]
- * Mammary Gland
 - Fibroadenoma
 - [Fibroadenoma TGLs = 1,2,11,12-20,21,22,23]
- * Nerve Trigeminal
 - Degeneration
- * Ovary
 - Cyst

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1274

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1274

ORGAN AND ACCOUNTABLE SITE STATUS

	Bursa	Dilation	Mild
	[Cyst TGLs = 4-16]		
	[Dilation TGLs = 4-16]		
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Minimal
		Cyst	

Animal Note: TGL 3 = NST (No Section Taken)

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Animal Note: TGL 13 = NCL

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1275

TRT#: 8

SEX: Female

DAY ON TEST: 645

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1275

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Urinary Bladder
- * Aorta
- * Harderian Gland
- * Intestine Small, Ileum
- * Pituitary Gland
- * Uterus
- * Bone
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Skin
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Edema
 - Necrosis
- * Clitoral Gland
 - Duct
- * Heart
 - Ventricle Rgt
 - [Cardiomyopathy TGLs = 4-11]
- * Kidney
 - Nephropathy
- * Liver
 - Hepatocyte
 - [Lymphoma Malignant TGLs = 5-12]
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 3-10]
- Lymph Node
 - Mediastinal
 - [Lymphoma Malignant TGLs = 11-6]
- * Lymph Node, Mandibular
 - [Congestion TGLs = 2-9]
 - [Lymphoma Malignant TGLs = 1-9]
- * Lymph Node, Mesenteric
 - [Lymphoma Malignant TGLs = 1-9]

- Mild
- Mild
- Marked
- Minimal
- Minimal
- Moderate
- Mild
- Chronicprogr, Mild
- Minimal
- Histiocyte, Minimal
- Mild
- Mild
- Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1275

TRT#: 8

SEX: Female

DAY ON TEST: 645

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1275

ORGAN AND ACCOUNTABLE SITE STATUS

[Lymphoma Malignant TGLs = 9-15]			
* Mammary Gland	Duct	Dilation Fibroadenoma	Minimal
[Fibroadenoma TGLs = 10-20]			
Mesentery		Lymphoma Malignant	
[Lymphoma Malignant TGLs = 7-12]			
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Mild
* Pancreas		Lymphoma Malignant Lymphoma Malignant	
[Lymphoma Malignant TGLs = 12-6]			
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Salivary Glands		Lymphoma Malignant	
Skeletal Muscle		Mineral	Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar		Degeneration	Minimal
* Spinal Cord, Thoracic	Nerve	Degeneration	Minimal
* Spleen		Degeneration Extramedullary Hematopoiesis Lymphoma Malignant	Mild Mild
[Lymphoma Malignant TGLs = 6-12]			
* Stomach, Forestomach	Epithelium	Hyperplasia Lymphoma Malignant Ulcer	Mild Mild
* Stomach, Glandular		Lymphoma Malignant	
* Thymus		Lymphoma Malignant	
* Thyroid Gland		Lymphoma Malignant	
* Trachea		Lymphoma Malignant	

PRIMARY CAUSE OF DEATH - Spleen Lymphoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1275

TRT#: 8

SEX: Female

DAY ON TEST: 645

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1275

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: TGL 8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1276

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1276

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- Skeletal Muscle
- * Trachea
- * Aorta
- * Clitoral Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Skin
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Stomach, Forestomach
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Mammary Gland
- * Salivary Glands
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Degeneration
- * Eye
 - Retina
 - Atrophy
 - Inflammation
- * Harderian Gland
 - Atrophy
 - Inflammation
- * Heart
 - Cardiomyopathy
- * Kidney
 - Nephropathy
- * Liver
 - Bile Duct
 - Hyperplasia
 - Mixed Cell Focus
- * Lung
 - [Mixed Cell Focus TGLs = 1-12]
 - Alveolus
 - Infiltration Cellular
 - [Infiltration Cellular TGLs = 2-10]
 - Erythrophagocytosis
- * Lymph Node, Mandibular
 - Degeneration
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Spinal Cord, Cervical
 - Degeneration
- * Spinal Cord, Lumbar
 - Nerve
 - Degeneration
- * Spinal Cord, Thoracic
 - Degeneration
- * Spleen
 - Extramedullary Hematopoiesis

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1276

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1276

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus		Pigment	Minimal
		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Adenoma	
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1277

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1277

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Liver | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

MISSING

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| | | Hypertrophy | Mild |
| * Clitoral Gland | | Inflammation | Chronic Active, Mild |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Epithlm Alvlus | Hyperplasia | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 2-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | |
| | | Hyperplasia | Minimal |
| | [Fibroadenoma TGLs = 1-20] | | |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Atrophy | Marked |
| | Rete Ovarii | Hyperplasia | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1277

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1277

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 3-4]

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	Follicle	Cyst	
	C Cell	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal
		Pigment	Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1278

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1278

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular
- * Uterus
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Skin
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lung
- * Pituitary Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 3-7]
 - * Clitoral Gland
 - [Dilation TGLs = 2-16]
 - * Harderian Gland
 - * Islets, Pancreatic
 - * Kidney
 - * Liver
 - [Angiectasis TGLs = 9-22]
 - [Mixed Cell Focus TGLs = 4,7,8-12,20,21,22]
 - * Lymph Node, Mandibular
 - * Mammary Gland
 - [Fibroadenoma TGLs = 1-20]
 - * Nerve Trigeminal
 - * Nose
- | | | | |
|--|---------------|--|---|
| | Duct | Degeneration
Hypertrophy | Cystic, Moderate
Minimal |
| | | Dilation
Inflammation | Moderate
Acute, Moderate |
| | | Atrophy
Hyperplasia
Nephropathy
Angiectasis
Clear Cell Focus
Mixed Cell Focus | Minimal
Marked
Chronicprogr, Minimal
Minimal |
| | | Hyperplasia
Proliferation
Fibroadenoma
Hyperplasia | Lymphocyte, Minimal
Plasma Cell, Minimal

Mild |
| | Olfactory Epi | Degeneration
Accumulation, Hyaline Droplet | Mild
Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1278

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1278

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Cyst	
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Adenoma	
[Adenoma TGLs = 5-8]			

Animal Note: TGL 6 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1280

TRT#: 8

SEX: Female

DAY ON TEST: 299

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1280

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Mammary Gland
- * Parathyroid Gland
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thymus
- * Urinary Bladder
- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Peripheral Nerve, Sciatic
- Skeletal Muscle
- * Spinal Cord, Thoracic
- * Thyroid Gland
- * Uterus
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Ovary
- * Peripheral Nerve, Tibial
- * Skin
- * Stomach, Forestomach
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Pancreas
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Intestine Small, Ileum

OBSERVATIONS

- * Bone Marrow
 - * Clitoral Gland
 - * Kidney
 - * Liver
 - [Lymphoma Malignant TGLs = 2,4 - 12]
 - * Lung
 - Lymph Node Inguinal
 - Note: In lymph node adjacent to clitoral gland.
 - * Lymph Node, Mesenteric
 - * Nose
 - Olfactory Epi
 - Respirat Epith
 - * Spleen
 - [Lymphoma Malignant TGLs = 3 - 12]
- Myelofibrosis
Inflammation
Lymphoma Malignant
Nephropathy
Lymphoma Malignant
- Marked
Chronic Active, Minimal

Chronicprogr, Minimal
- Lymphoma Malignant
Lymphoma Malignant
- Lymphoma Malignant
Accumulation, Hyaline Droplet
Accumulation, Hyaline Droplet
Lymphoma Malignant
- Mild
Minimal

PRIMARY CAUSE OF DEATH - Spleen Lymphoma Malignant

Animal Note: TGL 1 = NST (No Section Taken)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1281

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1281

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Brain	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Kidney	* Lymph Node, Mesenteric
* Pancreas	* Parathyroid Gland	* Pituitary Gland	Skeletal Muscle
* Skin	* Spinal Cord, Cervical	* Stomach, Forestomach	* Stomach, Glandular
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Degeneration	Cystic, Mild
* Adren Medulla			
Note: One of pair available for evaluation.			
* Clitoral Gland	Duct	Dilation	Minimal
		Inflammation	Chronic Active, Minimal
* Heart		Cardiomyopathy	Minimal
* Islets, Pancreatic		Hyperplasia	Minimal
* Liver		Eosinophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
[Infiltration Cellular TGLs = 5-10]			
* Lymph Node, Mandibular	Lymph Sinus	Ectasia	Moderate
[Ectasia TGLs = 3-9]			
* Mammary Gland		Fibroadenoma	Multiple
Note: Multiple distinct fibroadenomas included in sections for TGLs 1 and 2.			
[Fibroadenoma TGLs = 1,2-21,20]			
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Marked
		Cyst	
	Bursa	Dilation	Moderate
[Dilation TGLs = 4-16]			
* Peripheral Nerve, Sciatic		Degeneration	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1281

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1281

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Salivary Glands	Sublingual GI	Atrophy	Mild
* Spinal Cord, Lumbar		Cyst	
	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
		Inflammation	Acute, Mild
	Epithelium	Metaplasia	Squamous, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1282

TRT#: 8

SEX: Female

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1282

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Pituitary Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
- * Clitoral Gland
- [Dilation TGLs = 4-16]
- * Kidney
- * Liver
- * Lung
- [Infiltration Cellular TGLs = 5-10]
- * Mammary Gland
- [Fibroadenoma TGLs = 1,2-20,21]
- * Nerve Trigeminal
- * Nose
- * Ovary
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Spinal Cord, Thoracic
- * Spleen
- Duct
- Bile Duct
- Alveolus
- Duct
- Olfactory Epi
- Parotid GI
- Nerve
- Hypertrophy
- Dilation
- Inflammation
- Nephropathy
- Cyst
- Eosinophilic Focus
- Infiltration Cellular
- Dilation
- Fibroadenoma
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Degeneration
- Degeneration
- Vacuolation, Cytoplasmic
- Degeneration
- Degeneration
- Extramedullary Hematopoiesis
- Mild
- Moderate
- Chronic Active, Minimal
- Chronicprogr, Minimal
- Histiocyte, Mild
- Mild
- Multiple
- Mild
- Minimal
- Marked
- Moderate
- Moderate
- Minimal
- Mild
- Mild
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1282

TRT#: 8

SEX: Female

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1282

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus		Pigment	Minimal
* Thyroid Gland		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate

Animal Note: TGL 3 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1283

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1283

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Thyroid Gland
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Trachea
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hyperplasia
 - * Adrenal Medulla
 - Bilateral
 - [Pheochromocytoma Benign TGLs = 1-7]
 - Pheochromocytoma Benign
 - * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 - * Eye
 - Retina
 - Atrophy
 - * Harderian Gland
 - Inflammation
 - * Kidney
 - Inflammation
 - Mineral
 - * Liver
 - Basophilic Focus
 - Clear Cell Focus
 - Eosinophilic Focus
 - * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 3-10]
 - Infiltration Cellular
 - * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - * Mammary Gland
 - Duct
 - Dilation
 - * Nerve Trigeminal
 - Degeneration
 - * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - * Ovary
 - Atrophy
 - * Peripheral Nerve, Sciatic
 - Degeneration
- Mild
- Marked
- Chronic Active, Minimal
- Minimal
- Chronic, Minimal
- Granulomatous, Minimal
- Minimal
- Histiocyte, Mild
- Lymphocyte, Minimal
- Plasma Cell, Minimal
- Minimal
- Moderate
- Moderate
- Marked
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1283

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1283

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 4-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
* Uterus		Cyst	
	Epithelium	Metaplasia	Squamous, Minimal

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1284

TRT#: 8

SEX: Female

DAY ON TEST: 370

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1284

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Ovary
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Glandular
- Trigeminal Ganglion
- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Pancreas
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Thyroid Gland
- * Urinary Bladder
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- Skeletal Muscle
- * Spinal Cord, Thoracic
- Tissue NOS
- * Uterus
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Peripheral Nerve, Sciatic
- * Skin
- * Stomach, Forestomach
- * Trachea

INSUFFICIENT TISSUE

- * Thymus

OBSERVATIONS

- * Bone Marrow
 - * Kidney
 - * Liver
 - * Lung
 - [Infiltration Cellular TGLs = 5-10]
 - * Mammary Gland
 - [Fibroadenoma TGLs = 1-20]
 - * Nose
 - * Peripheral Nerve, Tibial
 - * Spleen
 - [Extramedullary Hematopoiesis TGLs = 2-12]
 - Tissue NOS
 - Note: Abdominal adipose "mass"
- Hypercellularity
- Nephropathy
- Extramedullary Hematopoiesis
- Infiltration Cellular
- Mixed Cell Focus
- Infiltration Cellular
- Fibroadenoma
- Accumulation, Hyaline Droplet
- Degeneration
- Extramedullary Hematopoiesis
- Marked
- Chronicprogr, Mild
- Mild
- Mixed Cell, Minimal
- Histiocyte, Mild
- Mild
- Minimal
- Marked

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL3 = NCL (No Corresponding Lesion); submitted tissue consisted of normal lymph node.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1284

TRT#: 8

SEX: Female

DAY ON TEST: 370

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1284

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: TGL 4 = NCL (No Corresponding Lesion); insufficient thymus available for evaluation.

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1286

TRT#: 8

SEX: Female

DAY ON TEST: 565

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1286

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Urinary Bladder
- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Islets, Pancreatic
- * Skeletal Muscle
- * Stomach, Forestomach
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Skin
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Pancreas
- * Spinal Cord, Cervical
- * Trachea

MISSING

- * Clitoral Gland
- * Parathyroid Gland
- * Thymus

AUTO PRECLUDES DIAG.

- * Intestine Small, Jejunum
- * Thyroid Gland

OBSERVATIONS

- * Bone Marrow Hypercellularity Moderate
- * Brain
- Note: Olfactory bulbs not available for evaluation.
- * Heart Cardiomyopathy Minimal
- * Kidney Nephropathy Chronicprogr, Minimal
- * Liver Basophilic Focus
- * Lung Infiltration Cellular Histiocyte, Moderate
- [Infiltration Cellular TGLs = 6-10]
- * Lymph Node, Mandibular Proliferation Plasma Cell, Minimal
- * Mammary Gland Dilation Minimal
- [Dilation TGLs = 1-9]
- * Nerve Trigeminal Degeneration Moderate
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Minimal
- * Ovary Atrophy Marked
- Periovarn Tiss Cyst Inflammation Chronic Active, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1286

TRT#: 8

SEX: Female

DAY ON TEST: 565

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1286

ORGAN AND ACCOUNTABLE SITE STATUS

[Cyst TGLs = 3-16]

[Inflammation TGLs = 2-20]

* Peripheral Nerve, Sciatic

Degeneration

Minimal

* Peripheral Nerve, Tibial

Degeneration

Minimal

* Pituitary Gland

Pars Distalis

Adenoma

[Adenoma TGLs = 7-4]

* Spinal Cord, Lumbar

Nerve

Degeneration

Mild

* Spleen

Degeneration

Minimal

Extramedullary Hematopoiesis

Mild

Pigment

Mild

Trigeminal Ganglion

Degeneration

Minimal

* Uterus

Inflammation

Suppurative, Mild

Epithelium

Metaplasia

Squamous, Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGLs 4,5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1287

TRT#: 8

SEX: Female

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1287

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- Skeletal Muscle
- * Stomach, Glandular
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Liver
- * Skin
- * Trachea
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex [Hypertrophy TGLs = 8-7] Hypertrophy Mild
- * Adrenal Medulla Hyperplasia Mild
- * Bone Marrow Hypercellularity Moderate
- * Brain Pineal Gland Mineral Minimal
- * Harderian Gland Atrophy Minimal
- * Lung Alveolus Inflammation Granulomatous, Minimal
- [Infiltration Cellular TGLs = 11-10] Infiltration Cellular Histocyte, Minimal
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Mild
- Proliferation Plasma Cell, Mild
- * Lymph Node, Mesenteric Erythrophagocytosis Mild
- * Mammary Gland Fibroadenoma Multiple
- [Fibroadenoma TGLs = 1,2-9,20]
- [Galactocele TGLs = 3-9] Galactocele
- Mesentery Necrosis Mild
- [Necrosis TGLs = 4-21]
- * Nerve Trigeminal Degeneration Moderate
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Minimal
- * Ovary Cyst

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1287

TRT#: 8

SEX: Female

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1287

ORGAN AND ACCOUNTABLE SITE STATUS

	Rete Ovarii	Hyperplasia	Mild
* Pancreas	Periductal	Cholangiofibrosis	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
Note: Pars distalis available for evaluation.			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
* Thymus		Atrophy	Minimal
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Adenoma	
		Cyst	

[Adenoma TGLs = 5-16]

Animal Note: TGLs 6,7,10 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1288

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1288

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Stomach, Forestomach
- * Uterus
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Trachea
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Nose
- * Spinal Cord, Cervical
- * Urinary Bladder

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Adenoma
 - Degeneration
 - Hyperplasia
 - Cystic, Mild
 - Moderate
- [Degeneration TGLs = 6-7]
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity
 - Marked
- * Clitoral Gland
 - Duct
 - Dilation
 - Marked
- [Dilation TGLs = 3-16]
- * Heart
 - Cardiomyopathy
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Eosinophilic Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Histiocyte, Minimal
- [Infiltration Cellular TGLs = 11-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Lymphocyte, Mild
 - Plasma Cell, Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Minimal
 - Hyperplasia
 - Marked
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Ovary
 - Cyst

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1288

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1288

ORGAN AND ACCOUNTABLE SITE STATUS

[Cyst TGLs = 4-16]

* Parathyroid Gland		Fibrosis	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Skin	Subcut Tiss	Fibroma	
	[Fibroma TGLs = 2-20]		
* Spinal Cord, Lumbar		Degeneration	Minimal
	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Marked
	[Extramedullary Hematopoiesis TGLs = 5-12]		
* Thymus		Atrophy	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

Animal Note: TGL 1 = NST (No Section Taken)

Animal Note: TGLs 7,8,9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1290

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1290

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skin
- * Thyroid Gland
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Spinal Cord, Cervical
- * Trachea
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pituitary Gland
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 5-7]
 - * Adrenal Medulla
 - * Bone Marrow
 - * Clitoral Gland
 - * Heart
 - Ventricl Rgt
 - [Cardiomyopathy TGLs = 10-21,11,11.1]
 - * Kidney
 - * Liver
 - Hepatocyte
 - Hepatocyte
 - [Eosinophilic Focus TGLs = 8-12]
 - [Necrosis TGLs = 7-12]
 - * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 9-10]
 - * Lymph Node, Mandibular
 - * Mammary Gland
 - Duct
 - [Fibroadenoma TGLs = 1,2,3-20,21,22]
 - * Nerve Trigeminal
- | | |
|--|---|
| <ul style="list-style-type: none"> Degeneration Vacuolation, Cytoplasmic Hyperplasia Hypercellularity Inflammation Cardiomyopathy Nephropathy Eosinophilic Focus Hypertrophy Necrosis Infiltration Cellular Hyperplasia Proliferation Dilation Fibroadenoma Degeneration | <ul style="list-style-type: none"> Cystic, Mild Minimal Minimal Minimal Chronic Active, Minimal Minimal Chronicprogr, Minimal Minimal Minimal Histiocyte, Mild Lymphocyte, Minimal Plasma Cell, Minimal Mild Multiple Mild |
|--|---|

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1290

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1290

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Marked
	Rete Ovarii	Hyperplasia	Marked
* Parathyroid Gland		Fibrosis	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
Note: Longitudinal section available for evaluation.			
* Peripheral Nerve, Tibial		Degeneration	Mild
* Salivary Glands	Parotid Gl	Atrophy	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
* Thymus		Atrophy	Mild
		Cyst	
Tissue NOS	Fat	Necrosis	Mild
[Necrosis TGLs = 4-20]			
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal

Animal Note: TGL 6 = NST (No Section Taken)

Animal Note: TGL 12 = NCL (No Corresponding Lesion)

Animal Note: TGL 11 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1291

TRT#: 8

SEX: Female

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1291

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Skin
- * Thyroid Gland
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Adenoma
 - Degeneration
 - Hypertrophy
 - Hyperplasia
 - Hypercellularity
 - Dilation
 - Cardiomyopathy
 - Hyperplasia
 - Nephropathy
 - Eosinophilic Focus
 - Infiltration Cellular
- * Adrenal Medulla
 - Cystic, Minimal
 - Mild
 - Mild
 - Minimal
 - Moderate
 - Minimal
 - Mild
 - Chronicprogr, Minimal
- * Bone Marrow
 - Duct
- * Clitoral Gland
 - Ventricl Rgt
- * Heart
 - Alveolus
- * Islets, Pancreatic
 - [Infiltration Cellular TGLs = 3-10]
- * Kidney
 - Hyperplasia
 - Proliferation
 - Dilation
 - Fibroadenoma
- * Liver
 - Hyperplasia
 - Proliferation
 - Dilation
 - Fibroadenoma
- * Lung
 - [Fibroadenoma TGLs = 1,2,4-20,21,22]
- * Lymph Node, Mandibular
 - Degeneration
 - Accumulation, Hyaline Droplet
 - Atrophy
 - Cyst
- * Mammary Gland
 - Duct
- * Nerve Trigeminal
 - Degeneration
 - Accumulation, Hyaline Droplet
 - Atrophy
 - Cyst
- * Nose
 - Olfactory Epi
- * Ovary
 - [Cyst TGLs = 6-16]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1291

TRT#: 8

SEX: Female

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1291

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus		Cyst	
		Inflammation	Suppurative, Mild

[Cyst TGLs = 5,7-16]

Animal Note: TGL 8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1292

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1292

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Uterus
- * Aorta
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Ovary
- * Skin
- * Trachea
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Pituitary Gland
- * Stomach, Forestomach
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Cystic, Mild
 - Mild
 - Minimal
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral GI
 - Note: One of pair available for evaluation.
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
 - Cardiomyopathy
 - Hyperplasia
 - Nephropathy
 - Basophilic Focus
 - Mixed Cell Focus
 - Vacuolation, Cytoplasmic
 - Minimal
- * Islets, Pancreatic
- * Kidney
- * Liver
 - Hepatocyte
 - [Mixed Cell Focus TGLs = 7-12]
 - [Vacuolation, Cytoplasmic TGLs = 6-12]
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 3-10]
 - Infiltration Cellular
 - Histiocyte, Minimal
- Lymph Node
 - Mediastinal
 - [Erythrophagocytosis TGLs = 5-20]
 - Erythrophagocytosis
 - Mild
- * Mammary Gland
 - Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1292

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1292

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 1-21]		Hyperplasia	Mild
* Nerve Trigeminal		Degeneration	Moderate
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Pancreas	Periductal	Cholangiofibrosis	Mild
	Acinus	Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
Skeletal Muscle		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Mild
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Tissue NOS	Fat	Necrosis	Moderate
[Necrosis TGLs = 4-20]			

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1294

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1294

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Thyroid Gland
- * Aorta
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Skin
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Kidney
- * Parathyroid Gland
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone Marrow
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Liver
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - [Degeneration TGLs = 4-7]
- * Clitoral Gland
 - [Dilation TGLs = 1-16]
- * Eye
- * Heart
- * Lung
 - [Infiltration Cellular TGLs = 2-10]
- * Lymph Node, Mandibular
- * Mammary Gland
- * Nerve Trigeminal
- * Nose
- * Ovary
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Pituitary Gland
- Degeneration
- Hypertrophy
- Dilation
- Inflammation
- Atrophy
- Cardiomyopathy
- Infiltration Cellular
- Inflammation
- Hyperplasia
- Proliferation
- Dilation
- Degeneration
- Accumulation, Hyaline Droplet
- Atrophy
- Cyst
- Inflammation
- Degeneration
- Degeneration
- Adenoma
- Cystic, Minimal
- Minimal
- Mild
- Chronic Active, Mild
- Minimal
- Minimal
- Histiocyte, Mild
- Chronic Active, Minimal
- Lymphocyte, Mild
- Plasma Cell, Mild
- Minimal
- Mild
- Mild
- Marked
- Chronic, Mild
- Minimal
- Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1294

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1294

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 3-4]

* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thymus		Atrophy	Minimal
		Cyst	
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal
		Polyp Stromal	Multiple

Animal Note: TGL 5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1295

TRT#: 8

SEX: Female

DAY ON TEST: 720

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1295

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Cystic, Moderate
 - Minimal
 - Mild
 - [Degeneration TGLs = 3-7]
- * Adrenal Medulla
 - Hyperplasia
 - Minimal
- * Bone Marrow
 - Hypercellularity
 - Marked
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Duct
 - Dilation
 - Marked
 - [Dilation TGLs = 11,12-16]
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Extramedullary Hematopoiesis
 - Minimal
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Inflammation
 - Histiocyte, Mild
 - Chronic Active, Minimal
 - [Infiltration Cellular TGLs = 7-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Lymphocyte, Mild
 - Plasma Cell, Mild
- * Mammary Gland
 - Fibroadenoma
 - Multiple
 - [Fibroadenoma TGLs = 5,9-20,21]
- * Nerve Trigeminal
 - Degeneration
 - Mild
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Minimal
- * Ovary
 - Atrophy
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1295

TRT#: 8

SEX: Female

DAY ON TEST: 720

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1295

ORGAN AND ACCOUNTABLE SITE STATUS

Cyst

[Cyst TGLs = 4-16]

* Peripheral Nerve, Sciatic

Degeneration

Mild

* Peripheral Nerve, Tibial

Degeneration

Mild

* Pituitary Gland

Pars Distalis

Hyperplasia

Minimal

* Spinal Cord, Lumbar

Nerve

Degeneration

Minimal

* Spinal Cord, Thoracic

Degeneration

Minimal

* Spleen

Extramedullary Hematopoiesis

Marked

[Extramedullary Hematopoiesis TGLs = 10-12]

* Thymus

Atrophy

Mild

Cyst

Hyperplasia

Epithelial, Mild

* Uterus

Endometrium

Hyperplasia

Cystic, Mild

Polyp Stromal

Thrombus

Moderate

[Thrombus TGLs = 2-16]

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 1,6,8 = NCL (No Corresponding Lesion)

Animal Note: TGL 13 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1296

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1296

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Aorta | * Bone | * Bone Marrow |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric | * Pancreas |
| * Salivary Glands | Skeletal Muscle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|-----------------------|
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Brain | | Edema | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| | Ventricl Rgt | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Hyperplasia | Moderate |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 3-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2-20,21] | Hyperplasia | Atypical, Mild |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Atrophy | Marked |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1296

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1296

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 4-4]

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Moderate
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Hyperplasia	Stromal, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1297

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1297

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 7,8-4]			
* Salivary Glands	Parotid GI	Atrophy	Mild
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Pigment	Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Basal Cell, Minimal
* Thymus		Atrophy	Minimal
		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Mild

Animal Note: TGL 1 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1298

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1298

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Moderate
* Thymus		Atrophy	Minimal
		Cyst	
		Ectopic Thyroid	
* Thyroid Gland	C Cell	Hyperplasia	Epithelial, Minimal
		Hyperplasia	Minimal
* Uterus		Adenocarcinoma	
	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1299

TRT#: 8

SEX: Female

DAY ON TEST: 594

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1299

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Parathyroid Gland	* Salivary Glands	Skeletal Muscle
* Skin	* Spinal Cord, Cervical	* Spinal Cord, Thoracic	* Stomach, Glandular
* Thymus	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Mild
* Brain		Compression	Marked
	[Compression TGLs = 2-1,2]		
* Kidney		Nephropathy	Chronicprogr, Minimal
* Liver	Hepatocyte	Necrosis	Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	[Infiltration Cellular TGLs = 1-10]		
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Moderate
* Mammary Gland	Duct	Dilation	Mild
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Moderate
* Pancreas	Acinus	Atrophy	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 3-4]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Pigment	Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1299

TRT#: 8

SEX: Female

DAY ON TEST: 594

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1299

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Polyp Stromal

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1300

TRT#: 8

SEX: Female

DAY ON TEST: 600

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1300

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Aorta
- * Bone
- * Bone Marrow
- * Brain
- * Esophagus
- * Harderian Gland
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Liver
- * Nerve Trigeminal
- * Parathyroid Gland
- * Peripheral Nerve, Sciatic
- * Peripheral Nerve, Tibial
- * Salivary Glands
- Skeletal Muscle
- * Skin
- * Spinal Cord, Cervical
- * Stomach, Forestomach
- Trigeminal Ganglion

AUTO PRECLUDES DIAG.

- * Eye
- * Intestine Large, Cecum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Pancreas
- * Thyroid Gland
- * Trachea
- * Urinary Bladder

OBSERVATIONS

- * Clitoral Gland
- Inflammation
- Chronic Active, Mild
- * Heart
- Ventricl Rgt
- Cardiomyopathy
- Mild
- [Cardiomyopathy TGLs = 6-11]
- * Kidney
- Nephropathy
- Chronicprogr, Minimal
- * Lung
- Congestion
- Mild
- Alveolus
- Infiltration Cellular
- Histiocyte, Moderate
- [Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular
- Hyperplasia
- Lymphocyte, Minimal
- Proliferation
- Plasma Cell, Mild
- [Proliferation TGLs = 1-9]
- * Lymph Node, Mesenteric
- Pigment
- Minimal
- * Mammary Gland
- Duct
- Dilation
- Minimal
- Fibroadenoma
- [Fibroadenoma TGLs = 5-20]
- * Nose
- Olfactory Epi
- Accumulation, Hyaline Droplet
- Moderate
- * Ovary
- Atrophy
- Moderate
- Cyst
- * Pituitary Gland
- Pars Distalis
- Adenoma
- [Adenoma TGLs = 3-4]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1300

TRT#: 8

SEX: Female

DAY ON TEST: 600

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1300

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Moderate
* Thymus		Hemorrhage	Minimal
[Hemorrhage TGLs = 7-6]			
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1301

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1301

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Liver
- * Parathyroid Gland
- * Stomach, Glandular
- * Urinary Bladder
- * Bone Marrow
- * Harderian Gland
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Salivary Glands
- * Thyroid Gland
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - [Hypertrophy TGLs = 3-7]
- * Adrenal Medulla
 - Hyperplasia
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
- * Heart
 - Ventricl Rgt
 - Cardiomyopathy
- * Islets, Pancreatic
 - Carcinoma
 - [Carcinoma TGLs = 4-6]
- * Kidney
 - Nephropathy
- * Lung
 - Alveolus
 - Infiltration Cellular
 - [Infiltration Cellular TGLs = 5-10]
- * Mammary Gland
 - Duct
 - Dilation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Adenoma
 - [Adenoma TGLs = 6-4]
- * Skin
 - Subcut Tiss
 - Fibroma
 - [Fibroma TGLs = 1-20]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1301

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1301

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Moderate
* Thymus		Atrophy	Minimal
* Uterus		Inflammation	Suppurative, Minimal
	Epithelium	Metaplasia	Squamous, Marked

Note: Hemorrhagic exudate.

[Inflammation TGLs = 2-16]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1303

TRT#: 8

SEX: Female

DAY ON TEST: 624

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1303

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nerve Trigeminal	* Pancreas
* Salivary Glands	Skeletal Muscle	* Skin	* Spinal Cord, Cervical
* Spinal Cord, Thoracic	* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland
* Trachea	Trigeminal Ganglion	* Urinary Bladder	

AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Adrenal Cortex		Degeneration	Cystic, Minimal
* Clitoral GI			
Note: One of pair available for evaluation.			
* Heart		Cardiomyopathy	Minimal
	Ventricle Rgt	Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronicprogr, Mild
* Liver		Eosinophilic Focus	
		Mixed Cell Focus	
* Lung		Congestion	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
[Congestion TGLs = 2-10]			
[Infiltration Cellular TGLs = 1-10]			
* Lymph Node, Mandibular		Hyperplasia	Lymphocyte, Minimal
		Proliferation	Plasma Cell, Minimal
* Mammary Gland	Duct	Dilation	Minimal
		Fibroadenoma	
		Galactocele	
		Hyperplasia	Atypical, Minimal
Note: Large galactocele ruptured and inflamed.			
[Fibroadenoma TGLs = 4,5-20,21]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1303

TRT#: 8

SEX: Female

DAY ON TEST: 624

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1303

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Mild
* Parathyroid Gland		Fibrosis	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spleen		Extramedullary Hematopoiesis	Minimal
* Thymus		Hemorrhage	Mild
[Hemorrhage TGLs = 3-6]			
* Uterus	Epithelium	Metaplasia	Squamous, Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1304

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1304

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Pancreas
- * Spinal Cord, Cervical
- Trigeminal Ganglion
- * Bone
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Stomach, Forestomach
- * Urinary Bladder
- * Bone Marrow
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- Skeletal Muscle
- * Stomach, Glandular
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Nerve Trigeminal
- * Skin
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hypertrophy
 - Vacuolation, Cytoplasmic
 - Cystic, Mild
 - Mild
 - Minimal
- [Degeneration TGLs = 6-7]
- * Adrenal Medulla
 - Hyperplasia
 - Mild
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Islets, Pancreatic
 - Hyperplasia
 - Mild
- * Kidney
 - Nephropathy
 - Chronicprogr, Minimal
- * Liver
 - Angiectasis
 - Mixed Cell Focus
 - Moderate
- [Angiectasis TGLs = 5-20]
- * Lung
 - Alveolus
 - Carcinoma
 - Infiltration Cellular
 - Metastatic (Thyroid Gland)
 - Histiocyte, Mild
 - [Infiltration Cellular TGLs = 8-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Lymphocyte, Minimal
 - Plasma Cell, Mild
- * Lymph Node, Mesenteric
 - Erythrophagocytosis
 - Minimal
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Galactocele
 - Hyperplasia
 - Minimal
 - Multiple
 - Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1304

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1304

ORGAN AND ACCOUNTABLE SITE STATUS

	[Fibroadenoma TGLs = 1-9,20]			
	[Galactocele TGLs = 2-21]			
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate	
* Ovary	Bursa	Dilation	Marked	
	[Dilation TGLs = 3,4-16]			
* Peripheral Nerve, Sciatic		Degeneration	Mild	
* Peripheral Nerve, Tibial		Degeneration	Mild	
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal	
* Salivary Glands	Sublingul GI	Atrophy	Mild	
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild	
* Spinal Cord, Thoracic		Degeneration	Moderate	
* Spleen		Extramedullary Hematopoiesis	Minimal	
		Pigment	Mild	
* Thymus		Atrophy	Minimal	
* Thyroid Gland	C Cell	Carcinoma		
	[Carcinoma TGLs = 7-8]			
* Uterus	Epithelium	Metaplasia	Squamous, Minimal	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1305

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1305

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 6-4]

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Moderate
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal

Animal Note: TGLs 5,7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1306

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1306

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland	C Cell	Pigment	Minimal
* Uterus		Hyperplasia	Moderate
	Endometrium	Adenocarcinoma	
		Hyperplasia	Cystic, Mild

[Adenocarcinoma TGLs = 2-16]

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1307

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1307

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

* Thyroid Gland

* Uterus

C Cell

Endometrium

Epithelium

Cyst

Hyperplasia

Hyperplasia

Metaplasia

Mild

Cystic, Minimal

Squamous, Mild

Animal Note: TGL 4 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1308

TRT#: 8

SEX: Female

DAY ON TEST: 641

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1308

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Parathyroid Gland
- * Spinal Cord, Lumbar
- Trigeminal Ganglion
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Peripheral Nerve, Tibial
- * Stomach, Forestomach
- * Bone
- * Harderian Gland
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Glandular
- * Brain
- * Heart
- * Nerve Trigeminal
- Skeletal Muscle
- * Thyroid Gland

MISSING

- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Large, Cecum
- * Islets, Pancreatic
- * Intestine Small, Duodenum
- * Pancreas
- * Intestine Small, Ileum
- * Trachea
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Brain
- Note: Olfactory bulbs not available for evaluation.
- * Clitoral Gland
- * Kidney
- * Liver
- [Cyst TGLs = 4,5,6-12,20]
- * Lung
- [Infiltration Cellular TGLs = 2-10]
- * Lymph Node, Mandibular
- * Mammary Gland
- [Fibroadenoma TGLs = 1,3-20,21]
- * Nose
- Hypertrophy
- Hypercellularity
- Dilation
- Nephropathy
- Cyst
- Hyperplasia
- Necrosis
- Infiltration Cellular
- Hyperplasia
- Fibroadenoma
- Accumulation, Hyaline Droplet
- Accumulation, Hyaline Droplet
- Minimal
- Moderate
- Mild
- Chronicprogr, Minimal
- Minimal
- Moderate
- Histiocyte, Minimal
- Lymphocyte, Minimal
- Multiple
- Minimal
- Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1308

TRT#: 8

SEX: Female

DAY ON TEST: 641

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1308

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Skin	Subcut Tiss	Edema	Minimal
	Subcut Tiss	Inflammation	Chronic Active, Minimal
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy	Mild
		Hemorrhage	Minimal
* Uterus	Epithelium	Metaplasia	Squamous, Minimal

PRIMARY CAUSE OF DEATH - Liver Centrilobular Hepatocyte Necrosis

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1309

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1309

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- Skeletal Muscle
- * Thyroid Gland
- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Stomach, Forestomach
- Trigeminal Ganglion
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Note: One of pair available for evaluation.
 - Inflammation
- * Eye
 - Retina
 - Atrophy
- * Kidney
 - Nephropathy
- * Liver
 - Basophilic Focus
 - Clear Cell Focus
 - Cyst
- [Cyst TGLs = 3-20]
 - Bile Duct
- * Lung
 - Epithlm Alvlus
 - Alveolus
 - [Infiltration Cellular TGLs = 1-10]
 - Hyperplasia
 - Infiltration Cellular
- * Mammary Gland
 - Duct
 - Dilation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland
 - Pars Distalis
 - Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1309

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1309

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 2-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Cyst	
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
	Epithelium	Metaplasia	Squamous, Minimal
		Polyp Stromal	

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1310

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1310

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Harderian Gland
- * Intestine Small, Duodenum
- * Liver
- Skeletal Muscle
- * Thymus
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Trachea
- * Bone Marrow
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Stomach, Forestomach
- Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Brain
 - Carcinoma
 - Compression
- [Compression TGLs = 6-2]
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
- [Dilation TGLs = 9-16]
- * Eye
 - Retina
- * Heart
 - Ventricl Rgt
- * Kidney
 - Nephropathy
- * Lung
 - Alveolus
 - Infiltration Cellular
- [Infiltration Cellular TGLs = 4-10]
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
- * Lymph Node, Mesenteric
 - Erythrophagocytosis
- * Mammary Gland
 - Duct
 - Dilation
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
- * Peripheral Nerve, Sciatic
 - Rete Ovarii
 - Hyperplasia
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1310

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1310

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Carcinoma	
[Carcinoma TGLs = 7-4]			
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thyroid Gland	C Cell	Adenoma	
[Adenoma TGLs = 8-8]			
Tissue NOS	Fat	Necrosis	Mild
[Necrosis TGLs = 1-20]			
* Uterus		Adenomyosis	Mild
	Endometrium	Hyperplasia	Cystic, Mild
		Hyperplasia	Stromal, Minimal
		Inflammation	Suppurative, Mild
	Epithelium	Metaplasia	Squamous, Moderate
[Hyperplasia TGLs = 2-16]			

Animal Note: TGLs 3,5 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1311

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1311

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Skin
- * Trachea
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Forestomach
- * Bone Marrow
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Skeletal Muscle
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
- * Liver
 - [Dilation TGLs = 2-16]
 - Eosinophilic Focus
- * Lung
 - [Eosinophilic Focus TGLs = 8-20]
 - Alveolus
 - Infiltration Cellular
- * Lymph Node, Mandibular
 - [Infiltration Cellular TGLs = 6-10]
 - Hyperplasia
 - Proliferation
- * Mammary Gland
 - Fibroadenoma
 - Galactocele
 - [Fibroadenoma TGLs = 3,4,5-21,22,23]
 - [Galactocele TGLs = 1-9,20]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
- * Pancreas
 - Periductal
 - Cholangiofibrosis
- * Parathyroid Gland
 - Fibrosis
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1311

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1311

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland [Adenoma TGLs = 7-4]	Pars Distalis	Adenoma	
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Mild
		Cyst	
		Hyperplasia	Epithelial, Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
		Inflammation	Suppurative, Minimal
	Epithelium	Metaplasia	Squamous, Moderate

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1312

TRT#: 8

SEX: Female

DAY ON TEST: 669

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1312

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Kidney | * Lung |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spinal Cord, Cervical | * Spinal Cord, Thoracic | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | * Uterus |

OBSERVATIONS

- | | | | |
|--|----------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Bone Marrow | | Hypercellularity | Moderate |
| * Clitoral Gland | | Inflammation | Chronic Active, Mild |
| * Islets, Pancreatic | | Adenoma | |
| [Adenoma TGLs = 5-6.1] | | | |
| * Liver | | Mixed Cell Focus | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | | Adenoma | |
| | | Fibroadenoma | Multiple |
| [Adenoma TGLs = 3-22] | | Hyperplasia | Marked |
| [Fibroadenoma TGLs = 1,2,4-20,21,23] | | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Spinal Cord, Lumbar | | Degeneration | Minimal |
| | Nerve | Degeneration | Moderate |
| * Spleen | | Extramedullary Hematopoiesis | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1312

TRT#: 8

SEX: Female

DAY ON TEST: 669

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1312

ORGAN AND ACCOUNTABLE SITE STATUS

* Stomach, Forestomach

Epithelium

Hyperplasia

Minimal

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1316

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1316

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Kidney
- * Parathyroid Gland
- * Skin
- * Trachea
- * Aorta
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- Skeletal Muscle
- * Stomach, Glandular

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Harderian Gland
 - Atrophy
 - Inflammation
 - Mixed Cell Focus
- * Liver
 - [Mixed Cell Focus TGLs = 4-12]
- * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 5-10]
- * Mammary Gland
 - Duct
 - [Fibroadenoma TGLs = 1,2-20,21]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
 - Cyst
 - [Cyst TGLs = 6-16]
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration
- * Pituitary Gland

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1316

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1316

ORGAN AND ACCOUNTABLE SITE STATUS

Note: Pars distalis available for evaluation.

* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Moderate
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Mild
		Inflammation	Suppurative, Minimal
	Epithelium	Metaplasia	Squamous, Mild
		Polyp Stromal	

[Hyperplasia TGLs = 7-21]

Animal Note: TGL 3 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1317

TRT#: 8

SEX: Female

DAY ON TEST: 651

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1317

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Aorta
- * Esophagus
- * Intestine Large, Cecum
- * Islets, Pancreatic
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Colon
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Stomach, Forestomach
- * Trigeminal Ganglion
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Pancreas
- * Skin
- * Stomach, Glandular
- * Urinary Bladder

AUTO PRECLUDES DIAG.

- * Intestine Small, Ileum
- * Intestine Small, Jejunum

OBSERVATIONS

- * Adrenal Cortex
 - Adenoma
 - Hypertrophy
 - Hypercellularity
- * Bone Marrow
 - Mild
 - Marked
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Kidney
 - Nephropathy
 - Basophilic Focus
 - Extramedullary Hematopoiesis
 - Hypertrophy
 - Infiltration Cellular
- * Liver
 - Chronicprogr, Minimal
 - Minimal
 - Mild
 - Histiocyte, Moderate
- * Lung
 - Hepatocyte
 - Alveolus
 - [Infiltration Cellular TGLs = 10-10]
 - Lymph Node
 - Lumbar
 - Iliac
 - [Erythrophagocytosis TGLs = 2,3-21]
 - [Erythrophagocytosis TGLs = 4,5-22]
- * Lymph Node, Mandibular
 - Erythrophagocytosis
 - Erythrophagocytosis
- * Mammary Gland
 - Duct
 - [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
 - Proliferation
 - Dilation
 - Fibroadenoma
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1317

TRT#: 8

SEX: Female

DAY ON TEST: 651

DOSE: 6.0W/kg(GSM)chr

DISP: Natural Death

HISTO: 12-5224-1317

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
* Ovary		Atrophy Cyst	Moderate
	[Atrophy TGLs = 6-16]		
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Minimal
	Note: Longitudinal section available for evaluation.		
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 11-4]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Cyst	
* Uterus		Dilation	Marked
	Epithelium	Inflammation	Chronic Active, Mild
		Metaplasia	Squamous, Marked
	Note: Marked amount of keratin within uterine lumen.		
	[Dilation TGLs = 8-16]		
	[Inflammation TGLs = 9-16]		
	[Metaplasia TGLs = 12-22]		

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1318

TRT#: 8

SEX: Female

DAY ON TEST: 545

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1318

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Spinal Cord, Thoracic
- * Thyroid Gland
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- Skeletal Muscle
- * Stomach, Forestomach
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Kidney
- * Parathyroid Gland
- * Skin
- * Stomach, Glandular
- Trigeminal Ganglion
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Thymus
- * Urinary Bladder

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
 - Hypercellularity
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Note: Olfactory bulbs not available for evaluation.
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
- * Heart
 - Cardiomyopathy
- * Liver
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
 - Inflammation
- * Mammary Gland
 - [Infiltration Cellular TGLs = 2-10]
 - [Fibroadenoma TGLs = 1-20]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Respirat Epith
 - Accumulation, Hyaline Droplet
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
 - Cyst
- * Peripheral Nerve, Sciatic
 - Degeneration
- * Peripheral Nerve, Tibial
 - Degeneration

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1318

TRT#: 8

SEX: Female

DAY ON TEST: 545

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1318

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Lumbar

Nerve

Degeneration

Minimal

* Spleen

Extramedullary Hematopoiesis

Mild

* Uterus

Epithelium

Metaplasia

Squamous, Minimal

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1319

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1319

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Aorta | * Bone | * Brain | * Clitoral Gland |
| * Esophagus | * Eye | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

INSUFFICIENT TISSUE

- * Adrenal Medulla

OBSERVATIONS

- | | | | |
|---|----------------------|--|--|
| * Adrenal Cortex | | Degeneration
Hyperplasia
Hypertrophy | Cystic, Minimal
Minimal
Mild |
| [Hypertrophy TGLs = 8-7] | | | |
| * Bone Marrow | | Hypercellularity | Marked |
| * Brain | | | |
| Note: Olfactory bulbs unavailable for evaluation. | | | |
| * Harderian Gland | | Atrophy
Inflammation | Minimal
Granulomatous, Minimal |
| * Liver | | Angiectasis
Eosinophilic Focus | Minimal |
| [Angiectasis TGLs = 6,7-12,20] | | | |
| * Lung | Alveolus | Infiltration Cellular
Pigment | Histiocyte, Moderate
Minimal |
| [Infiltration Cellular TGLs = 10-10] | | | |
| Lymph Node | Axillary
Axillary | Hyperplasia
Proliferation | Lymphocyte, Mild
Plasma Cell, Minimal |
| [Hyperplasia TGLs = 2-20] | | | |
| * Mammary Gland | Duct | Dilation
Fibroadenoma | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1319

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1319

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLs = 1-21]

* Nerve Trigeminal		Degeneration	Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Marked
		Cyst	
		Necrosis	Mild

[Necrosis TGLs = 3-16.1]

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	

[Adenoma TGLs = 11-4]

* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Cyst	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Adenocarcinoma	
		Polyp Stromal	

[Adenocarcinoma TGLs = 5-16.1]

[Polyp Stromal TGLs = 4-16.1]

Animal Note: TGL 9 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1320

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1320

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Aorta | * Bone | * Brain | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Clitoral Gland | Duct | Dilation | Mild |
| | | Inflammation | Chronic Active, Mild |
| * Harderian Gland | | Atrophy | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 1-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| * Mammary Gland | Duct | Dilation | Minimal |
| * Nerve Trigeminal | | Degeneration | Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Atrophy | Marked |
| | Rete Ovarii | Hyperplasia | Minimal |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| * Spinal Cord, Lumbar | Nerve | Degeneration | Moderate |
| * Spinal Cord, Thoracic | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1320

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1320

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

Extramedullary Hematopoiesis

Mild

Pigment

Mild

* Uterus

Cyst

Epithelium

Metaplasia

Squamous, Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1321

TRT#: 8

SEX: Female

DAY ON TEST: 702

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1321

ORGAN AND ACCOUNTABLE SITE STATUS

	Bursa	Dilation	Moderate
	[Cyst TGLs = 6-16]		
	[Dilation TGLs = 5-16]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 9-4]		
* Spinal Cord, Lumbar		Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Marked
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
* Thymus		Atrophy	Minimal
		Cyst	
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	
	[Polyp Stromal TGLs = 8-16]		

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGL 4 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1322

TRT#: 8

SEX: Female

DAY ON TEST: 741

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1322

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 6-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Minimal
		Pigment	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1323

TRT#: 8

SEX: Female

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1323

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Lymph Node, Mandibular
- * Salivary Glands
- * Stomach, Forestomach
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Stomach, Glandular
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Trachea

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Hyperplasia
 - Hypertrophy
- * Adrenal Medulla
 - Hyperplasia
- * Bone Marrow
 - Hypercellularity
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
- * Islets, Pancreatic
 - [Dilation TGLs = 1,2-16.1]
 - Adenoma
 - Carcinoma
 - [Carcinoma TGLs = 8-6]
- * Kidney
 - Nephropathy
- * Liver
 - Mixed Cell Focus
- * Lung
 - Alveolus
 - Infiltration Cellular
- * Mammary Gland
 - Duct
 - [Infiltration Cellular TGLs = 5-10]
 - Dilation
 - Hyperplasia
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Rete Ovarii
 - Atrophy
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1323

TRT#: 8

SEX: Female

DAY ON TEST: 737

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1323

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 6-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
* Thymus		Atrophy	Minimal
		Hyperplasia	Epithelial, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Cyst	
	Endometrium	Hyperplasia	Cystic, Moderate
Note: Cyst contains hemorrhage.			
[Cyst TGLs = 3-16.1]			
[Hyperplasia TGLs = 7-16.1]			
Vagina		Inflammation	Chronic Active, Minimal
[Inflammation TGLs = 4-20]			

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1324

TRT#: 8

SEX: Female

DAY ON TEST: 443

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1324

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Pituitary Gland
- * Spinal Cord, Cervical
- * Stomach, Forestomach
- * Trachea
- * Aorta
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Nerve Trigeminal
- * Salivary Glands
- * Spinal Cord, Lumbar
- * Stomach, Glandular
- * Trigeminal Ganglion
- * Bone
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Skeletal Muscle
- * Spinal Cord, Thoracic
- * Thymus
- * Urinary Bladder
- * Brain
- * Heart
- * Intestine Small, Duodenum
- * Lymph Node, Mandibular
- * Peripheral Nerve, Tibial
- * Skin
- * Spleen
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - * Bone Marrow
 - * Clitoral Gland
 - * Kidney
 - * Liver
 - * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 3,4-10]
 - * Mammary Gland
 - [Fibroadenoma TGLs = 1-20]
 - * Nose
 - * Ovary
 - * Pancreas
 - * Peripheral Nerve, Sciatic
 - * Uterus
 - Endometrium
 - Epithelium
 - [Hyperplasia TGLs = 2-16]
- Hyperplasia Minimal
- Hypercellularity Moderate
- Inflammation Chronic Active, Mild
- Nephropathy Chronicprogr, Minimal
- Eosinophilic Focus
- Infiltration Cellular Histiocyte, Minimal
- Fibroadenoma
- Accumulation, Hyaline Droplet Mild
- Atrophy Moderate
- Atrophy Minimal
- Degeneration Minimal
- Hyperplasia Cystic, Mild
- Metaplasia Squamous, Moderate

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1326

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1326

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Mild

* Thyroid Gland

C Cell

Hyperplasia

Minimal

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1327

TRT#: 8

SEX: Female

DAY ON TEST: 669

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1327

ORGAN AND ACCOUNTABLE SITE STATUS

Epithelium

Metaplasia

Squamous, Moderate

PRIMARY CAUSE OF DEATH

- Skin Subcut Tiss Fibrosarcoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1328

TRT#: 8

SEX: Female

DAY ON TEST: 514

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1328

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Peripheral Nerve, Tibial
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pituitary Gland
- * Spinal Cord, Lumbar
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Nerve Trigeminal
- * Skeletal Muscle
- * Spinal Cord, Thoracic
- * Urinary Bladder
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Parathyroid Gland
- * Skin
- * Stomach, Forestomach

MISSING

- * Clitoral Gland

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - * Bone Marrow
 - * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
 - * Heart
 - * Kidney
 - * Liver
 - [Lymphoma Malignant TGLs = 10-12]
 - * Lung
 - Alveolus
 - [Infiltration Cellular TGLs = 7-10]
 - Lymph Node
 - Deep Cervical
 - Deep Cervical
 - Deep Cervical
 - [Fibrosis TGLs = 3-20]
 - * Lymph Node, Mandibular
- | | | |
|--|-----------------------|-----------------------|
| | Necrosis | Mild |
| | Hypercellularity | Marked |
| | Cardiomyopathy | Minimal |
| | Lymphoma Malignant | |
| | Nephropathy | Chronicprogr, Minimal |
| | Lymphoma Malignant | |
| | Infiltration Cellular | Histiocyte, Minimal |
| | Lymphoma Malignant | |
| | Fibrosis | Moderate |
| | Inflammation | Chronic Active, Mild |
| | Lymphoma Malignant | |
| | Lymphoma Malignant | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1328

TRT#: 8

SEX: Female

DAY ON TEST: 514

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1328

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric		Lymphoma Malignant	
* Mammary Gland		Adenocarcinoma	
	Duct	Dilation	Mild
		Fibroadenoma	
	[Adenocarcinoma TGLs = 4-16]		
	[Dilation TGLs = 1-9]		
	[Fibroadenoma TGLs = 5-21]		
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal
	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Moderate
* Pancreas		Lymphoma Malignant	
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Pituitary Gland			
	Note: Pars distalis available for evaluation.		
* Salivary Glands	Parotid Gland	Atrophy	Moderate
	[Atrophy TGLs = 2-9]		
* Spleen		Lymphoma Malignant	
	[Lymphoma Malignant TGLs = 9-12]		
* Stomach, Glandular		Lymphoma Malignant	
* Thymus		Lymphoma Malignant	
Tissue NOS	Fat	Necrosis	Moderate
	[Necrosis TGLs = 6-20]		
* Uterus	Epithelium	Metaplasia	Squamous, Marked

PRIMARY CAUSE OF DEATH - Spleen Lymphoma Malignant

Animal Note: TGL 8 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1329

TRT#: 8

SEX: Female

DAY ON TEST: 697

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1329

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Aorta | * Bone | * Esophagus |
| * Eye | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lymph Node, Mesenteric | * Pancreas | * Salivary Glands | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|------------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Bone Marrow | | Hypercellularity | Minimal |
| * Brain | | Compression | Mild |
| | Pineal Gland | Vacuolation, Cytoplasmic | Minimal |
| * Clitoral Gland | Duct | Dilation | Marked |
| * Harderian Gland | | Inflammation | Granulomatous, Minimal |
| * Heart | Myocardium, Schwann Cell | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Liver | Bile Duct | Cyst | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 4-10] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Mild |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Minimal |
| | [Fibroadenoma TGLs = 5-20] | Fibroadenoma | |
| * Nerve Trigeminal | | Degeneration | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Atrophy | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1329

TRT#: 8

SEX: Female

DAY ON TEST: 697

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1329

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland [Adenoma TGLs = 1,3-2,4]	Pars Distalis	Adenoma	
* Spinal Cord, Lumbar	Nerve	Degeneration	Minimal
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen	White Pulp	Atrophy	Minimal
		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus	Epithelium	Metaplasia	Squamous, Mild
		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGL 2 = NCL (No Corresponding Lesion)

Animal Note: TGL 6 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1330

TRT#: 8

SEX: Female

DAY ON TEST: 487

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1330

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Aorta | * Bone |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Kidney |
| * Lymph Node, Mesenteric | * Nerve Trigeminal | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | Skeletal Muscle | * Skin | * Spinal Cord, Cervical |
| * Spinal Cord, Lumbar | * Spinal Cord, Thoracic | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |

INSUFFICIENT TISSUE

Trigeminal Ganglion

OBSERVATIONS

- | | | | |
|---|---------------------------------------|-------------------------------|-------------------------|
| * Bone Marrow | | Hypercellularity | Marked |
| * Clitoral Gland | Duct | Dilation | Marked |
| | | Inflammation | Chronic Active, Minimal |
| Note: One of pair available for evaluation. | | | |
| * Islets, Pancreatic | | Hyperplasia | Marked |
| * Liver | | Extramedullary Hematopoiesis | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic Active, Mild |
| | [Infiltration Cellular TGLs = 1-10] | | |
| * Lymph Node, Mandibular | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Minimal |
| | | Fibroadenoma | |
| | | Galactocele | |
| | [Fibroadenoma TGLs = 2-20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Minimal |
| * Peripheral Nerve, Tibial | | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1330

TRT#: 8

SEX: Female

DAY ON TEST: 487

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1330

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

Extramedullary Hematopoiesis

Moderate

* Uterus

Epithelium

Metaplasia

Squamous, Moderate

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1331

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1331

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Urinary Bladder
- * Aorta
- * Eye
- * Intestine Small, Duodenum
- * Kidney
- * Salivary Glands
- * Stomach, Forestomach
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Skeletal Muscle
- * Stomach, Glandular
- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Pancreas
- * Skin
- * Trachea

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Accessory Adrenal Cortical Nodule
 - Hypertrophy
 - [Hypertrophy TGLs = 6-7]
- * Adren Medulla
 - Note: One of pair available for evaluation.
- * Bone Marrow
 - Hypercellularity
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Clitoral Gland
 - Duct
 - Dilation
 - Inflammation
 - [Dilation TGLs = 4-16]
- * Harderian Gland
 - Atrophy
 - Inflammation
- * Heart
 - Cardiomyopathy
- * Liver
 - Eosinophilic Focus
 - Hepatocellular Adenoma
 - [Hepatocellular Adenoma TGLs = 5-12]
- * Lung
 - Alveolus
 - Infiltration Cellular
 - [Infiltration Cellular TGLs = 7-10]
- * Lymph Node, Mandibular
 - Hyperplasia

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1331

TRT#: 8

SEX: Female

DAY ON TEST: 738

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1331

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland	Duct	Proliferation Dilation Fibroadenoma	Plasma Cell, Mild Mild Multiple
	[Dilation TGLs = 3-9]		
	[Fibroadenoma TGLs = 1,2-20,21]		
* Nerve Trigeminal		Degeneration	Mild
* Nose	Olfactory Epi Respirat Epith	Accumulation, Hyaline Droplet Accumulation, Hyaline Droplet Inflammation	Minimal Minimal Suppurative, Minimal
* Ovary		Atrophy	Marked
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLs = 8-4]		
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
* Thymus		Atrophy Cyst	Mild
* Thyroid Gland	C Cell	Hyperplasia	Epithelial, Moderate
* Uterus	Endometrium Epithelium	Hyperplasia Hyperplasia Metaplasia Polyp Stromal	Minimal Cystic, Mild Squamous, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1332

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1332

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Pancreas
- * Stomach, Glandular
- * Urinary Bladder
- * Aorta
- * Heart
- * Intestine Small, Duodenum
- * Lung
- * Skeletal Muscle
- * Thymus
- * Bone
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Spinal Cord, Cervical
- * Thyroid Gland
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Stomach, Forestomach
- * Trachea

MISSING

Trigeminal Ganglion

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Hypertrophy
 - Hypercellularity
- * Bone Marrow
 - Compression
- * Brain
 - Dilation
 - Inflammation
- * Clitoral Gland
 - Duct
 - Inflammation
- * Harderian Gland
 - Inflammation
- * Kidney
 - Nephropathy
- * Liver
 - Extramedullary Hematopoiesis
- Lymph Node
 - Mediastinal
 - Erythrophagocytosis
- [Erythrophagocytosis TGLs = 9-6]
- * Mammary Gland
 - Duct
 - Dilation
 - Fibroadenoma
 - Hyperplasia
- [Fibroadenoma TGLs = 2,4-20,22]
- * Nerve Trigeminal
 - Degeneration
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
- * Ovary
 - Atrophy
 - Cyst

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1332

TRT#: 8

SEX: Female

DAY ON TEST: 744

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1332

ORGAN AND ACCOUNTABLE SITE STATUS

	Rete Ovarii	Hyperplasia	Moderate
[Cyst TGLs = 6-16]			
* Parathyroid Gland		Hyperplasia	Minimal
* Peripheral Nerve, Sciatic		Degeneration	Minimal
* Peripheral Nerve, Tibial		Degeneration	Mild
Note: Longitudinal section available for evaluation.			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 11-4]			
* Salivary Glands		Schwannoma Malignant	
* Skin	Subcut Tiss	Fibroma	
[Fibroma TGLs = 3-21]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
Tissue NOS	Fat	Necrosis	Moderate
[Necrosis TGLs = 5-23]			
* Uterus		Cyst	
[Cyst TGLs = 7-16]			

Animal Note: TGL 1 = NST (No Section Taken)

Animal Note: TGLs 8,10 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1333

TRT#: 8

SEX: Female

DAY ON TEST: 593

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1333

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Aorta	* Bone	* Brain
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Pancreas	* Parathyroid Gland	* Peripheral Nerve, Tibial	* Pituitary Gland
* Salivary Glands	Skeletal Muscle	* Skin	* Spinal Cord, Cervical
* Spinal Cord, Thoracic	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	Trigeminal Ganglion	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Degeneration	Cystic, Moderate
		Hyperplasia	Mild
		Hypertrophy	Minimal
* Bone Marrow		Hypercellularity	Marked
* Clitoral Gland		Inflammation	Chronic Active, Marked
	[Inflammation TGLs = 1,2-16]		
* Kidney		Nephropathy	Chronicprogr, Minimal
* Liver		Eosinophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
	[Infiltration Cellular TGLs = 6-10]		
* Lymph Node, Mandibular		Proliferation	Plasma Cell, Minimal
	[Proliferation TGLs = 4-9.1]		
* Mammary Gland	Duct	Dilation	Mild
	[Fibroadenoma TGLs = 3-20]	Fibroadenoma	
* Nerve Tibial			
	Note: Longitudinal section available for evaluation.		
* Nerve Trigeminal		Degeneration	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Moderate
* Ovary		Atrophy	Mild
* Peripheral Nerve, Sciatic		Degeneration	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1333

TRT#: 8

SEX: Female

DAY ON TEST: 593

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1333

ORGAN AND ACCOUNTABLE SITE STATUS

Note: Longitudinal section available for evaluation.

* Spinal Cord, Lumbar

Nerve

Degeneration

Minimal

* Spleen

Extramedullary Hematopoiesis

Moderate

* Uterus

Epithelium

Metaplasia

Squamous, Minimal

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 5,7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1335

TRT#: 8

SEX: Female

DAY ON TEST: 300

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1335

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Liver |
| * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Nerve Trigeminal |
| * Ovary | * Pancreas | * Parathyroid Gland | * Peripheral Nerve, Sciatic |
| * Peripheral Nerve, Tibial | * Pituitary Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Spinal Cord, Lumbar | * Spinal Cord, Thoracic |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | Trigeminal Ganglion | * Urinary Bladder | * Uterus |

OBSERVATIONS

- | | | | |
|---|---------------|---|------------------------|
| * Adrenal Cortex | | Vacuolation, Cytoplasmic | Mild |
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Bone Marrow | | Hypercellularity | Moderate |
| * Clitoral Gland | | Inflammation | Granulomatous, Mild |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| [Fibroadenoma TGLs = 1 - 20] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet
Inflammation | Mild
Acute, Minimal |
| Note: One half of level 3 available for evaluation. | | | |
| * Spleen | | Extramedullary Hematopoiesis | Minimal |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1337

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1337

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Aorta
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Parathyroid Gland
- * Spinal Cord, Cervical
- * Trachea
- * Bone
- * Eye
- * Intestine Large, Rectum
- * Lymph Node, Mesenteric
- * Salivary Glands
- * Stomach, Forestomach
- * Urinary Bladder
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Nerve Trigeminal
- * Skeletal Muscle
- * Stomach, Glandular
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pancreas
- * Skin
- * Thyroid Gland

OBSERVATIONS

- * Adrenal Cortex
 - Degeneration
 - Hyperplasia
 - Cystic, Minimal
- * Adrenal Medulla
 - Hyperplasia
 - Mild
- * Bone Marrow
 - Hypercellularity
 - Mild
- * Brain
 - Note: Olfactory bulbs unavailable for evaluation.
- * Heart
 - Cardiomyopathy
 - Minimal
- Ventricle Rgt
 - Cardiomyopathy
 - Minimal
- * Islets, Pancreatic
 - Hyperplasia
 - Minimal
- * Kidney
 - Nephropathy
 - Chronicprogr, Mild
- * Liver
 - Hepatocyte
 - Vacuolation, Cytoplasmic TGLs = 5-12
 - Mixed Cell Focus
 - Vacuolation, Cytoplasmic
 - Minimal
- * Lung
 - Alveolus
 - Infiltration Cellular TGLs = 3-10
 - Infiltration Cellular
 - Histiocyte, Mild
- * Lymph Node, Mandibular
 - Hyperplasia
 - Proliferation
 - Lymphocyte, Minimal
- * Mammary Gland
 - Fibroadenoma
 - Hyperplasia
 - Plasma Cell, Minimal
 - Moderate
- [Fibroadenoma TGLs = 2-21]
- [Hyperplasia TGLs = 1-20]
- * Nose
 - Olfactory Epi
 - Accumulation, Hyaline Droplet
 - Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1337

TRT#: 8

SEX: Female

DAY ON TEST: 740

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1337

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary		Atrophy	Marked
		Cyst	
	[Cyst TGLs = 6-16]		
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Marked
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
		Pigment	Mild
* Thymus		Atrophy	Minimal
Tissue NOS	Fat	Necrosis	Mild
	[Necrosis TGLs = 4-22]		
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Minimal
	Epithelium	Metaplasia	Squamous, Mild

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1338

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1338

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Salivary Glands
- * Stomach, Glandular
- * Aorta
- * Eye
- * Intestine Large, Rectum
- * Kidney
- Skeletal Muscle
- * Trachea
- * Bone
- * Harderian Gland
- * Intestine Small, Duodenum
- * Pancreas
- * Skin
- * Urinary Bladder
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Pituitary Gland
- * Stomach, Forestomach

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Adrenal Cortex [Hypertrophy TGLs = 8-7] Hypertrophy Minimal
- * Bone Marrow Hypercellularity Marked
- * Clitoral Gland Duct Dilation Mild
- * Heart Cardiomyopathy Minimal
- * Islets, Pancreatic Adenoma
- * Liver Hepatocyte Hypertrophy Mild
- * Lung Alveolus Infiltration Cellular [Infiltration Cellular TGLs = 9-10] Histocyte, Minimal
- * Lymph Node, Mandibular Hyperplasia Lymphocyte, Minimal
- * Lymph Node, Mesenteric Erythrophagocytosis Mild
- * Mammary Gland Fibroadenoma [Fibroadenoma TGLs = 1-20,1,2,3,4,5-20,21,22,23,24] Fibroadenoma
- * Nerve Trigeminal Degeneration Mild
- * Nose Olfactory Epi Accumulation, Hyaline Droplet Minimal
- * Ovary Rete Ovarii Hyperplasia Mild
- Inflammation Chronic Active, Minimal
- * Peripheral Nerve, Sciatic Degeneration Mild
- * Peripheral Nerve, Tibial Degeneration Minimal
- * Skin

Note: Fibroma has multiple entrapped fibroadenomas.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1338

TRT#: 8

SEX: Female

DAY ON TEST: 739

DOSE: 6.0W/kg(GSM)chr

DISP: Terminal Sacrifice

HISTO: 12-5224-1338

ORGAN AND ACCOUNTABLE SITE STATUS

* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Mild
* Spleen		Extramedullary Hematopoiesis	Moderate
		Pigment	Minimal
* Thymus		Atrophy	Mild
		Hyperplasia	Epithelial, Minimal
[Atrophy TGLs = 10-6]			
* Thyroid Gland	Bilateral, C Cell	Adenoma	
Trigeminal Ganglion		Degeneration	Minimal
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate
	Epithelium	Metaplasia	Squamous, Minimal

Animal Note: TGL 6 = NST (No Section Taken)

Animal Note: TGL 7 = NCL (No Corresponding Lesion)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1339

TRT#: 8

SEX: Female

DAY ON TEST: 727

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1339

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Bone Marrow |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Spinal Cord, Cervical | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | Trigeminal Ganglion | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|-----------------------------|---------------------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| | | Hyperplasia | Minimal |
| | | Hypertrophy | Mild |
| * Brain | | Compression | Mild |
| | [Compression TGLs = 7-2] | | |
| * Islets, Pancreatic | | Hyperplasia | Mild |
| * Kidney | | Nephropathy | Chronicprogr, Mild |
| * Liver | | Eosinophilic Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 2-10] | | |
| Lymph Node | Renal | Erythrophagocytosis | Moderate |
| | [Erythrophagocytosis TGLs = 4,5-21] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Mild |
| * Mammary Gland | Duct | Dilation | Mild |
| | | Hyperplasia | Mild |
| | [Dilation TGLs = 9-9] | | |
| * Nerve Trigeminal | | Degeneration | Mild |
| * Nose | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Atrophy | Moderate |
| * Peripheral Nerve, Sciatic | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1339

TRT#: 8

SEX: Female

DAY ON TEST: 727

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1339

ORGAN AND ACCOUNTABLE SITE STATUS

* Peripheral Nerve, Tibial		Degeneration	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLs = 8-4]			
* Spinal Cord, Lumbar	Nerve	Degeneration	Mild
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Pigment	Mild
* Thymus		Atrophy	Moderate
		Hyperplasia	Epithelial, Mild
* Uterus		Hyperplasia	Stromal, Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Animal Note: TGLs 1,3 = NCL (No Corresponding Lesion)

Animal Note: TGLs 6,10 = NST (No Section Taken)

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1340

TRT#: 8

SEX: Female

DAY ON TEST: 720

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1340

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | * Aorta | * Bone | * Brain |
| * Esophagus | * Eye | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Liver | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

- * Clitoral Gland

OBSERVATIONS

- | | | | |
|---|----------|-----------------------------------|-----------------------|
| * Adrenal Cortex | | Accessory Adrenal Cortical Nodule | |
| | | Degeneration | Cystic, Mild |
| | | Hyperplasia | Mild |
| | | Hypertrophy | Mild |
| | | Vacuolation, Cytoplasmic | Minimal |
| [Degeneration TGLs = 3-7] | | | |
| * Adren Medulla | | | |
| Note: One of pair available for evaluation. | | | |
| * Bone Marrow | | Hypercellularity | Mild |
| * Harderian Gland | | Atrophy | Minimal |
| * Kidney | | Nephropathy | Chronicprogr, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| [Infiltration Cellular TGLs = 8-10] | | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphocyte, Minimal |
| | | Proliferation | Plasma Cell, Minimal |
| * Lymph Node, Mesenteric | | Erythrophagocytosis | Minimal |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | | Hyperplasia | Minimal |
| [Fibroadenoma TGLs = 4,5-20,21] | | | |
| * Nerve Trigeminal | | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20105 - 59

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 01/02/2018

Time Report Requested: 11:58:55

First Dose M/F: 09/16/12 / 09/16/12

Lab: IIT

ANIMAL ID: 1340

TRT#: 8

SEX: Female

DAY ON TEST: 720

DOSE: 6.0W/kg(GSM)chr

DISP: Moribund Sacrifice

HISTO: 12-5224-1340

ORGAN AND ACCOUNTABLE SITE STATUS

* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Mild
* Ovary		Atrophy	Moderate
* Peripheral Nerve, Sciatic		Degeneration	Mild
* Peripheral Nerve, Tibial		Degeneration	Mild
* Spinal Cord, Cervical		Degeneration	Minimal
* Spinal Cord, Lumbar	Nerve	Degeneration	Moderate
* Spinal Cord, Thoracic		Degeneration	Minimal
* Spleen		Extramedullary Hematopoiesis	Mild
* Thymus		Atrophy	Minimal
Trigeminal Ganglion		Degeneration	Mild
* Uterus	Endometrium	Hyperplasia	Cystic, Moderate
	Epithelium	Metaplasia	Squamous, Mild

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Animal Note: TGLs 1,2,7 = NCL (No Corresponding Lesion)

Animal Note: TGL 6 = NST (No Section Taken)

*** END OF REPORT ***