

**Experiment Number:** 20105 - 56

**Test Type:** CHRONIC

**Route:** Whole Body Exposure

**Species/Strain:** RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

**CAS Number:** CELLPRADCDMA

**Date Report Requested:** 01/02/2018

**Time Report Requested:** 13:31:21

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

**Lab:** IIT

Final 2 - Data Changes through 12-15-17 CDMA Core Rats Only

**NTP Study Number:**

C20105B

**Lock Date:**

12/29/2015

**Cage Range:**

ALL

**Date Range:**

ALL

**Reasons For Removal:**

25022 ACCK

25021 TSAC

25020 NATD

25019 MSAC

**Removal Date Range:**

ALL

**Treatment Groups:**

Include ALL

**Study Gender:**

Both

**TDMSE Version:**

3.0.2.3\_002

**PWG Approval Date:**

NONE



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HARLAN SPRAGUE DAWLEY RATS MALE 0.0W/kg(CDMA)chr	DAY ON TEST																								males (cont...)
	0 6 4 2	0 7 3 2	0 5 9 0	0 2 9 4	0 6 5 5	0 6 8 1	0 6 9 1	0 5 8 0	0 4 2 0	0 5 4 7	0 5 5 1	0 6 6 4	0 7 7 0	0 4 3 7	0 5 9 8	0 5 6 3	0 5 5 2	0 7 1 9	0 7 3 3	0 7 3 4	0 5 6 5	0 7 3 1	0 7 1 5	0 7 3 1	
ANIMAL ID	0 0 5 0 1	0 0 5 0 2	0 0 5 0 3	0 0 5 0 4	0 0 5 0 6	0 0 5 0 9	0 0 5 0 0	0 0 5 0 1	0 0 5 0 1	0 0 5 0 2	0 0 5 0 3	0 0 5 0 4	0 0 5 0 5	0 0 5 0 6	0 0 5 0 7	0 0 5 0 8	0 0 5 0 9	0 0 5 0 2	0 0 5 0 2	0 0 5 0 3	0 0 5 0 4	0 0 5 0 7	0 0 5 0 9	0 0 5 0 3	0 0 5 0 3
Epithelium, Regeneration	2																								
Intestine Small, Duodenum	+ + A + + + + + + + + + + + + A + + + + A + + +																								
Erosion																									
Ulcer	3																								
Intestine Small, Ileum	+ + + A + + + + + A + + + + + + A + + + + A + + +																								
Artery, Inflammation, Chronic Active	3																								
Epithelium, Regeneration																									
Intestine Small, Jejunum	+ + + + + + + + + A + + + + + + A + + + + A + A +																								
Liver	+ +																								
Angiectasis																									
Basophilic Focus																									
Clear Cell Focus																									
Eosinophilic Focus																									
Extramedullary Hematopoiesis	2 1 1																								
Hepatodiaphragmatic Nodule																									
Infiltration Cellular, Mixed Cell	1																								
Mixed Cell Focus	X X X X X																								
Artery, Inflammation, Chronic Active																									
Artery, Mineral																									
Bile Duct, Cyst																									
Bile Duct, Hyperplasia	1 1 1 1 1 1 1 1 1 1																								
Hepatocyte, Degeneration																									
Hepatocyte, Necrosis	2																								
Hepatocyte, Vacuolation, Cytoplasmic	1 1 1																								
Kupffer Cell, Pigment	2																								

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked









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HARLAN SPRAGUE DAWLEY RATS MALE 0.0W/kg(CDMA)chr	DAY ON TEST																								males (cont...)	
	0 6 4 2	0 7 3 2	0 5 9 0	0 2 9 4	0 6 5 5	0 6 8 1	0 6 9 1	0 5 8 0	0 4 2 0	0 5 4 7	0 5 2 1	0 6 3 4	0 7 7 0	0 4 3 8	0 5 6 3	0 5 1 2	0 7 3 9	0 7 3 4	0 5 6 5	0 7 3 4	0 5 6 7	0 7 3 1	0 7 1 5	0 7 3 1		
ANIMAL ID	0 0 5 0 1	0 0 5 0 2	0 0 5 0 3	0 0 5 0 4	0 0 5 0 6	0 0 5 0 9	0 0 5 0 0	0 0 5 0 1	0 0 5 0 1	0 0 5 0 1	0 0 5 0 1	0 0 5 0 1	0 0 5 0 1	0 0 5 0 1	0 0 5 0 1	0 0 5 0 1	0 0 5 0 1	0 0 5 0 2	0 0 5 0 2	0 0 5 0 2	0 0 5 0 2	0 0 5 0 2	0 0 5 0 2	0 0 5 0 3	0 0 5 0 3	
Hyperplasia																										
Inflammation, Granulomatous																		4								
Inflammation, Acute																										
Inflammation, Chronic Active																										
Artery, Inflammation, Chronic Active																										
Duct, Dilation																										
Prostate																										
Decreased Secretory Fluid																										
Hemorrhage																										
Infiltration Cellular, Mononuclear Cell																										
Inflammation, Acute																										
Inflammation, Chronic Active																										
Artery, Inflammation, Chronic Active																										
Epithelium, Hyperplasia																										
Seminal Vesicle																										
Decreased Secretory Fluid																										
Hemorrhage																										
Inflammation, Acute																										
Inflammation, Chronic Active																										
Artery, Inflammation, Chronic Active																										
Epithelium, Hyperplasia																										
Testis																										
Cyst																										
Inflammation, Chronic Active																										
Pigment																										
Artery, Inflammation, Chronic Active																										
Germ Cell, Degeneration																										

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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DAY ON TEST	HARLAN SPRAGUE DAWLEY RATS MALE																				ANIMAL ID	males (cont...)				
	0642	0732	0590	0294	0665	0668	0589	0688	0420	0557	0551	0674	0673	0453	0673	0456	0552	0773	0773	0575			0773	0773	0631	0575
0.0W/kg(CDMA)chr	0050	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055	0055

Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Erythrophagocytosis		1	2				1									1	2		3						1	
Hyperplasia, Lymphocyte																				1						
Infiltration Cellular, Histiocyte																										
Infiltration Cellular, Polymorphonuclear									2							2										
Lymphocyte, Depletion																										

Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Developmental Malformation																										
Extramedullary Hematopoiesis				1	2			1	2				1	1	1				2	2		2			2	2
Hyperplasia, Lymphocyte		1																								
Pigment	2	2	2	1		3	3			3				1	2	2	2		2	1	2	1	2	3		
Arteriole, Mineral																										2
Red Pulp, Atrophy	2					2	1												2			2			2	2
White Pulp, Atrophy						2											3	2		3		2			1	

Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy	1	3	4		1	4	3	4		3	3	1	2	3		4	4	4	4	2		4	3	4	3	
Cyst																							X			
Ectopic Parathyroid Gland																										
Ectopic Thyroid																										
Hemorrhage					2					2																
Hyperplasia, Epithelial																									1	
Artery, Inflammation, Chronic Active																			3	3						

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy																										
Galactocele																										

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DAY ON TEST	HARLAN SPRAGUE DAWLEY RATS MALE																								ANIMAL ID	males (cont...)
	0642	0732	0590	0294	0665	0668	0569	0088	0040	0052	0051	0064	0053	0077	0063	0048	0056	0055	0071	0073	0073	0057	0077	0077		
0.0W/kg(CDMA)chr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0055	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0005	0	
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	0005	0	
	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	0001	0	
	1	2	3	4	6	9	0	1	1	2	3	4	5	6	7	8	9	0	1	2	2	3	4	0003	0	

Duct, Dilation

2

Skin

+ +

Cyst Epithelial Inclusion

X

Inflammation, Chronic Active

Ulcer

Artery, Subcutaneous Tissue, Inflammation, Chronic Active

3

Epidermis, Hyperplasia

Subcutaneous Tissue, Inflammation, Suppurative

Subcutaneous Tissue, Inflammation, Chronic

2

MUSCULOSKELETAL SYSTEM

Bone

+ +

Fibrous Osteodystrophy

1 1

Skeletal Muscle

+ +

Degeneration

1 2 2 1 1 3 2 2

Mineral

2

NERVOUS SYSTEM

Brain

+ +

Compression

2 2 1

Hemorrhage

Infiltration Cellular, Mononuclear Cell

Mineral

Necrosis

Choroid Plexus, Degeneration

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X .. Lesion present

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| DAY ON TEST   | HARLAN SPRAGUE DAWLEY RATS MALE |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males (cont...) |      |      |      |      |      |
|---|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-----------------|------|------|------|------|------|
|   | 0642                            | 0732 | 0590 | 0294 | 0665 | 0668 | 0589 | 0048 | 0057 | 0051 | 0042 | 0054 | 0067 | 0063 | 0047 | 0044 | 0055 | 0055 | 0077 | 0077 |           |                 | 0077 | 0057 | 0077 | 0077 | 0063 |
|   | 0                               | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0               | 0    | 0    | 0    | 0    | 0    |
|   | 0                               | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0               | 0    | 0    | 0    | 0    | 0    |
|   | 5                               | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5         | 5               | 5    | 5    | 5    | 5    | 5    |
|   | 0                               | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 2    | 2         | 2               | 2    | 2    | 2    | 3    | 3    |
|   | 1                               | 2    | 3    | 4    | 6    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 2    | 3         | 4               | 7    | 9    | 0    | 3    | 3    |
| Choroid Plexus, Mineral<br>Meninges, Hyperplasia<br>Meninges, Hyperplasia, Granular Cell<br>Pineal Gland, Mineral<br>Pineal Gland, Vacuolation, Cytoplasmic |                                 |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      | 1    |      |      |      |           |                 |      |      |      |      |      |
| Nerve Trigeminal<br>Degeneration  | +                               | +    | +    | +    | +    | +    | M    | +    | +    | I    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +               | +    | +    | +    | +    | +    |
| Peripheral Nerve, Sciatic<br>Degeneration<br>Infiltration Cellular, Mononuclear Cell  | 3                               | 1    | 3    |      | 2    | 2    |      | 3    |      |      | 2    | 1    | 2    |      | 1    |      | 3    | 1    | 2    |      | 3         | 2               | 3    | 3    | 3    | 3    | 3    |
| Peripheral Nerve, Tibial<br>Degeneration  | +                               | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | I    | +    | +    | +    | +    | +    | +    | +         | +               | +    | +    | +    | +    | +    |
| Spinal Cord, Cervical<br>Degeneration   | 3                               | 3    | 2    |      | 3    | 3    | 3    | 2    | 1    |      | 2    | 2    | 3    |      | 3    | 1    | 2    | 2    | 3    | 3    | 3         | 2               | 3    | 3    | 2    | 3    | 3    |
| Spinal Cord, Lumbar<br>Degeneration<br>Nerve, Degeneration  | +                               | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +               | +    | +    | +    | +    | +    |
| Spinal Cord, Thoracic<br>Degeneration<br>Hemorrhage, Focal  | 1                               | 2    | 2    |      | 2    | 3    | 1    | 3    |      | 1    |      | 3    | 3    | 3    | 3    | 1    | 1    | 1    | 2    | 3    | 3         | 2               | 3    | 2    | 3    | 2    | 4    |
| Trigeminal Ganglion<br>Degeneration   | +                               | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +               | +    | +    | +    | +    | +    |
|   | 1                               |      |      |      | 1    | 1    |      | 1    |      |      | 1    |      | 1    |      | 1    |      | 1    |      | 1    |      | 1         |                 | 1    |      | 1    |      | 1    |

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Lab: IIT

| DAY ON TEST      | HARLAN SPRAGUE DAWLEY RATS MALE |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | ANIMAL ID | males (cont...) |
|------------------|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-----------------|
|                  | 0721                            | 0733  | 0751  | 0773  | 0761  | 0776  | 0765  | 0755  | 0755  | 0776  | 0766  | 0777  | 0777  | 0777  | 0777  | 0777  | 0766  | 0777  | 0777  | 0766  | 0777  | 0766  | 0755  | 0755  |           |                 |
| 0.0W/kg(CDMA)chr | 00534                           | 00533 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 | 00553 |           |                 |

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|---|--|
| Epithelium, Regeneration             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Intestine Small, Duodenum            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A |   |  |  |  |   |  |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Ulcer                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Intestine Small, Ileum               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A |   |  |  |  |   |  |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Epithelium, Regeneration             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Intestine Small, Jejunum             | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A |  |  |  |   |  |
| Liver                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |  |  |   |  |
| Angiectasis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Basophilic Focus                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Clear Cell Focus                     | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   |  |  |  | X |  |
| Eosinophilic Focus                   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | X |  |  |  |   |  |
| Extramedullary Hematopoiesis         |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Hepatodiaphragmatic Nodule           |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Infiltration Cellular, Mixed Cell    |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Mixed Cell Focus                     |   |   |   | X |   |   | X | X |   |   | X | X |   |   | X | X |   |   |   |   |   |   |   | X | X |   |  |  |  |   |  |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Artery, Mineral                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Bile Duct, Cyst                      |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Bile Duct, Hyperplasia               |   |   |   | 1 | 2 | 1 | 1 |   |   | 2 | 1 |   |   | 1 | 1 |   |   |   |   |   |   |   | 2 | 1 |   |   |  |  |  |   |  |
| Hepatocyte, Degeneration             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Hepatocyte, Necrosis                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Hepatocyte, Vacuolation, Cytoplasmic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |
| Kupffer Cell, Pigment                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST   |                  | ANIMAL ID        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | males<br>(cont...) |                  |                  |
|--|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|------------------|------------------|
|  | 0<br>7<br>2<br>1                                    | 0<br>7<br>3<br>3 | 0<br>5<br>1<br>0 | 0<br>7<br>3<br>0 | 0<br>6<br>1<br>0 | 0<br>7<br>3<br>4 | 0<br>6<br>6<br>3 | 0<br>5<br>8<br>0 | 0<br>5<br>6<br>7 | 0<br>7<br>3<br>4 | 0<br>6<br>0<br>4 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>2 | 0<br>6<br>6<br>4 | 0<br>7<br>0<br>5 | 0<br>7<br>3<br>1 | 0<br>6<br>6<br>2 | 0<br>7<br>3<br>1 |                    | 0<br>6<br>8<br>5 | 0<br>5<br>8<br>2 |
| Periductal, Cholangiofibrosis                          | 2   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Mesentery  | + |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Hemorrhage   |   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Inflammation, Chronic                                  |   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Necrosis   | 3   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Neovascularization                                     |   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Artery, Inflammation, Chronic Active                   | 2 2 2 2 4 3 2 4 1 2 2                               |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Artery, Mineral  | 2 1 2 2   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Vein, Degeneration                                     | 1   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Vein, Inflammation, Chronic Active                     | 1   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Pancreas   | + |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Cyst   |   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Thrombus   |   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Acinus, Atrophy  | 1 1 1 1   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Acinus, Hyperplasia                                    | 2 1 2 2 3 2 1 2 3 3 2 3 4 2 1 2 2 2 2 3 4           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Artery, Inflammation, Chronic Active                   | 2 3 2 2 3 2 3 2 2 2 1 2 2 2 2 3                     |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Artery, Mineral  | 2 1 3 1   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Salivary Glands  | + |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Artery, Inflammation, Chronic Active                   | 2 3 1   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Artery, Mineral  | 3 2   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Duct, Parotid Gland, Dilation                          | 2 2   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Duct, Parotid Gland, Inflammation, Acute               | 2   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Parotid Gland, Atrophy                                 | 1 2 1 1 3 1   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Parotid Gland, Inflammation, Acute                     | 1   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Parotid Gland, Vacuolation, Cytoplasmic                |   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Stomach, Forestomach                                   | + |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST | 0721  | 0733  | 0751  | 0773  | 0761  | 0776  | 0755  | 0755  | 0776  | 0767  | 0777  | 0777  | 0777  | 0777  | 0777  | 0766  | 0777  | 0777  | 0766  | 0777  | 0766  | 0755  | 0755  | males<br>(cont...) |
|  | ANIMAL ID   | 00534 | 00535 | 00536 | 00538 | 00539 | 00540 | 00541 | 00542 | 00543 | 00544 | 00545 | 00546 | 00547 | 00548 | 00549 | 00550 | 00551 | 00552 | 00553 | 00554 | 00555 | 00556 | 00557 |                    |

Atrium, Myocardium, Hypertrophy  
 Myocardium, Mineral  
 Myocardium, Necrosis  
 Valve, Inflammation, Chronic Active  
 Ventricle Right, Cardiomyopathy

2

1 1 1 2 1 1 1 2 1 1 1 1

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accessory Adrenal Cortical Nodule |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   |   |
| Degeneration                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia                       |   | 1 | 1 |   | 1 |   | 2 | 2 | 3 |   | 2 |   | 2 |   | 1 | 2 | 2 |   | 2 | 3 |   |   |   |   |
| Hypertrophy                       |   | 2 |   | 1 | 2 | 1 |   |   |   |   |   | 1 |   | 1 | 2 | 2 |   | 1 |   | 1 | 1 |   |   |   |
| Necrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |
| Thrombus                          | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolation, Cytoplasmic          |   |   | 1 |   |   |   | 1 |   |   |   |   |   |   | 1 | 2 | 2 | 2 |   |   | 3 |   |   |   |   |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                       |   |   |   |   | 2 | 4 |   | 2 |   | 3 |   |   |   |   |   |   |   | 3 | 1 | 4 | 2 | 2 |   |   |
| Thrombus                          | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                       |   |   | 1 |   |   | 2 | 1 |   |   | 1 |   |   |   |   | 1 |   |   |   | 1 |   |   |   | 2 |   |
| Parathyroid Gland                 | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M |
| Hyperplasia                       |   |   |   |   | 2 | 3 | 1 | 4 | 1 |   | 2 | 1 | 1 | 1 | 1 | 1 |   | 4 | 3 |   | 4 |   | 3 | 2 |
| Pituitary Gland                   | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Craniopharyngeal Duct, Cyst       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pars Distalis, Cyst               |   |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   |   |   |   | X |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
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 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST |      | ANIMAL ID |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | males<br>(cont...) |      |      |   |   |   |   |
|--|-------------|------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------------|------|------|---|---|---|---|
|  | 0721        | 0733 | 0751      | 0773 | 0761 | 0773 | 0768 | 0755 | 0767 | 0754 | 0766 | 0774 | 0776 | 0777 | 0777 | 0777 | 0766 | 0770 | 0773 | 0766 | 0776 | 0758 |                    | 0758 | 0759 |   |   |   |   |
| Hyperplasia  | 2           |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Inflammation, Granulomatous                            |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Inflammation, Acute                                    |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Inflammation, Chronic Active                           | 2           | 3    |           | 2    |      | 3    |      | 2    | 1    |      | 2    |      | 2    | 1    |      | 1    | 2    |      |      | 3    | 2    | 1    |                    |      |      |   |   |   |   |
| Artery, Inflammation, Chronic Active                   | 3           | 4    |           | 3    | 2    | 4    | 2    | 3    |      |      | 2    |      |      | 1    |      |      | 1    | 4    |      |      | 2    |      |                    |      |      |   |   |   |   |
| Duct, Dilation   |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Prostate   | +           | +    | +         | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                  | +    |      |   |   |   |   |
| Decreased Secretory Fluid                              |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      |                    |      |      |   |   |   |   |
| Hemorrhage   |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Infiltration Cellular, Mononuclear Cell                |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Inflammation, Acute                                    | 2           |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |                    |      |      |   |   |   |   |
| Inflammation, Chronic Active                           |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |                    |      |      |   |   |   |   |
| Artery, Inflammation, Chronic Active                   |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Epithelium, Hyperplasia                                | 1           |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |                    |      |      |   |   |   |   |
| Seminal Vesicle  | +           | +    | +         | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                  | +    |      |   |   |   |   |
| Decreased Secretory Fluid                              |             |      |           |      | 3    | 1    | 4    | 2    |      |      |      |      |      |      |      |      |      |      | 4    | 3    | 4    | 3    | 2                  | 3    |      |   |   |   |   |
| Hemorrhage   |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Inflammation, Acute                                    |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Inflammation, Chronic Active                           |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Artery, Inflammation, Chronic Active                   |             |      |           |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Epithelium, Hyperplasia                                |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Testis   | +           | +    | +         | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                  | +    |      |   |   |   |   |
| Cyst   |             |      |           |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Inflammation, Chronic Active                           |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Pigment  |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |      |      |   |   |   |   |
| Artery, Inflammation, Chronic Active                   | 3           |      |           |      | 3    | 4    | 2    |      |      |      |      |      | 3    | 3    | 3    | 4    | 3    |      |      |      |      | 1    | 4                  | 4    | 4    | 4 | 2 | 2 | 2 |
| Germ Cell, Degeneration                                |             |      |           | 4    | 2    | 2    | 2    |      |      |      |      |      |      |      |      |      |      | 1    | 4    | 4    | 3    | 3    | 3                  | 3    | 4    | 1 | 2 |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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Experiment Number: 20105 - 56

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|
|  | 0721        | 0733 | 0751 | 0773 | 0761 | 0776 | 0765 | 0758 | 0755 | 0777 | 0766 | 0777 | 0777 | 0777 | 0777 | 0777 | 0766 | 0777 | 0766 | 0777 |           |                    | 0766 | 0755 | 0755 |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                  | 0    | 0055 |      |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                  | 0    | 0055 |      |
|  | 5           | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5         | 5                  | 5    | 0055 |      |
|  | 3           | 3    | 3    | 3    | 3    | 3    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 5    | 5    | 5    | 5    | 5    | 5    | 5         | 5                  | 6    | 0055 |      |
|  | 4           | 5    | 6    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4         | 5                  | 6    | 0055 |      |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymph Node, Mesenteric                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Erythrophagocytosis                      |   |   |   |   |   | 1 | 2 |   |   |   |   | 2 |   |   |   |   |   |   |   | 2 |   |   | 1 |
| Hyperplasia, Lymphocyte                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Histiocyte        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphocyte, Depletion                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spleen                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Developmental Malformation   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Extramedullary Hematopoiesis | 3 | 2 | 1 | 1 |   | 2 |   |   | 4 | 2 | 3 | 1 | 2 | 2 | 2 | 2 |   | 2 |   | 2 | 2 |   |   |
| Hyperplasia, Lymphocyte      |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigment                      |   | 1 | 1 | 2 | 1 |   | 1 | 2 |   | 2 |   |   | 1 | 1 | 1 |   | 2 | 1 |   | 2 | 1 | 1 | 2 |
| Arteriole, Mineral           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Red Pulp, Atrophy            |   |   |   |   |   |   | 2 | 3 |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 3 | 2 |
| White Pulp, Atrophy          |   |   |   |   |   |   | 1 | 2 |   |   |   |   |   |   |   |   | 3 | 1 |   | 1 |   | 2 | 3 |

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy                              | 3 |   | 2 | 3 | 4 | 2 | 3 | 4 | 4 | 2 | 2 | 4 | 3 |   | 3 | 2 | 1 | 4 | 4 | 1 | 4 | 3 | 4 |
| Cyst                                 |   | X |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | X | X |   |   |
| Ectopic Parathyroid Gland            |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | X |   |   |
| Ectopic Thyroid                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Epithelial              | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |

INTEGUMENTARY SYSTEM

|               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | I | + | + | + | + | M | + | + | + | + | + | M | + | + | + | + | + | + | + | + | M | + | + | + | + |
| Atrophy       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Galactocele   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked





Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                    |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|--------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST | 0721  | 0733  | 0751  | 0773  | 0761  | 0776  | 0756  | 0755  | 0777  | 0766  | 0777  | 0777  | 0777  | 0777  | 0777  | 0766  | 0777  | 0777  | 0766  | 0777  | 0766  | 0755  | 0755  | ANIMAL ID | males<br>(cont...) |
|  | ANIMAL ID   | 00534 | 00553 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 | 00555 |           |                    |

Choroid Plexus, Mineral  
Meninges, Hyperplasia  
Meninges, Hyperplasia, Granular Cell  
Pineal Gland, Mineral  
Pineal Gland, Vacuolation, Cytoplasmic

1

Nerve Trigeminal  
Degeneration

+ + + + + + + + + + + + + + + + + + + M + + + +  
2 2 3 2 1 3 2 1 2 2 3 2 1 2 1 1 3

Peripheral Nerve, Sciatic  
Degeneration  
Infiltration Cellular, Mononuclear Cell

+  
4 3 1 3 3 3 2 1 1 3 2 4 3 3 3 3 3 2 3 3 3 3 1 1 2  
1

Peripheral Nerve, Tibial  
Degeneration

+  
3 3 3 3 3 1 2 3 2 4 3 3 3 3 3 3 3 3 3 3 3 2 2 2

Spinal Cord, Cervical  
Degeneration

+  
1 1

Spinal Cord, Lumbar  
Degeneration  
Nerve, Degeneration

+  
3 3 4 2 3 3 1 1 3 3 2 4 4 3 3 3 3 2 3 3 3 3 2 1

Spinal Cord, Thoracic  
Degeneration  
Hemorrhage, Focal

+  
1 3 2 3 1 1 3 1 1 2 1 2 1 1 1 1 2 1 1 1 1 1 1 1

Trigeminal Ganglion  
Degeneration

M + + + + + + I + + + M + + + + + + + + + + + + + + + +  
1 1

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked















Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |                  |                        |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|------------------------|------------------|
|  | 0<br>6<br>6<br>2 | 0<br>7<br>3<br>3 | 0<br>6<br>6<br>3 | 0<br>7<br>3<br>2 | 0<br>7<br>1<br>5 | 0<br>6<br>4<br>2 | 0<br>7<br>2<br>9 | 0<br>6<br>5<br>6 | 0<br>6<br>6<br>0 | 0<br>6<br>6<br>4 | 0<br>6<br>6<br>1 | 0<br>2<br>1<br>2 | 0<br>6<br>2<br>4 | 0<br>7<br>3<br>2 | 0<br>6<br>3<br>0 | 0<br>6<br>7<br>1 | 0<br>5<br>7<br>4 | 0<br>6<br>6<br>7 | 0<br>5<br>8<br>2 | 0<br>6<br>8<br>7 |           |                    | 0<br>7<br>1<br>1 | 0<br>7<br>3<br>0       | 0<br>7<br>3<br>0 |
|  | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0         | 0                  | 0                | 0055667788990112345678 |                  |
|  | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0         | 0                  | 0                | 0055667788990112345678 |                  |

Edema 2  
 Inflammation, Acute  
 Inflammation, Chronic Active 1 1  
 Mineral  
 Ulcer  
 Epithelium, Hyperplasia 3 3 4 3  
 Epithelium, Hyperplasia, Atypical

Stomach, Glandular + + + + + + + + + + A + + + + + + + + + + + +  
 Erosion 1  
 Inflammation, Acute  
 Inflammation, Chronic Active 1  
 Mineral 1 4 2 2 3 2 2 2 3 3 1  
 Artery, Inflammation, Chronic Active

CARDIOVASCULAR SYSTEM

Aorta +  
 Mineral 2 3 3 1 3 1 2 3 3 1 3 3 1

Blood Vessel  
 Mineral

Heart +  
 Cardiomyopathy 2 1 1 4 2 3 4 2 1 3 1 1 1 1 4 4 1 3 2 1 1 1  
 Congestion  
 Thrombus 2  
 Artery, Mineral 2 2 1 3 2 3 3 1  
 Atrium, Dilatation  
 Atrium, Thrombus 3

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST      | HARLAN SPRAGUE DAWLEY RATS MALE |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | ANIMAL ID | males (cont...) |
|------------------|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-----------------|
|                  | 0662                            | 0733  | 0663  | 0732  | 0775  | 0674  | 0662  | 0666  | 0666  | 0666  | 0226  | 0677  | 0666  | 0666  | 0557  | 0666  | 0666  | 0556  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  |           |                 |
| 0.0W/kg(CDMA)chr | 00561                           | 00562 | 00563 | 00564 | 00565 | 00566 | 00567 | 00568 | 00569 | 00570 | 00571 | 00572 | 00573 | 00574 | 00575 | 00576 | 00577 | 00578 | 00579 | 00580 | 00581 | 00582 | 00583 | 00584 | 00585     |                 |

|                                     |           |   |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------------|-----------|---|--|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Atrium, Myocardium, Hypertrophy     | 3         |   |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
| Myocardium, Mineral                 | 1 2 1 1 1 |   |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
| Myocardium, Necrosis                | 2         |   |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
| Valve, Inflammation, Chronic Active | 2         |   |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
| Ventricle Right, Cardiomyopathy     | 1         | 2 |  | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

ENDOCRINE SYSTEM

|                                   |   |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
|-----------------------------------|---|---|---|-----|-----|---|---|---|---|-----|--|---|---|---|---|--|---|---|---|---|---|---|-----|--|---|---|---|
| Adrenal Cortex                    | +     |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Accessory Adrenal Cortical Nodule | X   |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Degeneration                      | 1   |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Hyperplasia                       | 2 2   |   | 2 |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   | 1 | 2 | 2 | 1 | 2 3 |  | 2 | 1 | 1 |
| Hypertrophy                       | 1   |   | 1 |     | 1 2 |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   | 1 | 2 | 3   |  | 1 | 1 | 2 |
| Necrosis                          | 3   |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Thrombus                          | 2   |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Vacuolation, Cytoplasmic          | 1 1 2 1   |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Adrenal Medulla                   | + + + M + |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Hyperplasia                       | 2 1 1 2 3 1 1 2 2                                   |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Thrombus                          | 1   |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Islets, Pancreatic                | +     |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Hyperplasia                       | 2 2   |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Parathyroid Gland                 | + + + + + + + M + + + + + + + + + + + + + + + + + + |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Hyperplasia                       | 3   | 2 |   | 4 3 |     | 2 | M | 4 | 4 | 2 1 |  | I | 2 | 2 | 3 |  | 1 | 3 |   |   |   |   |     |  |   |   |   |
| Pituitary Gland                   | +     |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Craniopharyngeal Duct, Cyst       |   |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |
| Pars Distalis, Cyst               | X   |   |   |     |     |   |   |   |   |     |  |   |   |   |   |  |   |   |   |   |   |   |     |  |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                             | HARLAN SPRAGUE DAWLEY RATS MALE |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | ANIMAL ID | males (cont...) |
|---|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------|-----------------|
|   | 062                             | 073 | 063 | 073 | 073 | 063 | 073 | 063 | 073 | 063 | 073 | 063 | 073 | 063 | 073 | 063 | 073 | 063 | 073 | 063 | 073 | 063 | 073 | 063 |           |                 |
| 0.0W/kg(CDMA)chr                        | 0                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0         |                 |
| Hyperplasia                             |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Inflammation, Granulomatous             |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Inflammation, Acute                     |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Inflammation, Chronic Active            |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Artery, Inflammation, Chronic Active    |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Duct, Dilation                          |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Prostate                                |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Decreased Secretory Fluid               |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Hemorrhage                              |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Infiltration Cellular, Mononuclear Cell |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Inflammation, Acute                     |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Inflammation, Chronic Active            |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Artery, Inflammation, Chronic Active    |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Epithelium, Hyperplasia                 |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Seminal Vesicle                         |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Decreased Secretory Fluid               |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Hemorrhage                              |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Inflammation, Acute                     |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Inflammation, Chronic Active            |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Artery, Inflammation, Chronic Active    |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Epithelium, Hyperplasia                 |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Testis                                  |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Cyst                                    |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Inflammation, Chronic Active            |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Pigment                                 |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Artery, Inflammation, Chronic Active    |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |
| Germ Cell, Degeneration                 |                                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |           |                 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          | ANIMAL ID | males<br>(cont...) |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------|-----------|--------------------|
|  | 0<br>6<br>6<br>2 | 0<br>7<br>3<br>3 | 0<br>6<br>6<br>3 | 0<br>7<br>3<br>2 | 0<br>7<br>1<br>5 | 0<br>6<br>4<br>2 | 0<br>7<br>2<br>9 | 0<br>6<br>5<br>6 | 0<br>6<br>6<br>4 | 0<br>6<br>0<br>1 | 0<br>6<br>9<br>2 | 0<br>6<br>1<br>4 | 0<br>7<br>3<br>2 | 0<br>6<br>3<br>0 | 0<br>6<br>7<br>1 | 0<br>5<br>2<br>4 | 0<br>6<br>6<br>7 | 0<br>5<br>6<br>2 | 0<br>6<br>8<br>7 | 0<br>7<br>1<br>1 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>0 | 0<br>5<br>8<br>4 |          |           |                    |
|  | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 00556611 |           |                    |
|  | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 00556611 |           |                    |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymph Node, Mesenteric                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Erythrophagocytosis                      |   |   |   |   |   |   |   |   | 3 |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lymphocyte                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Histiocyte        |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphocyte, Depletion                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spleen                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Developmental Malformation   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Extramedullary Hematopoiesis |   |   | 2 | 3 | 1 |   |   | 1 |   |   | 4 |   |   |   | 2 |   | 2 |   | 1 |   | 2 | 2 | 1 | 2 |
| Hyperplasia, Lymphocyte      |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1 |
| Pigment                      | 3 | 2 | 2 | 2 |   | 2 | 2 | 1 | 3 |   | 2 |   | 3 |   | 2 |   | 3 |   |   |   |   | 1 |   |   |
| Arteriole, Mineral           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Red Pulp, Atrophy            | 3 |   |   |   |   | 3 | 2 |   | 2 | 3 |   | 2 |   | 2 |   |   |   |   |   |   |   |   |   |   |
| White Pulp, Atrophy          | 3 |   |   |   |   | 3 | 2 | 1 | 2 | 4 | 2 | 3 |   | 1 |   | 1 |   | 2 |   |   |   |   | 2 |   |

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus                               | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Atrophy                              | 4 |   | 2 | 2 | 4 | 4 | 4 | 4 |   | 4 | 4 |   | 1 | 1 | 4 | 1 | 4 | 4 |   | 3 | 3 | 4 | 2 | 1 |
| Cyst                                 |   |   | X | X |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   | X |   |
| Ectopic Parathyroid Gland            |   |   | X |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Ectopic Thyroid                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Hemorrhage                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Epithelial              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active | 3 |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |

INTEGUMENTARY SYSTEM

|               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Mammary Gland | + | + | + | + | + | + | + | M | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Atrophy       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Galactocele   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked













|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>MALE</b><br><b>0.0W/kg(CDMA)chr</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|   |             | 2 | 6 | 5 | 7 | 5 | 6 | 7 | 6 | 6 | 5 | 6 | 4 | 6 | 7 | 6 |
|   |             | 4 | 5 | 6 | 3 | 1 | 1 | 3 | 8 | 4 | 5 | 4 | 9 | 0 | 0 | 2 |
|   |             | 8 | 8 | 9 | 4 | 0 | 6 | 3 | 8 | 8 | 5 | 5 | 6 | 0 | 5 | 9 |
|   | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|   |             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 |   |
|   |             | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 |   |
|   |             | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 |
| <b>* TOTALS</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**ALIMENTARY SYSTEM**

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |            |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------|------------|
| Esophagus                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |           |            |
| Dilation                             |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |           | <b>2</b>  | <b>4.0</b> |
| Hyperplasia                          |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |           | <b>1</b>  | <b>2.0</b> |
| Intestine Large, Cecum               | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | <b>75</b> |           |            |
| Edema                                |   |   |   |   |   |   |   |   |   |   |   | 3 |   | 2 | 1 |           | <b>11</b> | <b>2.0</b> |
| Erosion                              |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |           | <b>10</b> | <b>2.5</b> |
| Inflammation, Acute                  |   |   |   |   | 2 |   |   |   |   |   |   | 3 |   |   |   |           | <b>10</b> | <b>2.8</b> |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>3.0</b> |
| Ulcer                                |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |           | <b>6</b>  | <b>2.3</b> |
| Artery, Inflammation, Chronic Active |   |   |   |   | 2 |   |   |   |   |   |   | 2 |   | 2 | 2 |           | <b>20</b> | <b>2.1</b> |
| Artery, Mineral                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>2.0</b> |
| Epithelium, Regeneration             |   |   |   |   | 1 |   |   |   |   |   |   | 1 |   | 3 |   |           | <b>14</b> | <b>2.4</b> |
| Intestine Large, Colon               | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | <b>81</b> |           |            |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>1.0</b> |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>1.0</b> |
| Ulcer                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>1.0</b> |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 2 |           | <b>12</b> | <b>1.8</b> |
| Artery, Mineral                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2</b>  | <b>2.0</b> |
| Epithelium, Regeneration             |   |   |   |   | 2 |   |   |   |   |   |   |   |   | 3 |   |           | <b>5</b>  | <b>2.6</b> |
| Intestine Large, Rectum              | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | <b>83</b> |           |            |
| Edema                                |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |           | <b>1</b>  | <b>4.0</b> |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>1.0</b> |
| Hyperplasia, Lymphocyte              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>4.0</b> |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |           | <b>2</b>  | <b>2.5</b> |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>4</b>  | <b>1.8</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |
|--|-------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|  | 0<br>2<br>4<br>8              | 0<br>6<br>5<br>8      | 0<br>5<br>6<br>9      | 0<br>7<br>3<br>4      | 0<br>5<br>1<br>0      | 0<br>6<br>1<br>6      | 0<br>7<br>3<br>8      | 0<br>6<br>8<br>8      | 0<br>6<br>4<br>5      | 0<br>5<br>6<br>5      | 0<br>6<br>4<br>9      | 0<br>6<br>0<br>0      | 0<br>7<br>0<br>5      | 0<br>6<br>2<br>9      | 0<br>6<br>2<br>9      |          |
| ANIMAL ID  | 0<br>0<br>5<br>8<br>9         | 0<br>0<br>5<br>9<br>1 | 0<br>0<br>5<br>9<br>2 | 0<br>0<br>5<br>9<br>3 | 0<br>0<br>5<br>9<br>4 | 0<br>0<br>5<br>9<br>5 | 0<br>0<br>5<br>9<br>6 | 0<br>0<br>5<br>9<br>7 | 0<br>0<br>5<br>9<br>8 | 0<br>0<br>5<br>9<br>9 | 0<br>0<br>6<br>0<br>0 | 0<br>0<br>6<br>0<br>1 | 0<br>0<br>6<br>0<br>2 | 0<br>0<br>6<br>0<br>4 | 0<br>0<br>6<br>0<br>5 |          |
| Epithelium, Regeneration                               | 2                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3 2.3    |
| Intestine Small, Duodenum                              | + + A + + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 81       |
| Erosion  | 2                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0    |
| Ulcer  |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0    |
| Intestine Small, Ileum                                 | + + A + + A + + + + + + + + + |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 78       |
| Artery, Inflammation, Chronic Active                   |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 2.5    |
| Epithelium, Regeneration                               | 2                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0    |
| Intestine Small, Jejunum                               | + + A + A + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 73       |
| Liver  | + + + + + + + + + + + + + + + |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 90       |
| Angiectasis  |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0    |
| Basophilic Focus                                       |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1        |
| Clear Cell Focus                                       |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 8        |
| Eosinophilic Focus                                     | X X X                         |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 12       |
| Extramedullary Hematopoiesis                           |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 5 1.2    |
| Hepatodiaphragmatic Nodule                             |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1        |
| Infiltration Cellular, Mixed Cell                      |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3 1.0    |
| Mixed Cell Focus                                       | X X X X X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 32       |
| Artery, Inflammation, Chronic Active                   | 4                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 3.5    |
| Artery, Mineral  |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |
| Bile Duct, Cyst  |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3        |
| Bile Duct, Hyperplasia                                 | 1 2 1 1 1 2 2 1               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 41 1.2   |
| Hepatocyte, Degeneration                               |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0    |
| Hepatocyte, Necrosis                                   | 3                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 5 1.8    |
| Hepatocyte, Vacuolation, Cytoplasmic                   |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2        |
| Kupffer Cell, Pigment                                  |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>2<br>4<br>8      | 0<br>6<br>5<br>8      | 0<br>5<br>6<br>9      | 0<br>7<br>3<br>4      | 0<br>5<br>1<br>0      | 0<br>6<br>1<br>6      | 0<br>7<br>3<br>3      | 0<br>6<br>8<br>8      | 0<br>6<br>4<br>8      | 0<br>5<br>5<br>5      | 0<br>6<br>4<br>5      | 0<br>6<br>9<br>6      | 0<br>0<br>0<br>0      | 0<br>7<br>0<br>5      |                       |
| ANIMAL ID  | 0<br>0<br>5<br>8<br>9 | 0<br>0<br>5<br>9<br>1 | 0<br>0<br>5<br>9<br>2 | 0<br>0<br>5<br>9<br>3 | 0<br>0<br>5<br>9<br>4 | 0<br>0<br>5<br>9<br>5 | 0<br>0<br>5<br>9<br>6 | 0<br>0<br>5<br>9<br>7 | 0<br>0<br>5<br>9<br>8 | 0<br>0<br>5<br>9<br>9 | 0<br>0<br>6<br>0<br>0 | 0<br>0<br>6<br>0<br>1 | 0<br>0<br>6<br>0<br>2 | 0<br>0<br>6<br>0<br>4 | 0<br>0<br>6<br>0<br>5 |
| Periductal, Cholangiofibrosis                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 3.0                 |
| Mesentery  |                       |                       |                       |                       | +                     | +                     |                       | +                     |                       | +                     |                       | +                     |                       | +                     | 39                    |
| Hemorrhage   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0                 |
| Inflammation, Chronic                                  |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 1.5                 |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       | 2 3.0                 |
| Neovascularization                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       | 1 3.0                 |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       | 2                     | 3                     |                       | 4                     |                       | 1                     |                       | 1                     |                       | 2                     | 32 2.3                |
| Artery, Mineral  |                       |                       |                       |                       |                       | 1                     |                       |                       |                       | 2                     |                       | 2                     |                       | 3 1                   | 21 2.1                |
| Vein, Degeneration                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |
| Vein, Inflammation, Chronic Active                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |
| Pancreas   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90                    |
| Cyst   |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       | 1                     |
| Thrombus   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 4.0                 |
| Acinus, Atrophy  |                       |                       |                       |                       |                       | 1                     | 2                     | 1                     | 1                     |                       |                       |                       |                       | 1                     | 13 1.2                |
| Acinus, Hyperplasia                                    |                       |                       |                       |                       |                       | 2                     | 4                     | 3                     |                       | 1                     | 4                     | 2                     | 2                     | 2                     | 63 2.4                |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       | 2                     | 1                     | 2                     | 2                     | 2                     | 2                     | 3                     | 2                     | 2                     | 48 2.3                |
| Artery, Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       | 11 1.8                |
| Salivary Glands  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90                    |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       | 2                     |                       |                       |                       | 3                     |                       |                       |                       |                       | 11 2.5                |
| Artery, Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 2.5                 |
| Duct, Parotid Gland, Dilation                          |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       | 5 2.0                 |
| Duct, Parotid Gland, Inflammation, Acute               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Parotid Gland, Atrophy                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       | 2                     | 2 3                   | 18 2.0                |
| Parotid Gland, Inflammation, Acute                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 2.0                 |
| Parotid Gland, Vacuolation, Cytoplasmic                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Stomach, Forestomach                                   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90                    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 2 | 6 | 5 | 7 | 5 | 6 | 7 | 6 | 6 | 5 | 6 | 4 | 6 | 7 | 6 | 6 | 6 |
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> | 4 | 5 | 6 | 3 | 1 | 1 | 3 | 8 | 4 | 5 | 4 | 9 | 0 | 0 | 2 | 9 |   |
| <b>0.0W/kg(CDMA)chr</b>                | 8 | 8 | 9 | 4 | 0 | 6 | 3 | 8 | 8 | 5 | 5 | 6 | 0 | 5 | 9 |   |   |
| ANIMAL ID                              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|  | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 |   |   |
| <b>* TOTALS</b>                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                                   |  |  |   |  |  |   |  |  |   |  |  |  |   |   |  |  |  |   |
|-----------------------------------|--|--|---|--|--|---|--|--|---|--|--|--|---|---|--|--|--|---|
| Edema                             |  |  |   |  |  |   |  |  | 2 |  |  |  |   |   |  |  |  | 2 |
| Inflammation, Acute               |  |  |   |  |  |   |  |  | 1 |  |  |  |   |   |  |  |  |   |
| Inflammation, Chronic Active      |  |  | 2 |  |  |   |  |  |   |  |  |  | 2 |   |  |  |  |   |
| Mineral                           |  |  |   |  |  |   |  |  |   |  |  |  |   |   |  |  |  |   |
| Ulcer                             |  |  | 3 |  |  | 1 |  |  | 1 |  |  |  |   | 3 |  |  |  |   |
| Epithelium, Hyperplasia           |  |  | 3 |  |  |   |  |  |   |  |  |  | 4 | 2 |  |  |  |   |
| Epithelium, Hyperplasia, Atypical |  |  |   |  |  |   |  |  |   |  |  |  |   |   |  |  |  |   |

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Stomach, Glandular                   | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 86 |
| Erosion                              |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |    |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Mineral                              |   |   |   |   |   | 2 |   |   | 3 |   | 2 |   | 3 |   | 1 | 3 |   |    |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |

**CARDIOVASCULAR SYSTEM**

|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Aorta   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |
| Mineral |   |   |   |   |   |   |   |   | 2 | 1 | 2 |   | 2 |   | 2 | 1 |   |    |

|              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|--------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Blood Vessel |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Mineral      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |

|                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Heart              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |
| Cardiomyopathy     | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 3 | 1 | 3 | 2 | 2 | 1 | 2 | 2 |   |   |    |
| Congestion         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Thrombus           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Artery, Mineral    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |    |
| Atrium, Dilatation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Atrium, Thrombus   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 2 | 6 | 5 | 7 | 5 | 6 | 7 | 6 | 6 | 5 | 6 | 4 | 6 | 7 | 6 | 6 | 6 |
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> | 4 | 5 | 6 | 3 | 1 | 1 | 3 | 8 | 4 | 5 | 4 | 9 | 0 | 0 | 2 | 9 |   |
| <b>0.0W/kg(CDMA)chr</b>                | 8 | 8 | 9 | 4 | 0 | 6 | 3 | 8 | 8 | 5 | 5 | 6 | 0 | 5 | 9 |   |   |
| ANIMAL ID                              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|  | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 |   |   |
| <b>* TOTALS</b>                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                                     |  |   |   |   |   |   |  |   |  |   |   |   |   |   |   |  |  |               |
|-------------------------------------|--|---|---|---|---|---|--|---|--|---|---|---|---|---|---|--|--|---------------|
| Atrium, Myocardium, Hypertrophy     |  |   |   |   |   |   |  |   |  |   |   |   |   |   |   |  |  | <b>1 3.0</b>  |
| Myocardium, Mineral                 |  |   |   |   |   |   |  |   |  |   |   |   | 1 |   |   |  |  | <b>9 1.4</b>  |
| Myocardium, Necrosis                |  |   |   |   |   |   |  |   |  |   |   |   |   |   |   |  |  | <b>1 2.0</b>  |
| Valve, Inflammation, Chronic Active |  |   |   |   |   |   |  |   |  |   |   |   |   |   |   |  |  | <b>1 2.0</b>  |
| Ventricle Right, Cardiomyopathy     |  | 1 | 2 | 1 | 1 | 1 |  | 1 |  | 1 | 1 | 1 | 1 | 1 | 2 |  |  | <b>54 1.1</b> |

**ENDOCRINE SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   | <b>6</b>      |
| Degeneration                      |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   | <b>3 1.0</b>  |
| Hyperplasia                       |   | 3 | 2 | 1 |   | 1 |   |   | 1 |   | 2 | 2 |   |   | 2 |   |   | <b>47 1.7</b> |
| Hypertrophy                       |   |   |   | 2 |   |   |   |   | 2 |   | 1 |   | 2 | 1 |   |   |   | <b>35 1.5</b> |
| Necrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>5 2.4</b>  |
| Thrombus                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 3.0</b>  |
| Vacuolation, Cytoplasmic          |   |   |   | 1 |   |   |   |   |   |   | 1 |   |   |   |   | 1 |   | <b>20 1.5</b> |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>88</b>     |
| Hyperplasia                       |   | 4 |   |   |   | 1 |   | 1 | 2 | 4 |   | 1 |   | 1 | 4 |   |   | <b>42 2.0</b> |
| Thrombus                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>12 1.5</b> |
| Parathyroid Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M |   | <b>83</b>     |
| Hyperplasia                       |   |   | 3 |   | 4 | 1 |   | 3 | 1 | 4 | 2 | 2 | 2 | 4 |   |   |   | <b>51 2.5</b> |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>89</b>     |
| Craniopharyngeal Duct, Cyst       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |
| Pars Distalis, Cyst               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>5</b>      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                 |            |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------|------------|
|  | 0<br>2<br>4<br>8      | 0<br>6<br>5<br>8      | 0<br>5<br>6<br>9      | 0<br>7<br>3<br>4      | 0<br>5<br>1<br>0      | 0<br>6<br>1<br>6      | 0<br>7<br>3<br>8      | 0<br>6<br>8<br>8      | 0<br>6<br>5<br>8      | 0<br>5<br>4<br>5      | 0<br>6<br>9<br>5      | 0<br>4<br>0<br>6      | 0<br>6<br>0<br>0      | 0<br>7<br>0<br>5      | 0<br>6<br>2<br>9      |                 |            |
| ANIMAL ID  | 0<br>0<br>5<br>8<br>9 | 0<br>0<br>5<br>9<br>1 | 0<br>0<br>5<br>9<br>2 | 0<br>0<br>5<br>9<br>3 | 0<br>0<br>5<br>9<br>4 | 0<br>0<br>5<br>9<br>5 | 0<br>0<br>5<br>9<br>6 | 0<br>0<br>5<br>9<br>7 | 0<br>0<br>5<br>9<br>8 | 0<br>0<br>5<br>9<br>9 | 0<br>0<br>6<br>0<br>0 | 0<br>0<br>6<br>0<br>1 | 0<br>0<br>6<br>0<br>2 | 0<br>0<br>6<br>0<br>4 | 0<br>0<br>6<br>0<br>5 | <b>* TOTALS</b> |            |
| Pars Distalis, Hyperplasia                             |                       | 1                     |                       | 4                     |                       |                       | 4                     | 1                     |                       | 2                     | 2                     |                       | 3                     | 2                     | 3                     |                 |            |
| Pars Intermedia, Angiectasis                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>        | <b>4.0</b> |
| Pars Intermedia, Cyst                                  |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       | <b>6</b>        |            |
| Pars Intermedia, Hyperplasia                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>        | <b>3.0</b> |
| Thyroid Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | <b>89</b>       |            |
| C-cell, Hyperplasia                                    |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       | 3                     |                       |                       |                       | <b>16</b>       | <b>1.8</b> |
| Follicle, Hyperplasia, Cystic                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>        | <b>1.0</b> |
| <b>GENERAL BODY SYSTEM</b>                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                 |            |
| Tissue NOS   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>3</b>        |            |
| Abdominal, Fat, Hemorrhage                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>        | <b>3.0</b> |
| Fat, Necrosis  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>2</b>        | <b>3.0</b> |
| <b>GENITAL SYSTEM</b>                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                 |            |
| Bulbourethral Gland                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     |                       |                       |                       | <b>1</b>        |            |
| Ductus Deferens  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>        |            |
| Granuloma  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>        | <b>4.0</b> |
| Epididymis   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | <b>90</b>       |            |
| Exfoliated Germ Cell                                   |                       |                       | 1                     |                       | 3                     | 1                     | 1                     | 3                     | 1                     | 2                     | 2                     | 2                     |                       | 2                     | 2                     | <b>51</b>       | <b>1.9</b> |
| Granuloma Sperm  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>        | <b>3.0</b> |
| Hypospermia  |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       |                       |                       | 4                     |                       | <b>28</b>       | <b>3.4</b> |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>2</b>        | <b>2.5</b> |
| Preputial Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | <b>88</b>       |            |
| Atrophy  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>        | <b>2.0</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|  | 0<br>2<br>4<br>8      | 0<br>6<br>5<br>8      | 0<br>5<br>6<br>9      | 0<br>7<br>3<br>4      | 0<br>5<br>1<br>0      | 0<br>6<br>1<br>6      | 0<br>7<br>3<br>8      | 0<br>6<br>8<br>8      | 0<br>6<br>5<br>5      | 0<br>5<br>4<br>8      | 0<br>6<br>9<br>5      | 0<br>4<br>0<br>6      | 0<br>6<br>0<br>0      | 0<br>7<br>0<br>5      | 0<br>6<br>2<br>9      |          |
| ANIMAL ID  | 0<br>0<br>5<br>8<br>9 | 0<br>0<br>5<br>9<br>1 | 0<br>0<br>5<br>9<br>2 | 0<br>0<br>5<br>9<br>3 | 0<br>0<br>5<br>9<br>4 | 0<br>0<br>5<br>9<br>5 | 0<br>0<br>5<br>9<br>6 | 0<br>0<br>5<br>9<br>7 | 0<br>0<br>5<br>9<br>8 | 0<br>0<br>5<br>9<br>9 | 0<br>0<br>6<br>9<br>0 | 0<br>0<br>6<br>9<br>1 | 0<br>0<br>6<br>0<br>2 | 0<br>0<br>6<br>0<br>4 | 0<br>0<br>6<br>0<br>5 |          |
| Hyperplasia  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |          |
| Inflammation, Granulomatous                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 4.0                 |          |
| Inflammation, Acute                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |          |
| Inflammation, Chronic Active                           |                       | 2                     |                       | 1                     | 2                     | 3                     |                       | 2                     |                       | 3                     |                       | 2                     | 2                     |                       | 46 2.0                |          |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0                 |          |
| Duct, Dilation   |                       | 3                     |                       | 3                     |                       | 2                     | 2                     |                       | 1                     | 4                     | 4                     |                       |                       | 3                     | 51 2.4                |          |
| Prostate   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90                    |          |
| Decreased Secretory Fluid                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4 2.0                 |          |
| Hemorrhage   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |          |
| Infiltration Cellular, Mononuclear Cell                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |          |
| Inflammation, Acute                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 7 2.9                 |          |
| Inflammation, Chronic Active                           |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 6 1.2                 |          |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0                 |          |
| Epithelium, Hyperplasia                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 5 1.2                 |          |
| Seminal Vesicle  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90                    |          |
| Decreased Secretory Fluid                              |                       |                       |                       |                       |                       |                       | 1                     | 1                     |                       | 3                     |                       |                       |                       | 4                     | 35 2.9                |          |
| Hemorrhage   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |          |
| Inflammation, Acute                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4 3.0                 |          |
| Inflammation, Chronic Active                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       | 1 1.0                 |          |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0                 |          |
| Epithelium, Hyperplasia                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |          |
| Testis   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90                    |          |
| Cyst   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |          |
| Inflammation, Chronic Active                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 3.5                 |          |
| Pigment  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |          |
| Artery, Inflammation, Chronic Active                   |                       |                       | 3                     | 3                     |                       |                       | 3                     | 3                     | 2                     |                       |                       | 3                     | 3                     | 4                     | 52 2.9                |          |
| Germ Cell, Degeneration                                |                       |                       |                       |                       | 2                     | 1                     |                       | 2                     |                       | 4                     |                       | 2                     |                       | 3                     | 51 2.3                |          |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 2 | 6 | 5 | 7 | 5 | 6 | 7 | 6 | 6 | 5 | 6 | 4 | 6 | 7 | 6 |   |
|  |             | 4 | 5 | 6 | 3 | 1 | 1 | 3 | 8 | 4 | 5 | 4 | 9 | 0 | 0 | 2 |   |
|  |             | 8 | 8 | 9 | 4 | 0 | 6 | 3 | 8 | 8 | 5 | 5 | 6 | 0 | 5 | 9 |   |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 |   |
|  |             | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |             | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 |   |
| <b>* TOTALS</b>  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                                |   |     |
|--------------------------------|---|-----|
| Interstitial Cell, Hyperplasia | 1 | 1.0 |
| Rete Testis, Dilation          | 1 | 2.0 |
| Seminiferous Tubule, Dilation  | 1 | 2.0 |

HEMATOPOIETIC SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Bone Marrow                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 90  |     |
| Hypercellularity                         |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |    | 15  | 1.9 |
| Lymph Node                               |   |   |   | + |   |   |   |   |   |   |   | + |   | + | + | 25 |     |     |
| Iliac, Erythrophagocytosis               |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 2.0 |
| Iliac, Hyperplasia, Lymphocyte           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 2.0 |
| Iliac, Infiltration Cellular, Histiocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 2.0 |
| Iliac, Proliferation, Plasma Cell        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3   | 2.0 |
| Iliac, Lymphatic Sinus, Ectasia          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 5   | 1.8 |
| Lumbar, Erythrophagocytosis              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 2.0 |
| Lymphatic Sinus, Mediastinal, Ectasia    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 3.0 |
| Mediastinal, Erythrophagocytosis         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 6   | 2.5 |
| Mediastinal, Hemorrhage                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 3.0 |
| Pancreatic, Erythrophagocytosis          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3   | 2.3 |
| Pancreatic, Hemorrhage                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 2.0 |
| Pancreatic, Hyperplasia, Lymphocyte      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 3.0 |
| Renal, Erythrophagocytosis               |   |   |   |   |   |   |   |   |   |   |   | 3 |   | 2 | 3 | 8  | 2.6 |     |
| Renal, Proliferation, Plasma Cell        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 2.0 |
| Lymph Node, Mandibular                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 89 |     |     |
| Hyperplasia, Lymphocyte                  |   |   |   | 2 | 2 |   | 1 | 1 |   |   |   | 2 |   | 1 |   | 41 | 1.8 |     |
| Infiltration Cellular, Polymorphonuclear |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   | 2  | 2.5 |     |
| Proliferation, Plasma Cell               |   |   |   |   | 1 | 2 | 3 |   | 2 | 1 |   | 2 | 1 | 2 |   | 2  | 49  | 1.9 |
| Lymphatic Sinus, Ectasia                 |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 2  | 16  | 1.9 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--|-------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  | ANIMAL ID   | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 2               | 6 | 5 | 7 | 5 | 6 | 7 | 6 | 6 | 5 | 6 | 4 | 6 | 7 | 6 |  |
|  |             | 4               | 5 | 6 | 3 | 1 | 1 | 3 | 8 | 4 | 5 | 4 | 9 | 0 | 0 | 2 |  |
|  |             | 8               | 8 | 9 | 4 | 0 | 6 | 3 | 8 | 8 | 5 | 5 | 6 | 0 | 5 | 9 |  |
|  |             | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 5               | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 |  |
|  |             | 8               | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 9               | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 |  |
|  |             | <b>* TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |    |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----|-----|
| Lymph Node, Mesenteric                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |    |     |
| Erythrophagocytosis                      |   |   |   |   |   |   |   |   |   |   | 2 | 2 |   |   | 2 |           | 17 | 1.8 |
| Hyperplasia, Lymphocyte                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | 2  | 1.5 |
| Infiltration Cellular, Histiocyte        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | 1  | 2.0 |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | 2  | 2.0 |
| Lymphocyte, Depletion                    |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |           | 2  | 2.5 |
| Spleen                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |    |     |
| Developmental Malformation               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | 1  |     |
| Extramedullary Hematopoiesis             |   |   |   | 2 |   |   |   | 1 |   | 3 |   |   |   | 3 |   |           | 45 | 1.9 |
| Hyperplasia, Lymphocyte                  |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |           | 5  | 1.2 |
| Pigment                                  |   |   | 3 | 2 | 2 | 2 | 2 | 1 | 2 |   | 3 | 2 |   |   | 2 |           | 57 | 1.9 |
| Arteriole, Mineral                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | 1  | 2.0 |
| Red Pulp, Atrophy                        |   |   | 1 |   |   |   | 2 |   | 3 |   | 4 | 1 |   | 2 | 2 |           | 26 | 2.2 |
| White Pulp, Atrophy                      |   |   | 1 |   |   |   |   |   | 2 |   | 3 |   |   |   | 3 |           | 30 | 2.1 |
| Thymus                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>88</b> |    |     |
| Atrophy                                  | 3 | 3 | 2 |   | 3 | 4 | 2 | 4 | 4 | 4 | 2 | 2 | 2 | 4 | 4 |           | 79 | 3.0 |
| Cyst                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |           | 10 |     |
| Ectopic Parathyroid Gland                |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |           | 6  |     |
| Ectopic Thyroid                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | 1  |     |
| Hemorrhage                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | 2  | 2.0 |
| Hyperplasia, Epithelial                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | 2  | 1.5 |
| Artery, Inflammation, Chronic Active     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | 6  | 2.7 |

INTEGUMENTARY SYSTEM

|               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |   |     |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---|-----|
| Mammary Gland | + | + | + | + | M | + | + | + | + | + | M | + | + | + | + | <b>82</b> |   |     |
| Atrophy       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | 1 | 4.0 |
| Galactocele   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | 1 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 2 | 6 | 5 | 7 | 5 | 6 | 7 | 6 | 6 | 5 | 6 | 4 | 6 | 7 | 6 | 6 | 6 |
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> | 4 | 5 | 6 | 3 | 1 | 1 | 3 | 8 | 4 | 5 | 4 | 9 | 0 | 0 | 2 | 9 |   |
| <b>0.0W/kg(CDMA)chr</b>                | 8 | 8 | 9 | 4 | 0 | 6 | 3 | 8 | 8 | 5 | 5 | 6 | 0 | 5 | 9 |   |   |
| ANIMAL ID                              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|  | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 |   |   |
| <b>* TOTALS</b>                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Duct, Dilation 3 2.0

Skin 90

Cyst Epithelial Inclusion X 3

Inflammation, Chronic Active 1 2.0

Ulcer 4 2 4.0

Artery, Subcutaneous Tissue, Inflammation, Chronic Active 1 3.0

Epidermis, Hyperplasia 1 2.0

Subcutaneous Tissue, Inflammation, Suppurative 1 4.0

Subcutaneous Tissue, Inflammation, Chronic 1 2.0

MUSCULOSKELETAL SYSTEM

Bone 90

Fibrous Osteodystrophy 1 1 1 1 4 2 2 1 1 2 46 1.4

Skeletal Muscle 90

Degeneration 2 3 2 2 2 2 34 1.8

Mineral 1 2 1 2.0

NERVOUS SYSTEM

Brain 90

Compression 7 1.6

Hemorrhage 2 1.5

Infiltration Cellular, Mononuclear Cell 1 1.0

Mineral 1 1.0

Necrosis 1 2 7 1.7

Choroid Plexus, Degeneration 1 2.0

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|  | 0<br>2<br>4<br>8      | 0<br>6<br>5<br>8      | 0<br>5<br>6<br>9      | 0<br>7<br>3<br>4      | 0<br>5<br>1<br>0      | 0<br>6<br>1<br>6      | 0<br>7<br>3<br>8      | 0<br>6<br>8<br>8      | 0<br>6<br>4<br>5      | 0<br>5<br>6<br>5      | 0<br>6<br>4<br>9      | 0<br>6<br>0<br>0      | 0<br>7<br>0<br>5      | 0<br>6<br>2<br>9      | 0<br>6<br>2<br>9      |          |
| ANIMAL ID  | 0<br>0<br>5<br>8<br>9 | 0<br>0<br>5<br>9<br>1 | 0<br>0<br>5<br>9<br>2 | 0<br>0<br>5<br>9<br>3 | 0<br>0<br>5<br>9<br>4 | 0<br>0<br>5<br>9<br>5 | 0<br>0<br>5<br>9<br>6 | 0<br>0<br>5<br>9<br>7 | 0<br>0<br>5<br>9<br>8 | 0<br>0<br>5<br>9<br>9 | 0<br>0<br>6<br>0<br>0 | 0<br>0<br>6<br>0<br>1 | 0<br>0<br>6<br>0<br>2 | 0<br>0<br>6<br>0<br>4 | 0<br>0<br>6<br>0<br>5 |          |
| Choroid Plexus, Mineral                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       | 1                     | 3 1.0                 |          |
| Meninges, Hyperplasia                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |          |
| Meninges, Hyperplasia, Granular Cell                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |          |
| Pineal Gland, Mineral                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     | 3 1.3                 |          |
| Pineal Gland, Vacuolation, Cytoplasmic                 | 1                     | 1                     |                       |                       |                       |                       |                       | 2                     |                       | 2                     |                       |                       | 3                     |                       | 12 2.0                |          |
| Nerve Trigeminal Degeneration                          | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 84<br>63 2.0          |          |
| Peripheral Nerve, Sciatic Degeneration                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 90<br>86 2.4          |          |
| Infiltration Cellular, Mononuclear Cell                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |          |
| Peripheral Nerve, Tibial Degeneration                  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 88<br>84 2.6          |          |
| Spinal Cord, Cervical Degeneration                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90<br>30 1.0          |          |
| Spinal Cord, Lumbar Degeneration                       | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90<br>21 1.0          |          |
| Nerve, Degeneration                                    | 1                     | 2                     | 1                     | 2                     |                       | 3                     | 3                     | 2                     |                       | 2                     | 1                     | 3                     | 1                     | 2                     | 79 2.4                |          |
| Spinal Cord, Thoracic Degeneration                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90<br>58 1.5          |          |
| Hemorrhage, Focal                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |          |
| Trigeminal Ganglion Degeneration                       | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | M                     | 75<br>23 1.0          |          |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                            |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> |                         | 2 | 6 | 5 | 7 | 5 | 6 | 7 | 6 | 6 | 5 | 6 | 4 | 6 | 7 | 6 |   |
|  |                         | 4 | 5 | 6 | 3 | 1 | 1 | 3 | 8 | 4 | 5 | 4 | 9 | 0 | 0 | 2 |   |
|  |                         | 8 | 8 | 9 | 4 | 0 | 6 | 3 | 8 | 8 | 5 | 5 | 6 | 0 | 5 | 9 |   |
|  | <b>0.0W/kg(CDMA)chr</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| ANIMAL ID                              |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |                         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 |   |
|  |                         | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |                         | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 |   |
| <b>* TOTALS</b>                        |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

RESPIRATORY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Lung   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |
| Congestion   |   |   | 2 | 3 |   |   | 2 |   |   |   |   |   |   |   |   |   | <b>13 2.0</b> |
| Foreign Body   | X |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | <b>4</b>      |
| Hemorrhage   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3 1.7</b>  |
| Inflammation, Suppurative                                | 3 |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | <b>3 2.7</b>  |
| Inflammation, Chronic Active                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 1.0</b>  |
| Inflammation, Subacute                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 1.5</b>  |
| Alveolus, Infiltration Cellular, Histiocyte              |   |   |   | 1 | 1 | 1 | 1 |   |   |   |   |   |   |   | 2 |   | <b>37 1.2</b> |
| Artery, Inflammation, Chronic Active                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   | <b>3 2.3</b>  |
| Artery, Mineral  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Artery, Mediastinum, Inflammation, Chronic Active        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 1.5</b>  |
| Epithelium Alveolus, Hyperplasia                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3 2.7</b>  |
| Interstitial, Mineral                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Perivascular, Inflammation, Chronic Active               |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | <b>1 2.0</b>  |
| Nose   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>89</b>     |
| Foreign Body   | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | <b>5</b>      |
| Inflammation, Suppurative                                | 3 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   | <b>10 1.6</b> |
| Nasopharyngeal Duct, Respiratory Epithelium, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   | <b>1 3.0</b>  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet      |   |   | 3 | 2 | 1 | 3 | 2 | 2 | 2 | 2 |   | 3 | 2 | 2 | 2 | 3 | <b>79 1.9</b> |
| Olfactory Epithelium, Metaplasia, Respiratory            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3 1.0</b>  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3 1.0</b>  |
| Respiratory Epithelium, Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3 1.3</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST                        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                    | 2 | 6 | 5 | 7 | 5 | 6 | 7 | 6 | 6 | 5 | 6 | 4 | 6 | 7 | 6 |
| HARLAN SPRAGUE DAWLEY RATS<br>MALE | 4 | 5 | 6 | 3 | 1 | 1 | 3 | 8 | 4 | 5 | 4 | 9 | 0 | 0 | 2 |
|                                    | 8 | 8 | 9 | 4 | 0 | 6 | 3 | 8 | 8 | 5 | 5 | 6 | 0 | 5 | 9 |
| 0.0W/kg(CDMA)chr                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID                          | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 |
|                                    | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 |
|                                    | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 |

\* TOTALS

Respiratory Epithelium, Hyperplasia, Goblet Cell 1 1.0

Respiratory Epithelium, Mineral 1 2.0

Trachea + + + + + + + + + + + + + + 90

Artery, Mineral 1 3.0

Epithelium, Hyperplasia 3 1 3.0

Epithelium, Metaplasia, Squamous 1 1.0

SPECIAL SENSES SYSTEM

Eye + + A + + + + + + + + + + + + 85

Retinal Detachment 1 3.0

Anterior Chamber, Inflammation, Acute 2 4 1.8

Cornea, Fibrosis 1 1.0

Cornea, Inflammation, Acute 1 1 3 1 3 28 2.1

Cornea, Neovascularization 1 2 10 1.4

Cornea, Ulcer 3 2 6 2.5

Cornea, Epithelium, Hyperplasia 1 2 13 2.4

Retina, Atrophy 1 6 1.3

Retina, Degeneration 1 1.0

Harderian Gland + + + + + + + + + + + + + + 90

Atrophy 1 1.0

Degeneration, Cystic 2 1.5

Inflammation, Acute 2 2.5

Inflammation, Chronic Active 2 1.0

Lacrimal Gland 2

Metaplasia, Harderian Gland 2 2.0

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0.0W/kg(CDMA)chr | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | ANIMAL ID   | 2 | 6 | 5 | 7 | 5 | 6 | 7 | 6 | 6 | 5 | 6 | 4 | 6 | 7 | 6 | 6 |
|  |             | 4 | 5 | 6 | 3 | 1 | 1 | 3 | 8 | 4 | 5 | 4 | 9 | 0 | 0 | 2 | 9 |
|  |             | 8 | 8 | 9 | 4 | 0 | 6 | 3 | 8 | 8 | 5 | 5 | 6 | 0 | 5 | 9 |   |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|  |             | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 |   |
| <b>* TOTALS</b>  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

URINARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Kidney                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90     |
| Mineral                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0  |
| Nephropathy, Chronic Progressive     | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 88 3.7 |
| Thrombus                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0  |
| Artery, Mineral                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 2.0  |
| Pelvis, Dilation                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Renal Tubule, Cyst                   |   |   |   |   | X |   |   |   |   |   |   |   |   | X | X |   | 18     |
| Renal Tubule, Hyperplasia, Atypical  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 3.0  |
| Renal Tubule, Hyperplasia, Oncocytic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 1.0  |
| Urothelium, Hyperplasia              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Urinary Bladder                      | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | 89     |
| Hemorrhage                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 3.0  |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 2.5  |
| Necrosis                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0  |
| Muscularis, Degeneration             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0  |
| Urothelium, Hyperplasia              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>MALE</b><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 0719 | 0719 | 0719 | 0719 | 0674 | 0774 | 0667 | 0551 | 0553 | 0553 | 0764 | 0664 | 0666 | 0771 | 0773 | 0773 | 0669 | 0773 | 0662 | 0773 | 0667 | 0777 | 0777 | <b>males</b><br><b>(cont...)</b> |
|   | ANIMAL ID   | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 | 0139 |                                  |

ALIMENTARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Hemorrhage                           |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Regeneration             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Intestine Large, Colon               | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + |
| Cyst                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Rectum              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Duodenum            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + |
| Dilation                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Ectopic Tissue                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Ulcer                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Ileum               | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + |
| Congestion                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked





Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1.5W/kg(CDMA)chr | DAY ON TEST | 0719 | 0719 | 0719 | 0719 | 0674 | 0774 | 0667 | 0551 | 0551 | 0551 | 0764 | 0664 | 0664 | 0664 | 0771 | 0771 | 0771 | 0663 | 0773 | 0662 | 0772 | 0773 | 0774 | ANIMAL ID | males<br>(cont...) |
|  | ANIMAL ID   | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 | 0134 |           |                    |

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stomach, Glandular Erosion Mineral | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + |
|                                    | 3 |   |   |   |   |   |   | 3 |   |   |   |   |   | 3 | 2 |   |   |   |   |   | 1 |   |   |   |   |

CARDIOVASCULAR SYSTEM

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aorta Dilation Mineral | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|                        | 1 |   |   |   |   |   |   | 2 |   |   |   |   |   | 2 |   | 3 | 2 |   |   |   |   |   |   |   |

|   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Blood Vessel Pulmonary Artery, Mineral Pulmonary Artery, Necrosis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart Cardiomyopathy Artery, Degeneration Artery, Mineral Artery, Pericardium, Pigment Atrium, Dilatation Atrium, Thrombus Atrium, Myocardium, Hypertrophy Atrium, Myocardium, Necrosis Myocardium, Mineral Myocardium, Necrosis Ventricle Right, Cardiomyopathy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
|  | 3 | 1 | 1 | 2 | 1 | 3 | 2 | 3 |   | 1 | 1 | 2 |   | 3 | 3 | 2 | 2 |   | 2 | 2 | 2 | 1 | 1 | 1 | 2 |
|  | 3 |   |   |   |   |   |   | 2 |   |   |   |   |   | 2 | 2 |   |   |   |   |   |   |   |   |   |   |
|  |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   |   |   |   |   |
|  | 2 | 1 | 1 | 1 | 1 | 1 |   |   | 3 |   |   |   |   | 3 | 2 | 1 |   |   | 1 | 1 | 2 | 1 | 1 | 1 | 1 |

ENDOCRINE SYSTEM

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked





















Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1.5W/kg(CDMA)chr | DAY ON TEST |   | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |   |   |
|--|-------------|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|---|
|  | 0           | 0 | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    | 0 | 0 |
|  | 7           | 7 | 7         | 7 | 6 | 7 | 7 | 6 | 5 | 5 | 5 | 7 | 6 | 6 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 6 |                    | 7 | 7 |
|  | 1           | 3 | 3         | 3 | 1 | 1 | 3 | 3 | 9 | 7 | 5 | 3 | 3 | 9 | 1 | 3 | 3 | 3 | 9 | 3 | 3 | 2 | 3                  | 3 |   |
|  | 9           | 0 | 2         | 4 | 4 | 0 | 4 | 7 | 1 | 3 | 0 | 4 | 4 | 4 | 5 | 1 | 2 | 3 | 3 | 7 | 0 | 4 | 0                  | 4 |   |
|  | 0           | 0 | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  | 0 |   |
|  | 1           | 1 | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1                  | 1 |   |
|  | 3           | 3 | 3         | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3                  | 3 |   |
|  | 4           | 4 | 4         | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6                  | 6 |   |
|  | 3           | 4 | 5         | 6 | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9                  | 3 |   |
| Renal Tubule, Cyst                                     | X           |   |           |   |   | X |   | X |   |   |   |   |   | X |   | X |   |   |   |   |   |   |                    |   |   |
| Renal Tubule, Hyperplasia, Atypical                    |             |   |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |   |   |
| Urinary Bladder  | +           | + | +         | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | A | +                  | + | + |
| Dilation   |             |   |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |   |   |
| Hemorrhage   |             |   |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |   |   |
| Inflammation, Acute                                    |             |   |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |   |   |
| Inflammation, Chronic Active                           |             |   |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |   | 3 |
| Artery, Inflammation, Chronic Active                   |             |   |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |   |   |
| Urothelium, Hyperplasia                                |             |   |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |                    |   | 3 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>MALE</b><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 0732 | 0734 | 0674 | 0751 | 0664 | 0368 | 0664 | 0666 | 0767 | 0777 | 0676 | 0776 | 0777 | 0676 | 0776 | 0777 | 0676 | 0776 | 0655 | 0757 | 0575 | <b>males</b><br><b>(cont...)</b> |
|   | ANIMAL ID   | 0137 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 | 0113 |                                  |

ALIMENTARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Intestine Large, Cecum               | + | + | A | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | A | + | A |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Regeneration             | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 2 |   |
| Intestine Large, Colon               | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A |   |
| Cyst                                 |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Rectum              | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | A |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Duodenum            | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Dilation                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ectopic Tissue                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Intestine Small, Ileum               | + | + | A | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A |
| Congestion                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1.5W/kg(CDMA)chr | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       | ANIMAL ID | males<br>(cont...) |  |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-----------|--------------------|--|
|  | 0732        | 0734 | 0764 | 0771 | 0754 | 0766 | 0733 | 0766 | 0766 | 0777 | 0777 | 0777 | 0766 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0766 | 0755 | 0777 | 0755 |       |           |                    |  |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 01374 |           |                    |  |
| Intestine Small, Jejunum                               | +           | +    | A    | +    | A    | +    | A    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | A    | +    | +     | A         |                    |  |
| Liver  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +     | +         |                    |  |
| Angiectasis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Clear Cell Focus                                       |             |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Eosinophilic Focus                                     | X           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Extramedullary Hematopoiesis                           |             |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Hepatodiaphragmatic Nodule                             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Infiltration Cellular, Mixed Cell                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Mixed Cell Focus                                       | X           |      |      | X    |      | X    |      | X    | X    |      |      |      | X    |      | X    | X    | X    | X    |      | X    |      |      |      | X    |       |           |                    |  |
| Artery, Inflammation, Chronic Active                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Artery, Mineral  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Bile Duct, Cyst  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       | X         |                    |  |
| Bile Duct, Hyperplasia                                 |             |      |      | 1    |      | 1    |      | 1    |      |      |      | 1    |      | 1    | 1    |      |      |      |      |      | 1    | 1    |      | 1    | 2     |           |                    |  |
| Hepatocyte, Necrosis                                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       | 3         |                    |  |
| Hepatocyte, Vacuolation, Cytoplasmic                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Periductal, Cholangiofibrosis                          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |       |           |                    |  |
| Mesentery  | +           |      |      |      |      |      |      |      |      |      |      | +    |      |      |      |      |      |      |      |      | +    |      | +    |      |       |           |                    |  |
| Fibrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Necrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Neovascularization                                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Artery, Inflammation, Chronic Active                   | 4           |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      | 4    |      | 1    |      |       |           |                    |  |
| Artery, Mineral  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Vein, Inflammation, Chronic Active                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Oral Mucosa  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |
| Ulcer  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |           |                    |  |

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Experiment Number: 20105 - 56

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Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1.5W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | males<br>(cont...)    |                       |   |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
|  | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>4      | 0<br>6<br>7<br>4      | 0<br>7<br>1<br>1      | 0<br>5<br>4<br>2      | 0<br>6<br>6<br>6      | 0<br>3<br>8<br>7      | 0<br>6<br>4<br>5      | 0<br>6<br>6<br>7      | 0<br>6<br>6<br>5      | 0<br>7<br>9<br>2      | 0<br>7<br>2<br>5      | 0<br>7<br>3<br>3      | 0<br>6<br>8<br>6      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>3      | 0<br>6<br>5<br>5      | 0<br>5<br>2<br>5      | 0<br>7<br>3<br>1      | 0<br>5<br>3<br>5      |                       |                       |                       |                       |   |
|  | 0<br>1<br>3<br>7<br>4 | 0<br>1<br>3<br>7<br>5 | 0<br>1<br>3<br>7<br>6 | 0<br>1<br>3<br>7<br>7 | 0<br>1<br>3<br>7<br>8 | 0<br>1<br>3<br>8<br>0 | 0<br>1<br>3<br>8<br>1 | 0<br>1<br>3<br>8<br>2 | 0<br>1<br>3<br>8<br>3 | 0<br>1<br>3<br>8<br>4 | 0<br>1<br>3<br>8<br>5 | 0<br>1<br>3<br>8<br>6 | 0<br>1<br>3<br>8<br>7 | 0<br>1<br>3<br>8<br>8 | 0<br>1<br>3<br>9<br>9 | 0<br>1<br>3<br>9<br>0 | 0<br>1<br>3<br>9<br>1 | 0<br>1<br>3<br>9<br>2 | 0<br>1<br>3<br>9<br>3 | 0<br>1<br>3<br>9<br>4 | 0<br>1<br>3<br>9<br>5 | 0<br>1<br>3<br>9<br>6 | 0<br>1<br>3<br>9<br>7 | 0<br>1<br>3<br>9<br>8 | 0<br>1<br>4<br>9<br>9 | 0<br>1<br>4<br>9<br>0 | 0<br>1<br>4<br>9<br>1 |   |
| Pancreas   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |   |
| Inflammation, Chronic Active                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Thrombus   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Acinus, Atrophy  |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       | 1                     | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Acinus, Hyperplasia                                    |                       |                       | 1                     | 2                     | 4                     | 4                     |                       |                       | 1                     | 2                     | 3                     | 2                     | 1                     | 4                     | 2                     | 4                     | 3                     |                       | 1                     |                       | 3                     |                       |                       |                       | 2                     | 2                     | 2                     |   |
| Artery, Inflammation, Chronic Active                   | 3                     |                       |                       |                       |                       |                       |                       |                       | 4                     |                       | 4                     | 1                     | 1                     |                       |                       |                       |                       |                       | 2                     |                       | 2                     |                       |                       |                       | 2                     |                       |                       |   |
| Artery, Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Salivary Glands  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | + |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Artery, Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Duct, Parotid Gland, Dilation                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Duct, Parotid Gland, Inflammation, Acute               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Parotid Gland, Atrophy                                 |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       | 3                     |                       | 2                     |                       |                       |                       |                       |                       |   |
| Parotid Gland, Inflammation, Acute                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Parotid Gland, Vacuolation, Cytoplasmic                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Submandibular Gland, Atrophy                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |   |
| Stomach, Forestomach                                   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | + |
| Cyst   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Edema  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Erosion  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Inflammation, Acute                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Inflammation, Chronic Active                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Ulcer  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     | 1                     |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |   |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Epithelium, Hyperplasia                                |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       | 1                     |                       |                       |                       |                       | 4 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1.5W/kg(CDMA)chr | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|
|  | 0732        | 0734 | 0764 | 0771 | 0754 | 0766 | 0733 | 0766 | 0766 | 0777 | 0777 | 0777 | 0766 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0766 | 0755 | 0777 | 0755 | 0777 |           |                    |
| Accessory Adrenal Cortical Nodule                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    | X         |                    |
| Angiectasis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Atrophy  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Degeneration   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Degeneration, Cystic                                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Hyperplasia  | 2           |      |      | 2    | 1    |      | 2    |      |      | 2    | 2    | 1    |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Hypertrophy  | 2           | 1    | 2    |      | 2    |      |      |      |      |      | 1    |      | 2    |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Necrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Thrombus   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Vacuolation, Cytoplasmic                               | 1           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Adrenal Medulla  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         |                    |
| Hyperplasia  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Islets, Pancreatic                                     | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         |                    |
| Hyperplasia  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Parathyroid Gland                                      | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         |                    |
| Hyperplasia  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Hyperplasia, Focal                                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Pituitary Gland  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         |                    |
| Pars Distalis, Cyst                                    | X           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Pars Distalis, Hyperplasia                             | 4           | 4    |      | 2    |      | 3    |      |      |      |      |      |      | 4    |      | 2    |      | 4    | 2    |      |      |      |      |      |      |           |                    |
| Pars Distalis, Necrosis                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Pars Intermedia, Angiectasis                           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Pars Intermedia, Cyst                                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Pars Intermedia, Hyperplasia                           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Pars Nervosa, Cyst                                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                          | HARLAN SPRAGUE DAWLEY RATS MALE |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males (cont...) |   |  |
|--------------------------------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-----------------|---|--|
|                                      | 0732                            | 0734 | 0737 | 0741 | 0744 | 0756 | 0763 | 0768 | 0766 | 0766 | 0776 | 0777 | 0777 | 0766 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0766 | 0755 | 0757 | 0755 |           |                 |   |  |
| 1.5W/kg(CDMA)chr                     | 0                               | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1         | males (cont...) |   |  |
| Duct, Dilation                       |                                 | 3    |      |      |      |      |      | 2    |      | 3    |      | 3    |      | 3    |      | 4    | 4    | 4    | 1    | 4    | 3    | 1    |      |      | 2         | 3               |   |  |
| Duct, Hyperplasia                    | 2                               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |   |  |
| Prostate                             | +                               | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +               |   |  |
| Decreased Secretory Fluid            |                                 |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      | 2         |                 |   |  |
| Inflammation, Acute                  |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |           |                 |   |  |
| Inflammation, Chronic Active         |                                 | 1    |      |      |      |      |      |      |      | 1    | 1    |      |      |      | 1    |      |      |      |      | 2    |      |      |      |      |           |                 |   |  |
| Artery, Thrombus                     |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |   |  |
| Epithelium, Hyperplasia              |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      | 1    |      |      |      |           | 1               |   |  |
| Seminal Vesicle                      | +                               | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +               |   |  |
| Decreased Secretory Fluid            |                                 |      |      |      |      |      |      |      |      | 4    |      | 3    |      |      |      |      |      |      |      | 2    |      |      |      |      | 3         | 1               | 4 |  |
| Inflammation, Acute                  |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |   |  |
| Inflammation, Chronic Active         |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |   |  |
| Testis                               | +                               | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +               |   |  |
| Edema                                |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |   |  |
| Artery, Inflammation, Chronic Active | 4                               | 2    |      |      |      |      |      | 4    |      | 2    |      | 3    | 3    |      | 4    | 3    |      |      |      | 3    | 3    | 4    |      |      | 4         |                 |   |  |
| Germ Cell, Degeneration              | 1                               |      |      |      |      |      |      |      | 4    | 4    |      | 4    |      |      | 1    |      |      |      | 1    | 2    | 1    | 1    |      |      | 1         | 2               |   |  |
| Germinal Epithelium, Mineral         |                                 |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |   |  |
| Interstitial Cell, Hyperplasia       |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |   |  |
| Seminiferous Tubule, Dilation        |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |   |  |

**HEMATOPOIETIC SYSTEM**

|                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone Marrow      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Hemorrhage       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |  |
| Hypercellularity |   |   |   | 3 |   |   |   |   |   | 4 | 3 |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   | 4 |  |
| Lymph Node       | + |   |   |   |   |   |   |   |   | + | + |   | + |   |   |   |   |   |   | + | + |   |   |   | + | + |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1.5W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | males<br>(cont...)    |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>4      | 0<br>6<br>7<br>4      | 0<br>7<br>1<br>1      | 0<br>5<br>4<br>2      | 0<br>6<br>6<br>6      | 0<br>3<br>8<br>7      | 0<br>6<br>4<br>5      | 0<br>6<br>0<br>7      | 0<br>6<br>9<br>5      | 0<br>7<br>2<br>2      | 0<br>7<br>0<br>5      | 0<br>7<br>3<br>3      | 0<br>6<br>8<br>6      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>3      | 0<br>6<br>5<br>5      | 0<br>5<br>2<br>5      | 0<br>7<br>3<br>1      | 0<br>5<br>3<br>5      |                       |                       |
| ANIMAL ID  | 0<br>1<br>3<br>7<br>4 | 0<br>1<br>3<br>7<br>5 | 0<br>1<br>3<br>7<br>6 | 0<br>1<br>3<br>7<br>7 | 0<br>1<br>3<br>7<br>8 | 0<br>1<br>3<br>7<br>0 | 0<br>1<br>3<br>7<br>1 | 0<br>1<br>3<br>7<br>2 | 0<br>1<br>3<br>7<br>3 | 0<br>1<br>3<br>7<br>4 | 0<br>1<br>3<br>7<br>5 | 0<br>1<br>3<br>7<br>6 | 0<br>1<br>3<br>7<br>7 | 0<br>1<br>3<br>7<br>8 | 0<br>1<br>3<br>7<br>9 | 0<br>1<br>3<br>7<br>0 | 0<br>1<br>3<br>7<br>1 | 0<br>1<br>3<br>7<br>2 | 0<br>1<br>3<br>7<br>3 | 0<br>1<br>3<br>7<br>4 | 0<br>1<br>3<br>7<br>5 | 0<br>1<br>3<br>7<br>6 | 0<br>1<br>3<br>7<br>7 | 0<br>1<br>3<br>7<br>8 | 0<br>1<br>3<br>7<br>9 |

Erythrophagocytosis  
Hyperplasia, Lymphocyte  
Proliferation, Plasma Cell  
Lymphatic Sinus, Ectasia

2 3 1

Spleen  
Extramedullary Hematopoiesis  
Hemorrhage  
Pigment  
Thrombus  
Red Pulp, Atrophy  
White Pulp, Atrophy

+  
2 1 2 3 1 2 1 4 2 2 2 3 2 3 2 2 2 1 1 2  
1 1 2 2 2 1 1 3 1 1 3 1 1 3 1  
1 1  
2 3  
2 2

Thymus  
Atrophy  
Cyst  
Ectopic Parathyroid Gland  
Hemorrhage  
Hyperplasia, Epithelial  
Artery, Inflammation, Chronic Active

+ + + + + + + + I + + + + + + + + + + + + + + + + +  
2 2 2 3 2 1 3 3 4 3 2 3 1 2 4 1 3 3 2 2 3  
X  
2 2  
3

INTEGUMENTARY SYSTEM

Mammary Gland  
Atrophy  
Galactocele  
Duct, Dilation

+ + + M M M M + + + M + + + + M + + + + + M + + + +  
2  
1

Skin  
Cyst Epithelial Inclusion

+  
X X X

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked







Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST   | HARLAN SPRAGUE DAWLEY RATS MALE |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males (cont...) |      |      |                 |
|---|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-----------------|------|------|-----------------|
|   | 0732                            | 0734 | 0764 | 0771 | 0754 | 0766 | 0733 | 0766 | 0766 | 0777 | 0777 | 0777 | 0766 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0766 |           |                 | 0755 | 0777 | 0755            |
| 1.5W/kg(CDMA)chr                                      | 0                               | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0               | 0    | 1137 | males (cont...) |
| Congestion  |                                 |      |      |      | 3    | 2    | 3    |      |      |      |      |      |      | 3    | 2    |      |      |      |      |      |           |                 |      | 2    |                 |
| Foreign Body  |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Hemorrhage  |                                 |      |      |      |      |      |      | 2    |      |      | 2    |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Inflammation, Granulomatous                           | 1                               | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      | 1    |                 |
| Inflammation, Chronic                                 |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Inflammation, Chronic Active                          |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Alveolus, Infiltration Cellular, Histiocyte           |                                 | 1    | 1    | 1    |      |      |      |      |      | 3    |      | 3    |      |      | 1    | 1    | 1    | 1    | 4    |      |           | 2               |      | 4    |                 |
| Artery, Inflammation, Chronic Active                  |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      |           |                 |      |      |                 |
| Epithelium Alveolus, Hyperplasia                      |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Interstitial, Inflammation, Chronic                   |                                 |      |      |      |      |      |      |      |      | 3    |      | 3    |      |      |      |      |      |      | 3    |      |           |                 |      |      |                 |
| Interstitial, Inflammation, Chronic Active            |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Interstitial, Mineral                                 |                                 |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Nose  | +                               | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +               | +    | +    |                 |
| Foreign Body  |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Hyperplasia, Lymphocyte                               |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Inflammation, Suppurative                             |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 2                               | 2    | 2    | 2    | 2    | 2    | 3    | 2    | 1    | 1    | 2    | 1    | 1    | 2    | 1    | 1    | 1    | 1    | 2    | 2    | 2         | 2               | 1    | 1    |                 |
| Olfactory Epithelium, Hyperplasia                     |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Olfactory Epithelium, Metaplasia, Respiratory         |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |                                 |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Respiratory Epithelium, Hyperplasia                   |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |
| Trachea   | +                               | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +               | +    | A    |                 |
| Artery, Inflammation, Chronic Active                  |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |      |                 |

SPECIAL SENSES SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>MALE</b><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 07 | 07 | 06 | 07 | 05 | 06 | 03 | 06 | 06 | 06 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 07 | 06 | 05 | 07 | 05 |    |
|   | ANIMAL ID   | 32 | 34 | 34 | 31 | 34 | 36 | 38 | 34 | 30 | 39 | 32 | 30 | 33 | 38 | 33 | 33 | 33 | 31 | 33 | 37 | 35 | 32 | 33 | 35 |
|   |             | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |

males  
(cont...)

Renal Tubule, Cyst  
Renal Tubule, Hyperplasia, Atypical

X X X X

Urinary Bladder  
Dilation  
Hemorrhage  
Inflammation, Acute  
Inflammation, Chronic Active  
Artery, Inflammation, Chronic Active  
Urothelium, Hyperplasia

+ + A + + + + + + + + + + + + + + + + + A + + A  
4  
2  
1  
2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
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1) Minimal 3) Moderate  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>MALE</b><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 0695 | 0734 | 0517 | 0733 | 0772 | 0772 | 0774 | 0773 | 0771 | 0471 | 0773 | 0774 | 0773 | 0772 | 0773 | 0678 | 0753 | 0773 | 0770 | 0693 | 0771 | 0771 | <b>males</b><br><b>(cont...)</b> |
|   | ANIMAL ID   | 0140 | 0143 | 0145 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 |                                  |
|   |             | 2357 | 8444 | 0000 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 |                                  |

ALIMENTARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum               | A | + | A | + | + | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | A | + | + |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |
| Epithelium, Regeneration             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Colon               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + |
| Cyst                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Rectum              | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Duodenum            | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Dilation                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ectopic Tissue                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Ileum               | + | + | A | + | + | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | A | + |
| Congestion                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked









Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1.5W/kg(CDMA)chr | DAY ON TEST | 0695 | 0734 | 0517 | 0734 | 0771 | 0772 | 0774 | 0773 | 0774 | 0743 | 0771 | 0773 | 0774 | 0773 | 0773 | 0668 | 0753 | 0773 | 0777 | 0667 | 0773 | 0771 | 0779 | males<br>(cont...) |
|  | ANIMAL ID   | 0140 | 0114 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 |                    |

Accessory Adrenal Cortical Nodule

X

Angiectasis

Atrophy

4

Degeneration

Degeneration, Cystic

1

Hyperplasia

2

2

2

1

1

2

1

1

2

Hypertrophy

1

1

1

1

1

2

2

1

Necrosis

3

2

Thrombus

2

Vacuolation, Cytoplasmic

2

Adrenal Medulla

+

+

+

+

+

+

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+

+

+

Hyperplasia

2

1

2

2

3

1

1

1

2

1

Islets, Pancreatic

+

+

+

+

+

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A

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+

Hyperplasia

Parathyroid Gland

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M

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+

Hyperplasia

2

3

2

2

2

3

2

1

Hyperplasia, Focal

2

Pituitary Gland

+

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+

Pars Distalis, Cyst

X

X

X

X

X

X

X

Pars Distalis, Hyperplasia

1

1

4

2

Pars Distalis, Necrosis

Pars Intermedia, Angiectasis

Pars Intermedia, Cyst

Pars Intermedia, Hyperplasia

2

1

Pars Nervosa, Cyst

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

1-4 .. Lesion qualified as:

X .. Lesion present

A .. Autolysis precludes evaluation

1) Minimal 3) Moderate

I .. Insufficient tissue

BLANK .. Not examined microscopically

2) Mild 4) Marked





















Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                                |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS<br/>MALE</b> |           | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 6 | 6 | 4 | 4 | 6 | 5 | 7 | 5 | 7 | 5 |
|  |           | 3 | 3 | 3 | 3 | 6 | 0 | 6 | 1 | 6 | 4 | 0 | 1 | 9 | 1 | 8 | 8 | 8 |
|  |           | 0 | 2 | 0 | 0 | 3 | 5 | 8 | 0 | 2 | 7 | 4 | 5 | 7 | 7 | 2 | 2 | 2 |
| <b>1.5W/kg(CDMA)chr</b>                    | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  |           | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|  |           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|  |           | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |   |   |
| <b>* TOTALS</b>                            |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

ALIMENTARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |              |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Esophagus                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +         | <b>90</b>    |
| Intestine Large, Cecum               | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + | <b>76</b> |              |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 3.0</b> |
| Hemorrhage                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b> |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 2 |           | <b>8 1.9</b> |
| Epithelium, Regeneration             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |
| Intestine Large, Colon               | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | <b>83</b> |              |
| Cyst                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>     |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 1 |           | <b>4 1.8</b> |
| Intestine Large, Rectum              | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | <b>81</b> |              |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b> |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 3.0</b> |
| Intestine Small, Duodenum            | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | <b>84</b> |              |
| Dilation                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |
| Ectopic Tissue                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>     |
| Ulcer                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 4.0</b> |
| Intestine Small, Ileum               | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | <b>76</b> |              |
| Congestion                           |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |           | <b>1 2.0</b> |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |           | <b>1 1.0</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1.5W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS      |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------|
|  | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>0      | 0<br>6<br>6<br>3      | 0<br>7<br>0<br>5      | 0<br>5<br>6<br>8      | 0<br>6<br>1<br>0      | 0<br>6<br>6<br>2      | 0<br>4<br>4<br>7      | 0<br>4<br>0<br>4      | 0<br>6<br>1<br>5      | 0<br>5<br>9<br>7      | 0<br>7<br>1<br>7      | 0<br>5<br>8<br>2      |               |
| ANIMAL ID  | 0<br>1<br>4<br>3<br>1 | 0<br>1<br>4<br>3<br>2 | 0<br>1<br>4<br>3<br>3 | 0<br>1<br>4<br>3<br>4 | 0<br>1<br>4<br>3<br>5 | 0<br>1<br>4<br>3<br>6 | 0<br>1<br>4<br>3<br>7 | 0<br>1<br>4<br>3<br>8 | 0<br>1<br>4<br>3<br>9 | 0<br>1<br>4<br>4<br>0 | 0<br>1<br>4<br>4<br>1 | 0<br>1<br>4<br>4<br>2 | 0<br>1<br>4<br>4<br>3 | 0<br>1<br>4<br>4<br>4 | 0<br>1<br>4<br>4<br>5 |               |
| Intestine Small, Jejunum                               | +                     | +                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | A                     | +                     | +                     | +                     | +                     | <b>73</b>     |
| Liver  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | <b>90</b>     |
| Angiectasis  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1 3.0</b>  |
| Clear Cell Focus                                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>4</b>      |
| Eosinophilic Focus                                     |                       | X                     |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       | X                     |                       |                       | <b>5</b>      |
| Extramedullary Hematopoiesis                           |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       | <b>4 1.3</b>  |
| Hepatodiaphragmatic Nodule                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       | <b>1</b>      |
| Infiltration Cellular, Mixed Cell                      |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       | <b>1 1.0</b>  |
| Mixed Cell Focus                                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       | <b>51</b>     |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     | <b>1 2.0</b>  |
| Artery, Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     | <b>1 1.0</b>  |
| Bile Duct, Cyst  |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       | <b>5</b>      |
| Bile Duct, Hyperplasia                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     | 1                     | <b>33 1.0</b> |
| Hepatocyte, Necrosis                                   |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     | 3                     |                       |                       | 2                     |                       | <b>6 2.2</b>  |
| Hepatocyte, Vacuolation, Cytoplasmic                   |                       |                       | 1                     | 4                     | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>6 2.3</b>  |
| Periductal, Cholangiofibrosis                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>2 1.5</b>  |
| Mesentery  |                       |                       |                       |                       |                       |                       |                       | +                     |                       |                       |                       | +                     | +                     | +                     | +                     | <b>19</b>     |
| Fibrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1 2.0</b>  |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1 2.0</b>  |
| Neovascularization                                     |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>2 2.5</b>  |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       | 2                     | 2                     | 1                     | 2                     | <b>16 2.3</b> |
| Artery, Mineral  |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       | 2                     | 2                     |                       | <b>5 2.0</b>  |
| Vein, Inflammation, Chronic Active                     |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>2 1.5</b>  |
| Oral Mucosa  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>      |
| Ulcer  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1 3.0</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1.5W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|  | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>0      | 0<br>6<br>6<br>3      | 0<br>7<br>0<br>5      | 0<br>5<br>6<br>8      | 0<br>6<br>1<br>0      | 0<br>6<br>6<br>2      | 0<br>4<br>4<br>7      | 0<br>4<br>0<br>4      | 0<br>6<br>1<br>5      | 0<br>5<br>9<br>7      | 0<br>7<br>1<br>7      | 0<br>5<br>8<br>2      |          |
| ANIMAL ID  | 0<br>1<br>4<br>3<br>1 | 0<br>1<br>4<br>3<br>2 | 0<br>1<br>4<br>3<br>3 | 0<br>1<br>4<br>3<br>4 | 0<br>1<br>4<br>3<br>5 | 0<br>1<br>4<br>3<br>6 | 0<br>1<br>4<br>3<br>7 | 0<br>1<br>4<br>3<br>8 | 0<br>1<br>4<br>3<br>9 | 0<br>1<br>4<br>4<br>0 | 0<br>1<br>4<br>4<br>1 | 0<br>1<br>4<br>4<br>2 | 0<br>1<br>4<br>4<br>3 | 0<br>1<br>4<br>4<br>4 | 0<br>1<br>4<br>4<br>5 |          |
| Pancreas   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 88       |
| Inflammation, Chronic Active                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 4.0    |
| Thrombus   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0    |
| Acinus, Atrophy  |                       |                       |                       | 2                     |                       | 2                     |                       |                       | 1                     |                       |                       |                       | 1                     |                       |                       | 9 1.4    |
| Acinus, Hyperplasia                                    |                       | 2                     | 2                     | 4                     | 3                     |                       | 4                     |                       |                       |                       | 3                     | 2                     | 3                     |                       |                       | 55 2.7   |
| Artery, Inflammation, Chronic Active                   | 1                     |                       | 1                     |                       |                       |                       | 2                     |                       |                       |                       | 2                     | 2                     | 2                     | 2                     |                       | 28 2.0   |
| Artery, Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       | 2 2.5    |
| Salivary Glands  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |
| Artery, Inflammation, Chronic Active                   | 1                     |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       | 6 2.2    |
| Artery, Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       | 1 2.0    |
| Duct, Parotid Gland, Dilation                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |
| Duct, Parotid Gland, Inflammation, Acute               |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0    |
| Parotid Gland, Atrophy                                 |                       |                       |                       | 4                     |                       | 4                     | 4                     |                       |                       |                       | 3                     |                       | 2                     |                       |                       | 15 2.8   |
| Parotid Gland, Inflammation, Acute                     |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       | 1                     | 1                     |                       |                       | 4 1.0    |
| Parotid Gland, Vacuolation, Cytoplasmic                |                       |                       | 1                     | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 1.0    |
| Submandibular Gland, Atrophy                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 3.0    |
| Stomach, Forestomach                                   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |
| Cyst   |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1        |
| Edema  |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       | 3                     |                       |                       | 5 1.6    |
| Erosion  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |
| Inflammation, Acute                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       | 1 1.0    |
| Inflammation, Chronic Active                           |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4 2.0    |
| Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |
| Ulcer  |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       | 1                     |                       |                       | 8 1.9    |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0    |
| Epithelium, Hyperplasia                                |                       |                       |                       | 3                     | 2                     | 4                     |                       |                       | 2                     |                       |                       | 3                     |                       |                       |                       | 17 2.4   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                            | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 7         | 7 | 7 | 7 | 6 | 7 | 5 | 6 | 6 | 4 | 4 | 6 | 5 | 7 | 5 | 7 | 5 |
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> | 3         | 3 | 3 | 3 | 6 | 0 | 6 | 1 | 6 | 4 | 0 | 1 | 9 | 1 | 8 |   |   |
|  | 0         | 2 | 0 | 0 | 3 | 5 | 8 | 0 | 2 | 7 | 4 | 5 | 7 | 7 | 2 |   |   |
| <b>1.5W/kg(CDMA)chr</b>                | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  | 4         | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|  | 3         | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|  | 1         | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |   |   |

**\* TOTALS**

|                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 86    |
| Erosion            |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 2 1.0 |
| Mineral            |   |   |   |   |   |   | 3 |   |   |   |   | 3 | 3 | 4 |   |   | 9 3.1 |

**CARDIOVASCULAR SYSTEM**

|          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Aorta    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90    |
| Dilation |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 2 |   |   | 5 1.8 |
| Mineral  |   |   |   |   |   |   | 3 |   |   |   |   | 3 |   | 3 |   |   | 8 2.8 |

|                            |  |  |  |  |  |  |   |   |  |  |  |  |  |  |  |  |       |
|----------------------------|--|--|--|--|--|--|---|---|--|--|--|--|--|--|--|--|-------|
| Blood Vessel               |  |  |  |  |  |  |   | + |  |  |  |  |  |  |  |  | 2     |
| Pulmonary Artery, Mineral  |  |  |  |  |  |  | 3 |   |  |  |  |  |  |  |  |  | 1 3.0 |
| Pulmonary Artery, Necrosis |  |  |  |  |  |  |   |   |  |  |  |  |  |  |  |  | 1 1.0 |

|                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Heart                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90     |
| Cardiomyopathy                  | 2 | 2 | 2 | 2 | 1 | 1 | 3 | 2 | 2 | 1 |   | 3 | 2 | 4 | 2 |   | 84 1.9 |
| Artery, Degeneration            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Artery, Mineral                 |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 1 |   | 7 2.1  |
| Artery, Pericardium, Pigment    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0  |
| Atrium, Dilation                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0  |
| Atrium, Thrombus                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5 3.6  |
| Atrium, Myocardium, Hypertrophy |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0  |
| Atrium, Myocardium, Necrosis    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Myocardium, Mineral             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 1.0  |
| Myocardium, Necrosis            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0  |
| Ventricle Right, Cardiomyopathy | 1 |   | 2 |   |   | 1 |   | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |   | 45 1.2 |

**ENDOCRINE SYSTEM**

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1.5W/kg(CDMA)chr | DAY ON TEST   |               |               |               |               |               |               |               |               |               |               |               |               |               |               | * TOTALS |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------|
|  | 07<br>30      | 07<br>32      | 07<br>33      | 07<br>30      | 06<br>63      | 07<br>50      | 05<br>68      | 06<br>10      | 06<br>62      | 04<br>47      | 04<br>44      | 06<br>65      | 05<br>97      | 07<br>71      | 05<br>58      |          |
| ANIMAL ID  | 01<br>43<br>1 | 01<br>42<br>3 | 01<br>44<br>3 | 01<br>43<br>4 | 01<br>44<br>3 | 01<br>44<br>5 | 01<br>44<br>6 | 01<br>44<br>7 | 01<br>44<br>8 | 01<br>44<br>9 | 01<br>44<br>0 | 01<br>44<br>1 | 01<br>44<br>2 | 01<br>44<br>3 | 01<br>44<br>4 |          |
| Accessory Adrenal Cortical Nodule                      |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 4        |
| Angiectasis  |               |               |               |               |               | 2             |               |               |               |               |               |               |               |               |               | 1 2.0    |
| Atrophy  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1 4.0    |
| Degeneration   |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1 2.0    |
| Degeneration, Cystic                                   |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 3 1.3    |
| Hyperplasia  |               |               |               |               | 1             | 2             |               |               | 1             |               |               |               | 2             | 2             |               | 42 1.9   |
| Hypertrophy  |               | 1             |               | 1             | 3             |               | 2             | 1             |               | 2             | 1             |               |               |               | 2             | 42 1.4   |
| Necrosis   |               |               |               |               |               |               |               |               |               |               |               |               |               | 3             |               | 5 2.2    |
| Thrombus   |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 2 2.0    |
| Vacuolation, Cytoplasmic                               |               |               |               | 1             |               |               |               |               |               |               |               | 1             | 3             | 1             | 3             | 18 1.7   |
| Adrenal Medulla  | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | 90       |
| Hyperplasia  |               |               |               | 1             | 1             | 2             |               |               |               |               |               |               | 1             |               |               | 34 1.8   |
| Islets, Pancreatic                                     | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | 88       |
| Hyperplasia  |               | 2             |               |               | 4             | 3             |               |               |               | 2             |               |               |               |               |               | 15 2.7   |
| Parathyroid Gland                                      | +             | +             | +             | +             | M             | +             | M             | +             | +             | +             | +             | +             | +             | +             | +             | 83       |
| Hyperplasia  |               |               | 4             | 2             |               |               |               |               | 3             |               |               | 3             | 3             |               |               | 35 2.5   |
| Hyperplasia, Focal                                     |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1 2.0    |
| Pituitary Gland  | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | 90       |
| Pars Distalis, Cyst                                    |               |               |               |               |               |               |               |               |               |               | X             |               |               | X             |               | 15       |
| Pars Distalis, Hyperplasia                             |               |               |               | 2             |               |               |               |               | 4             |               |               |               | 3             |               | 2             | 32 2.4   |
| Pars Distalis, Necrosis                                |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1 2.0    |
| Pars Intermedia, Angiectasis                           |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1 3.0    |
| Pars Intermedia, Cyst                                  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1        |
| Pars Intermedia, Hyperplasia                           |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 3 2.0    |
| Pars Nervosa, Cyst                                     |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1        |

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Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1.5W/kg(CDMA)chr | DAY ON TEST   |               |               |               |               |               |               |               |               |               |               |               |               |               |               | * TOTALS |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------|
|  | 07<br>30      | 07<br>32      | 07<br>30      | 07<br>30      | 06<br>33      | 07<br>05      | 05<br>06      | 06<br>01      | 06<br>02      | 04<br>07      | 04<br>04      | 06<br>01      | 05<br>09      | 07<br>01      | 05<br>08      |          |
| ANIMAL ID  | 01<br>43<br>1 | 01<br>43<br>2 | 01<br>43<br>3 | 01<br>43<br>4 | 01<br>43<br>5 | 01<br>43<br>6 | 01<br>43<br>7 | 01<br>43<br>8 | 01<br>43<br>9 | 01<br>44<br>0 | 01<br>44<br>1 | 01<br>44<br>2 | 01<br>44<br>3 | 01<br>44<br>4 | 01<br>44<br>5 |          |
| Thyroid Gland  | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | 87       |
| C-cell, Hyperplasia                                    |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 17 1.8   |
| Follicle, Cyst   |               |               | 2             |               |               |               |               |               |               |               |               |               |               |               |               | 2        |
| <b>GENERAL BODY SYSTEM</b>                             |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |          |
| Tissue NOS   |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1        |
| <b>GENITAL SYSTEM</b>                                  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |          |
| Bulbourethral Gland                                    |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1        |
| Coagulating Gland                                      |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 2        |
| Inflammation, Chronic Active                           |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 2 3.0    |
| Epididymis   | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | 90       |
| Exfoliated Germ Cell                                   |               |               | 3             | 1             |               | 3             | 3             |               | 3             |               | 3             | 2             |               | 1             |               | 33 1.7   |
| Granuloma Sperm  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1 4.0    |
| Hypospermia  |               |               | 1             | 1             |               | 1             |               |               | 3             |               | 3             | 4             | 4             | 4             |               | 24 3.1   |
| Artery, Inflammation, Chronic Active                   |               | 3             |               |               |               |               |               |               |               |               |               |               |               |               |               | 3 3.0    |
| Tail, Developmental Malformation                       |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1        |
| Penis  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 4        |
| Concretion   |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 3 2.7    |
| Prolapse   |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1 4.0    |
| Preputial Gland  | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | +             | 88       |
| Atrophy  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1 4.0    |
| Inflammation, Suppurative                              |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | 1 2.0    |
| Inflammation, Chronic Active                           | 1             | 4             | 3             |               | 3             |               |               | 1             | 2             | 2             | 1             | 1             |               |               |               | 53 1.9   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 6 | 6 | 4 | 4 | 6 | 5 | 7 | 5 | 7 | 5 |
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> | 3 | 3 | 3 | 3 | 6 | 0 | 6 | 1 | 6 | 4 | 0 | 1 | 9 | 1 | 8 |   |   |
| <b>1.5W/kg(CDMA)chr</b>                | 0 | 2 | 0 | 0 | 3 | 5 | 8 | 0 | 2 | 7 | 4 | 5 | 7 | 7 | 2 |   |   |
| ANIMAL ID                              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|  | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |
|  | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |   |

**\* TOTALS**

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Duct, Dilation                       |   |   | 2 | 3 |   | 2 |   | 3 | 2 |   | 2 |   | 2 | 3 |   |   |        |
| Duct, Hyperplasia                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
| Prostate                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90     |
| Decreased Secretory Fluid            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5 2.0  |
| Inflammation, Acute                  |   |   |   | 4 | 2 |   |   | 1 | 2 |   |   |   |   |   |   |   | 9 1.7  |
| Inflammation, Chronic Active         |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 10 1.7 |
| Artery, Thrombus                     |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 1 4.0  |
| Epithelium, Hyperplasia              |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 11 1.6 |
| Seminal Vesicle                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90     |
| Decreased Secretory Fluid            |   |   | 2 | 4 | 4 | 3 |   |   | 4 |   |   | 3 | 4 | 4 | 3 |   | 34 3.0 |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 2.3  |
| Testis                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 89     |
| Edema                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 3.0  |
| Artery, Inflammation, Chronic Active | 2 | 3 | 3 |   |   |   | 1 |   |   |   |   | 2 | 3 | 4 | 1 |   | 37 2.8 |
| Germ Cell, Degeneration              |   |   | 2 | 1 |   | 3 | 2 |   | 3 |   |   | 3 | 4 | 4 | 4 |   | 37 2.6 |
| Germinal Epithelium, Mineral         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Interstitial Cell, Hyperplasia       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 2.5  |
| Seminiferous Tubule, Dilatation      |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   | 1 2.0  |

**HEMATOPOIETIC SYSTEM**

|                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Bone Marrow      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90     |
| Hemorrhage       |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 1 |   |   | 5 1.8  |
| Hypercellularity | 2 | 1 | 1 |   |   |   |   |   | 1 | 3 | 4 |   | 2 |   | 2 |   | 25 2.5 |
| Lymph Node       |   |   | + | + |   |   | + |   |   |   |   |   |   | + |   |   | 23     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
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Experiment Number: 20105 - 56

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                            |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> |                         | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 6 | 6 | 4 | 4 | 6 | 5 | 7 | 5 | 8 | 2 |
|  |                         | 3 | 3 | 3 | 3 | 6 | 0 | 6 | 1 | 6 | 4 | 0 | 1 | 9 | 1 | 8 |   |   |
|  |                         | 0 | 2 | 0 | 0 | 3 | 5 | 8 | 0 | 2 | 7 | 4 | 5 | 7 | 7 |   |   |   |
|  | <b>1.5W/kg(CDMA)chr</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| ANIMAL ID                              |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |                         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  |                         | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|  |                         | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|  |                         | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |   |
| <b>* TOTALS</b>                        |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|  |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  |   |     |
|--|--|--|--|--|--|---|--|--|---|--|--|--|--|--|--|---|--|---|-----|
| Bronchial, Erythrophagocytosis                 |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  | 2 | 2.5 |
| Bronchial, Hyperplasia, Lymphocyte             |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  | 1 | 1.0 |
| Iliac, Erythrophagocytosis                     |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  | 2 | 2.0 |
| Iliac, Infiltration Cellular, Histiocyte       |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  | 1 | 2.0 |
| Iliac, Lymphatic Sinus, Ectasia                |  |  |  |  |  | 3 |  |  |   |  |  |  |  |  |  |   |  | 3 | 1.7 |
| Lumbar, Erythrophagocytosis                    |  |  |  |  |  | 2 |  |  |   |  |  |  |  |  |  |   |  | 2 | 2.5 |
| Lumbar, Proliferation, Plasma Cell             |  |  |  |  |  | 2 |  |  |   |  |  |  |  |  |  |   |  | 1 | 2.0 |
| Lumbar, Lymphatic Sinus, Ectasia               |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  | 2 | 1.5 |
| Lymphatic Sinus, Mediastinal, Ectasia          |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  | 1 | 1.0 |
| Lymphatic Sinus, Popliteal, Ectasia            |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  | 1 | 2.0 |
| Lymphatic Sinus, Renal, Ectasia                |  |  |  |  |  |   |  |  | 2 |  |  |  |  |  |  |   |  | 4 | 2.0 |
| Mediastinal, Erythrophagocytosis               |  |  |  |  |  | 3 |  |  |   |  |  |  |  |  |  |   |  | 7 | 2.7 |
| Mediastinal, Hemorrhage                        |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  | 1 | 2.0 |
| Mediastinal, Infiltration Cellular, Histiocyte |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  | 1 | 2.0 |
| Mediastinal, Inflammation, Acute               |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  | 1 | 2.0 |
| Mediastinal, Pigment                           |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  | 1 | 2.0 |
| Pancreatic, Erythrophagocytosis                |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  | 1 | 3.0 |
| Renal, Erythrophagocytosis                     |  |  |  |  |  |   |  |  | 3 |  |  |  |  |  |  | 3 |  | 6 | 2.5 |
| Renal, Hyperplasia, Lymphocyte                 |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  | 1 | 1.0 |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Lymph Node, Mandibular            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
| Congestion                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Erythrophagocytosis               |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 3  | 2.0 |
| Hyperplasia, Lymphocyte           | 2 | 1 |   |   | 3 | 1 |   | 2 |   |   |   |   | 2 |   |   |   |   | 50 | 1.8 |
| Infiltration Cellular, Histiocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 1.0 |
| Necrosis, Lymphocyte              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Proliferation, Plasma Cell        | 2 | 2 |   | 1 | 3 | 2 | 3 | 2 | 2 |   |   | 1 | 2 |   |   | 2 |   | 61 | 1.8 |
| Lymphatic Sinus, Ectasia          | 4 | 4 |   |   |   | 2 | 2 |   |   |   |   |   |   | 1 | 1 |   |   | 24 | 2.0 |

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 89 |  |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
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1) Minimal 3) Moderate  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

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**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                                | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 7         | 7 | 7 | 7 | 6 | 7 | 5 | 6 | 6 | 4 | 4 | 6 | 5 | 7 | 5 | 5 |
| <b>HARLAN SPRAGUE DAWLEY RATS<br/>MALE</b> | 3         | 3 | 3 | 3 | 6 | 0 | 6 | 1 | 6 | 4 | 0 | 1 | 9 | 1 | 8 |   |
|  | 0         | 2 | 0 | 0 | 3 | 5 | 8 | 0 | 2 | 7 | 4 | 5 | 7 | 7 | 2 |   |
| <b>1.5W/kg(CDMA)chr</b>                    | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  |           | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   |
|  |           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |   |
|  |           | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**\* TOTALS**

|   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |            |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|------------|
| Erythrophagocytosis   | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>5</b> | <b>2.0</b> |
| Hyperplasia, Lymphocyte Proliferation, Plasma Cell Lymphatic Sinus, Ectasia |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>3</b> | <b>1.3</b> |
|   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1</b> | <b>2.0</b> |
|   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2</b> | <b>2.0</b> |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |            |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|-----------|------------|
| Spleen                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  | <b>90</b> |            |
| Extramedullary Hematopoiesis | 2 | 2 |   |   | 1 |   |   |   |   | 4 | 4 |   | 3 |   |   |  | <b>60</b> | <b>2.1</b> |
| Hemorrhage                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | <b>1</b>  | <b>1.0</b> |
| Pigment                      | 1 | 3 | 1 | 3 | 3 | 4 |   | 2 |   |   |   | 2 |   |   |   |  | <b>54</b> | <b>1.9</b> |
| Thrombus                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | <b>1</b>  | <b>3.0</b> |
| Red Pulp, Atrophy            |   |   |   | 2 |   | 2 | 2 |   | 1 |   |   | 2 |   | 2 | 1 |  | <b>14</b> | <b>1.9</b> |
| White Pulp, Atrophy          |   |   |   |   |   | 2 |   | 1 |   |   |   | 1 |   | 2 |   |  | <b>11</b> | <b>2.3</b> |

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |            |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|-----------|------------|
| Thymus                               | + | M | + | + | + | M | + | + | + | + | + | + | + | + | + |  | <b>85</b> |            |
| Atrophy                              | 1 |   | 3 | 4 | 3 |   | 4 | 3 | 4 | 2 | 3 | 4 | 4 | 4 | 4 |  | <b>76</b> | <b>2.5</b> |
| Cyst                                 |   |   | X |   | X |   |   |   |   |   |   |   | X |   |   |  | <b>10</b> |            |
| Ectopic Parathyroid Gland            |   |   | X |   |   |   |   |   |   |   |   |   | X |   | X |  | <b>6</b>  |            |
| Hemorrhage                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | <b>2</b>  | <b>2.0</b> |
| Hyperplasia, Epithelial              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | <b>2</b>  | <b>1.0</b> |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |  | <b>3</b>  | <b>2.3</b> |

**INTEGUMENTARY SYSTEM**

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |            |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|-----------|------------|
| Mammary Gland  | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + |  | <b>77</b> |            |
| Atrophy        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | <b>2</b>  | <b>2.0</b> |
| Galactoceles   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |  | <b>1</b>  |            |
| Duct, Dilation |   |   | 2 |   | 1 | 3 |   |   | 2 |   |   |   |   |   |   |  | <b>8</b>  | <b>1.8</b> |

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |  |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|-----------|--|
| Skin                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  | <b>90</b> |  |
| Cyst Epithelial Inclusion |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |  | <b>12</b> |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                                |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS<br/>MALE</b> |                         | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 6 | 6 | 4 | 4 | 6 | 5 | 7 | 5 | 8 | 5 |
|  |                         | 3 | 3 | 3 | 3 | 6 | 0 | 6 | 1 | 6 | 4 | 0 | 1 | 9 | 1 | 8 | 8 | 8 |
|  |                         | 0 | 2 | 0 | 0 | 3 | 5 | 8 | 0 | 2 | 7 | 4 | 5 | 7 | 7 | 2 | 2 | 2 |
|  | <b>1.5W/kg(CDMA)chr</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| ANIMAL ID                                  |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |                         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  |                         | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|  |                         | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|  |                         | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 5 | 5 |
| <b>* TOTALS</b>                            |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                                       |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |     |
|---------------------------------------|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|---|-----|
| Inflammation, Suppurative             |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  | 2 | 3.5 |
| Inflammation, Chronic Active          |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  | 2 | 4.0 |
| Ulcer                                 |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  | 2 | 3.0 |
| Epidermis, Hyperplasia                |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  | 1 | 4.0 |
| Prepuce, Hyperplasia                  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  | 2 | 2.5 |
| Prepuce, Inflammation, Chronic Active |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  | 1 | 2.0 |
| Prepuce, Ulcer                        |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  | 2 | 3.0 |
| Subcutaneous Tissue, Hemorrhage       |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  | 1 | 4.0 |

**MUSCULOSKELETAL SYSTEM**

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |  |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|--|
| Bone                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |  |
| Fibrous Osteodystrophy |   |   |   | 2 |   | 2 |   | 2 |   | 2 |   |   | 1 | 2 | 2 | 1 |   |   | 20 | 1.7 |  |
| Skeletal Muscle        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |  |
| Degeneration           | 1 |   |   | 2 | 1 | 2 | 1 |   | 2 |   |   | 1 | 2 | 1 |   |   |   |   | 35 | 1.4 |  |
| Diaphragm, Hernia      |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   | 1  | 3.0 |  |

**NERVOUS SYSTEM**

|                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|--|
| Brain                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |  |
| Compression             |   |   | 2 |   | 1 | 2 | 1 |   | 2 |   |   |   |   |   |   |   |   |   | 12 | 1.7 |  |
| Edema                   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   | 1  | 1.0 |  |
| Hemorrhage              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 3  | 2.0 |  |
| Mineral                 |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   | 3  | 1.0 |  |
| Necrosis                |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 | 1 |   |   | 7  | 1.6 |  |
| Choroid Plexus, Mineral |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |  |
| Glial Cell, Hyperplasia |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 2  | 1.5 |  |
| Hypothalamus, Cyst      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |     |  |
| Meninges, Fibrosis      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1  | 1.0 |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                    | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 6 | 6 | 4 | 4 | 6 | 5 | 7 | 5 | 7 | 5 |
| HARLAN SPRAGUE DAWLEY RATS<br>MALE | 3 | 3 | 3 | 3 | 6 | 0 | 6 | 1 | 6 | 4 | 0 | 1 | 9 | 1 | 8 |   |   |
|                                    | 0 | 2 | 0 | 0 | 3 | 5 | 8 | 0 | 2 | 7 | 4 | 5 | 7 | 7 | 2 |   |   |
| 1.5W/kg(CDMA)chr                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                    | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| ANIMAL ID                          | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|                                    | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |
|                                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |   |   |

\* TOTALS

|  |  |  |  |  |  |  |  |  |   |  |  |   |  |   |  |  |  |   |     |
|--|--|--|--|--|--|--|--|--|---|--|--|---|--|---|--|--|--|---|-----|
| Meninges, Hyperplasia, Granular Cell   |  |  |  |  |  |  |  |  |   |  |  |   |  |   |  |  |  | 1 | 2.0 |
| Meninges, Mineral                      |  |  |  |  |  |  |  |  |   |  |  |   |  |   |  |  |  | 1 | 1.0 |
| Pineal Gland, Mineral                  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |   |  |  |  | 3 | 1.0 |
| Pineal Gland, Vacuolation, Cytoplasmic |  |  |  |  |  |  |  |  | 1 |  |  | 2 |  | 1 |  |  |  | 6 | 1.2 |

|                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Nerve Trigeminal Degeneration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
|                               | 1 |   | 1 |   | 3 | 1 | 3 | 1 |   |   |   | 1 | 2 | 1 |   |   |   | 66 | 1.8 |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Peripheral Nerve, Sciatic Degeneration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
|  | 2 | 3 | 3 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 4 | 1 |   |   | 90 | 2.5 |

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Peripheral Nerve, Tibial Degeneration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
|                                       | 2 | 3 | 3 | 3 | 1 | 2 | 2 | 2 | 3 | 1 | 1 | 2 | 2 | 3 | 2 |   |   | 90 | 2.7 |

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Spinal Cord, Cervical Degeneration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
|                                    | 1 |   | 1 | 1 | 1 |   |   |   | 1 |   |   | 1 |   |   |   |   |   | 36 | 1.0 |

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Spinal Cord, Lumbar Degeneration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
| Nerve, Degeneration              | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 |   |   | 2 | 3 | 2 | 2 |   |   | 85 | 2.7 |

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Spinal Cord, Thoracic Degeneration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
|                                    | 2 | 2 | 2 | 2 | 1 |   |   | 1 | 1 |   |   | 1 | 1 | 1 |   |   |   | 69 | 1.9 |

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Trigeminal Ganglion Degeneration | M | M | + | + | + | I | M | + | + | M | + | + | + | + | + | + | + | 77 |     |
|                                  |   |   |   |   | 1 |   |   |   |   |   |   |   |   | 1 | 1 |   |   | 22 | 1.0 |

RESPIRATORY SYSTEM

|      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |  |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0      |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|--------|
|   | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 6 | 6 | 4 | 4 | 6 | 5 | 7 | 5 | 7 | 5        | 2      |
| HARLAN SPRAGUE DAWLEY RATS<br>MALE                    | 3 | 3 | 3 | 3 | 6 | 0 | 6 | 1 | 6 | 4 | 0 | 1 | 9 | 1 | 8 | 8 | 8        |        |
|   | 0 | 2 | 0 | 0 | 3 | 5 | 8 | 0 | 2 | 7 | 4 | 5 | 7 | 7 | 2 | 2 | 2        |        |
| 1.5W/kg(CDMA)chr                                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        |        |
|   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1        |        |
| ANIMAL ID   | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4        |        |
|   | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3        |        |
|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |   |          |        |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |        |
| Congestion  |   |   |   |   | 2 |   |   | 2 |   |   |   |   |   |   |   |   |          | 13 2.2 |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 2      |
| Hemorrhage  |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |          | 5 2.0  |
| Inflammation, Granulomatous                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 6 1.2  |
| Inflammation, Chronic                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 1 2.0  |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 1 2.0  |
| Alveolus, Infiltration Cellular, Histiocyte           | 1 | 1 | 4 | 1 | 1 | 1 | 1 | 1 |   | 1 | 3 |   |   |   | 1 |   |          | 38 1.4 |
| Artery, Inflammation, Chronic Active                  |   |   | 2 |   |   |   |   |   |   |   |   | 1 |   |   |   |   |          | 3 1.7  |
| Epithelium Alveolus, Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 2 3.0  |
| Interstitial, Inflammation, Chronic                   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   |   |          | 5 2.2  |
| Interstitial, Inflammation, Chronic Active            |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 1 2.0  |
| Interstitial, Mineral                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 1 1.0  |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | 90     |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 2      |
| Hyperplasia, Lymphocyte                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 1 2.0  |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 6 1.3  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 3 | 2 | 1 | 2 | 1 |   |          | 88 1.8 |
| Olfactory Epithelium, Hyperplasia                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 1 2.0  |
| Olfactory Epithelium, Metaplasia, Respiratory         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 2 1.0  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 1 1.0  |
| Respiratory Epithelium, Hyperplasia                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 4 1.5  |
| Trachea   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | 88     |
| Artery, Inflammation, Chronic Active                  | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 1 2.0  |

SPECIAL SENSES SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 6 | 6 | 4 | 4 | 6 | 5 | 7 | 5 | 5 | 5 |
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> | 3 | 3 | 3 | 3 | 6 | 0 | 6 | 1 | 6 | 4 | 0 | 1 | 9 | 1 | 8 | 8 | 8 |
| <b>1.5W/kg(CDMA)chr</b>                | 0 | 2 | 0 | 0 | 3 | 5 | 8 | 0 | 2 | 7 | 4 | 5 | 7 | 7 | 2 | 2 | 2 |
| ANIMAL ID                              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|  | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|  | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 5 |
| <b>* TOTALS</b>                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 83 |
| Anterior Chamber, Inflammation, Acute |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 1 |   | 2 | 1  |
| Cornea, Fibrosis                      |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Cornea, Inflammation, Acute           |   |   |   | 1 |   |   |   | 2 | 1 |   |   |   | 1 |   | 2 |   | 18 |
| Cornea, Neovascularization            | 1 | 1 | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   | 14 |
| Cornea, Ulcer                         |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 1  |
| Cornea, Epithelium, Hyperplasia       |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   |   |   | 15 |
| Lens, Cataract                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Retina, Atrophy                       |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   |   | 17 |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Harderian Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  |
| Degeneration, Cystic              |   |   |   | 1 | 2 |   |   |   |   |   |   |   |   |   |   |   | 4  |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 3  |
| Inflammation, Suppurative         | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Inflammation, Granulomatous       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5  |
| Inflammation, Acute               |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   | 1  |
| Inflammation, Chronic             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |

|                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|-----------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Lacrimal Gland              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Metaplasia, Harderian Gland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

**URINARY SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |
| Nephropathy, Chronic Progressive  | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 2 | 3 | 4 | 4 | 4 | 4 |   | 90 |
| Thrombus                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Pelvis, Inflammation, Suppurative |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Pelvis, Urothelium, Hyperplasia   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                                |                                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0     | 0 |
|--|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|---|
| <b>HARLAN SPRAGUE DAWLEY RATS<br/>MALE</b> |                                      | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 6 | 6 | 4 | 4 | 6 | 5 | 7 | 5 | 5     |   |
|  |                                      | 3 | 3 | 3 | 3 | 6 | 0 | 6 | 1 | 6 | 4 | 0 | 1 | 9 | 1 | 8 | 8     |   |
|  |                                      | 0 | 2 | 0 | 0 | 3 | 5 | 8 | 0 | 2 | 7 | 4 | 5 | 7 | 7 | 2 | 2     |   |
|  | <b>1.5W/kg(CDMA)chr</b>              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |   |
|  | ANIMAL ID                            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0     |   |
|  |                                      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1     |   |
|  |                                      | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4     |   |
|  |                                      | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4     |   |
|  |                                      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 5     |   |
| <b>* TOTALS</b>                            |                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |   |
|  | Renal Tubule, Cyst                   |   |   | X |   |   |   | X |   | X |   |   |   | X | X | X | 17    |   |
|  | Renal Tubule, Hyperplasia, Atypical  |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 1 2.0 |   |
|  | Urinary Bladder                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 83    |   |
|  | Dilation                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |   |
|  | Hemorrhage                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |   |
|  | Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0 |   |
|  | Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 2.5 |   |
|  | Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |   |
|  | Urothelium, Hyperplasia              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 2.5 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST | 0731  | 0733  | 0688  | 0720  | 0731  | 0673  | 0764  | 0773  | 0773  | 0773  | 0593  | 0733  | 0733  | 0733  | 0744  | 0773  | 0666  | 0666  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | males<br>(cont...) |
|  | ANIMAL ID   | 01551 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 |                    |

ALIMENTARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum               | + | + | + | + | + | A | + | A | + | + | + | A | + | + | + | + | A | + | A | + | + | + | + | A | + |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 3 |   |   |   |   |   |   |   | 2 |   |
| Artery, Thrombus                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Colon               | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Intestine Large, Rectum              | + | + | + | + | + | A | + | A | + | + | + | A | + | + | + | + | + | A | + | + | + | + | A | + |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Duodenum            | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Intestine Small, Ileum               | + | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | A | + |   |
| Hemorrhage                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Jejunum             | + | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | A | + | A | + | + | + | + | A | + |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Liver                                | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Basophilic Focus                     |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |
| Clear Cell Focus                     |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus                   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   | X |   |   |   |   | X |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | males<br>(cont...) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|
|  | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>3      | 0<br>6<br>8<br>8      | 0<br>7<br>2<br>0      | 0<br>7<br>3<br>2      | 0<br>6<br>1<br>0      | 0<br>7<br>3<br>3      | 0<br>6<br>4<br>2      | 0<br>7<br>3<br>0      | 0<br>6<br>3<br>4      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>5<br>9<br>2      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>4      | 0<br>4<br>7<br>1      | 0<br>6<br>3<br>9      | 0<br>6<br>6<br>4      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>3      |                       |                    |
|  | 0<br>1<br>5<br>5<br>1 | 0<br>1<br>5<br>5<br>2 | 0<br>1<br>5<br>5<br>3 | 0<br>1<br>5<br>5<br>4 | 0<br>1<br>5<br>5<br>5 | 0<br>1<br>5<br>5<br>6 | 0<br>1<br>5<br>5<br>7 | 0<br>1<br>5<br>5<br>9 | 0<br>1<br>5<br>6<br>0 | 0<br>1<br>5<br>6<br>1 | 0<br>1<br>5<br>6<br>2 | 0<br>1<br>5<br>6<br>3 | 0<br>1<br>5<br>6<br>4 | 0<br>1<br>5<br>6<br>5 | 0<br>1<br>5<br>6<br>6 | 0<br>1<br>5<br>6<br>7 | 0<br>1<br>5<br>6<br>9 | 0<br>1<br>5<br>6<br>0 | 0<br>1<br>5<br>6<br>1 | 0<br>1<br>5<br>6<br>2 | 0<br>1<br>5<br>6<br>3 | 0<br>1<br>5<br>6<br>4 | 0<br>1<br>5<br>6<br>5 | 0<br>1<br>5<br>6<br>6 | 0<br>1<br>5<br>6<br>7 |                    |

Parotid Gland, Atrophy 3 4 3 2  
 Parotid Gland, Inflammation, Acute  
 Sublingual Gland, Atrophy

Stomach, Forestomach +  
 Edema  
 Inflammation, Acute  
 Inflammation, Chronic Active 1 3 2 1  
 Ulcer 2  
 Epithelium, Hyperplasia 4 2 4  
 Epithelium, Hyperplasia, Basal Cell

Stomach, Glandular + + + + + A +  
 Erosion 2 1  
 Mineral 3  
 Necrosis 2 1  
 Artery, Mineral

CARDIOVASCULAR SYSTEM

Aorta +  
 Dilation  
 Mineral 1

Blood Vessel  
 Inflammation, Chronic Active

Heart +  
 Cardiomyopathy 2 2 1 3 3 2 1 2 2 2 2 2 2 3 2 2 1 2 1 2 3 1  
 Inflammation, Suppurative

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked











Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr  | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |                  |                  |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|------------------|
|   | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>3 | 0<br>6<br>8<br>8 | 0<br>7<br>2<br>0 | 0<br>7<br>3<br>2 | 0<br>6<br>1<br>0 | 0<br>7<br>3<br>2 | 0<br>6<br>4<br>0 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>4 | 0<br>7<br>3<br>2 | 0<br>5<br>9<br>2 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>7 | 0<br>7<br>3<br>4 | 0<br>4<br>3<br>1 | 0<br>7<br>3<br>7 | 0<br>6<br>1<br>6 | 0<br>6<br>3<br>3 | 0<br>7<br>3<br>3 |           |                    | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>1 |
| Proliferation, Plasma Cell<br>Lymphatic Sinus, Ectasia  | 2                | 2                |                  |                  | 1                | 2                | 2                | 2                | 2                | 2                | 2                | 3                | 1                |                  |                  | 1                | 1                |                  |                  |                  | 2         | 2                  | 2                |                  |
| Lymph Node, Mesenteric<br>Erythrophagocytosis<br>Hyperplasia, Lymphocyte<br>Lymphatic Sinus, Ectasia                                    | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | A                | +                | +                | +                | +         | +                  | +                |                  |
| Spleen<br>Congestion<br>Extramedullary Hematopoiesis<br>Hemorrhage<br>Necrosis<br>Pigment<br>Red Pulp, Atrophy<br>White Pulp, Atrophy   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                  | +                |                  |
| Thymus<br>Atrophy<br>Cyst<br>Ectopic Parathyroid Gland<br>Hemorrhage<br>Hyperplasia, Epithelial<br>Artery, Inflammation, Chronic Active | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | I                | +                | +                | +         | M                  | +                |                  |

INTEGUMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Mammary Gland<br>Atrophy<br>Galactocele | M | + | + | + | M | + | + | M | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
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M .. Missing tissue  
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BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | males<br>(cont...)    |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>3      | 0<br>6<br>8<br>8      | 0<br>7<br>2<br>0      | 0<br>7<br>3<br>2      | 0<br>6<br>1<br>0      | 0<br>7<br>3<br>3      | 0<br>6<br>4<br>2      | 0<br>7<br>3<br>0      | 0<br>6<br>3<br>4      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>0      | 0<br>5<br>9<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>7      | 0<br>4<br>3<br>1      | 0<br>7<br>3<br>9      | 0<br>6<br>6<br>4      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      |                       |                       |
|  | 0<br>1<br>5<br>5<br>1 | 0<br>1<br>5<br>5<br>2 | 0<br>1<br>5<br>5<br>3 | 0<br>1<br>5<br>5<br>4 | 0<br>1<br>5<br>5<br>5 | 0<br>1<br>5<br>5<br>6 | 0<br>1<br>5<br>5<br>7 | 0<br>1<br>5<br>5<br>9 | 0<br>1<br>5<br>5<br>0 | 0<br>1<br>5<br>5<br>1 | 0<br>1<br>5<br>5<br>2 | 0<br>1<br>5<br>5<br>3 | 0<br>1<br>5<br>5<br>4 | 0<br>1<br>5<br>5<br>5 | 0<br>1<br>5<br>5<br>6 | 0<br>1<br>5<br>5<br>7 | 0<br>1<br>5<br>5<br>8 | 0<br>1<br>5<br>5<br>9 | 0<br>1<br>5<br>5<br>0 | 0<br>1<br>5<br>5<br>1 | 0<br>1<br>5<br>5<br>2 | 0<br>1<br>5<br>5<br>3 | 0<br>1<br>5<br>5<br>4 | 0<br>1<br>5<br>5<br>5 | 0<br>1<br>5<br>5<br>6 | 0<br>1<br>5<br>5<br>7 |

Duct, Dilation

1

3

2

Skin

Cyst Epithelial Inclusion

Inflammation, Chronic Active

Ulcer

Hair Follicle, Degeneration

Subcutaneous Tissue, Inflammation,  
Suppurative

Subcutaneous Tissue, Inflammation, Chronic

Subcutaneous Tissue, Inflammation, Chronic  
Active

Subcutaneous Tissue, Necrosis

MUSCULOSKELETAL SYSTEM

Bone

Fibrous Osteodystrophy

Cranium, Inflammation, Chronic Active

Bone, Vertebra

Developmental Malformation

Skeletal Muscle

Degeneration

Inflammation, Chronic Active

Mineral

NERVOUS SYSTEM

Brain

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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1) Minimal 3) Moderate

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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST | 0731  | 0733  | 0688  | 0720  | 0772  | 0673  | 0764  | 0773  | 0773  | 0773  | 0593  | 0733  | 0773  | 0773  | 0471  | 0769  | 0664  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | males<br>(cont...) |
|  | ANIMAL ID   | 01551 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 |                    |

Trigeminal Ganglion Degeneration

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|   | 1 |   | 1 | 1 |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |

RESPIRATORY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Congestion  |   |   |   |   |   | 2 |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |
| Foreign Body  |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage  |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Granulomatous                           |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic                                 |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |
| Metaplasia, Osseous                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolus, Infiltration Cellular, Histiocyte           | 1 |   |   | 4 |   |   |   |   |   |   |   |   |   | 1 | 1 |   | 1 |   |   |   | 1 |   |   |   |
| Artery, Inflammation, Chronic Active                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium Alveolus, Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Interstitial, Mineral                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinum, Inflammation, Suppurative                |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Perivascular, Infiltration Cellular, Lymphocyte       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   | X |   |   |   |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   | 2 |   | 2 |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 1 | 3 | 3 |
| Olfactory Epithelium, Metaplasia, Respiratory         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST | 0731  | 0733  | 0688  | 0720  | 0772  | 0676  | 0767  | 0077  | 0077  | 0077  | 0059  | 0073  | 0073  | 0073  | 0047  | 0067  | 0066  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  | males<br>(cont...) |       |       |       |       |
|  | ANIMAL ID   | 01551 | 01552 | 01553 | 01554 | 01555 | 01556 | 01557 | 01558 | 01559 | 01560 | 01561 | 01562 | 01563 | 01564 | 01565 | 01566 | 01567 | 01568 | 01569 | 01570 | 01571 | 01572 | 01573 |                    | 01574 | 01575 | 01576 | 01577 |
|  |             | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |                    | 0     | 0     | 0     | 0     |

Respiratory Epithelium, Hyperplasia

1 2 2 1

Trachea

+ +

SPECIAL SENSES SYSTEM

Eye

+ + + + + A + + + + + + + + + + + A + + + + A +

Phthisis Bulbi

3

Retinal Detachment

3

Anterior Chamber, Inflammation, Acute

1

2

Cornea, Fibrosis

1

Cornea, Inflammation, Acute

1

1

1

1

2

1

1

Cornea, Neovascularization

1

1

1

1

Cornea, Epithelium, Degeneration

1

Cornea, Epithelium, Hyperplasia

1

2

1

3

1

Retina, Atrophy

1

1

1

1

Harderian Gland

+ +

Atrophy

Degeneration

2

Degeneration, Cystic

1

Inflammation, Granulomatous

Inflammation, Chronic Active

2

Lacrimal Gland

Metaplasia, Harderian Gland

Zymbal's Gland

URINARY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | males<br>(cont...)    |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>3      | 0<br>6<br>8<br>8      | 0<br>7<br>2<br>0      | 0<br>7<br>3<br>2      | 0<br>6<br>1<br>0      | 0<br>7<br>3<br>3      | 0<br>6<br>4<br>2      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>4      | 0<br>6<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>5<br>9<br>0      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>4      | 0<br>4<br>7<br>1      | 0<br>6<br>3<br>7      | 0<br>6<br>1<br>6      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      |                       | 0<br>7<br>3<br>0      |                       |
| ANIMAL ID  | 0<br>1<br>5<br>5<br>1 | 0<br>1<br>5<br>5<br>2 | 0<br>1<br>5<br>5<br>3 | 0<br>1<br>5<br>5<br>4 | 0<br>1<br>5<br>5<br>5 | 0<br>1<br>5<br>5<br>6 | 0<br>1<br>5<br>5<br>7 | 0<br>1<br>5<br>5<br>8 | 0<br>1<br>5<br>5<br>9 | 0<br>1<br>5<br>6<br>0 | 0<br>1<br>5<br>6<br>1 | 0<br>1<br>5<br>6<br>2 | 0<br>1<br>5<br>6<br>3 | 0<br>1<br>5<br>6<br>4 | 0<br>1<br>5<br>6<br>5 | 0<br>1<br>5<br>6<br>6 | 0<br>1<br>5<br>6<br>7 | 0<br>1<br>5<br>6<br>8 | 0<br>1<br>5<br>6<br>9 | 0<br>1<br>5<br>7<br>0 | 0<br>1<br>5<br>7<br>1 | 0<br>1<br>5<br>7<br>2 | 0<br>1<br>5<br>7<br>3 | 0<br>1<br>5<br>7<br>4 | 0<br>1<br>5<br>7<br>5 | 0<br>1<br>5<br>7<br>6 | 0<br>1<br>5<br>7<br>7 |
| Kidney   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |
| Mineral Necrosis                                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Nephropathy, Chronic Progressive                       | 2                     | 3                     | 3                     | 4                     | 4                     | 3                     | 4                     | 3                     | 4                     | 4                     | 2                     | 2                     | 4                     | 2                     | 1                     | 3                     | 2                     | 3                     | 4                     | 3                     | 2                     | 2                     | 4                     | 4                     | 4                     | 4                     | 4                     |
| Thrombus Artery, Inflammation, Chronic Active          |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Pelvis, Dilation                                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Pelvis, Inflammation, Suppurative                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Pelvis, Urothelium, Hyperplasia                        |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Perirenal Tissue, Thrombus                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |
| Renal Tubule, Cyst                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |
| Renal Tubule, Hyperplasia, Atypical                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Renal Tubule, Inflammation, Suppurative                |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Urothelium, Hyperplasia                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Urinary Bladder  | +                     | +                     | +                     | +                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |
| Hemorrhage   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Inflammation, Acute                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Serosa, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Urothelium, Hyperplasia                                |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked









Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST | 0731  | 0733  | 0731  | 0733  | 0739  | 0733  | 0733  | 0732  | 0732  | 0733  | 0734  | 0733  | 0730  | 0736  | 0737  | 0734  | 0734  | 0732  | 0730  | 0737  | 0733  | 0733  | 0731  | 0733  | 0731  | 0733  | 0739  | 0734  | males<br>(cont...) |
|  | ANIMAL ID   | 01578 | 01157 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 |                    |

|                                      |   |   |   |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |   |  |
|--------------------------------------|---|---|---|---|---|--|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|---|--|
| Thrombus                             | 4 |   |   |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |   |  |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |   |  |
| Artery, Mineral                      | 2 |   |   |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |   |  |
| Atrium Left, Mineral                 |   |   |   |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |   |  |
| Myocardium, Mineral                  |   |   |   |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |   |  |
| Pericardium, Hemorrhage              |   |   |   |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |   |  |
| Ventricle Right, Cardiomyopathy      | 1 | 2 | 2 | 1 | 2 |  | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 |  |  |  |  |  | 2 |  |
| Ventricle Right, Dilatation          |   |   |   |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |   |  |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accessory Adrenal Cortical Nodule | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Extramedullary Hematopoiesis      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia                       | 2 | 3 |   | 2 | 2 |   |   |   | 2 | 4 |   |   | 2 |   |   | 2 |   | 1 | 1 | 1 |   |   |   |   |   |   | 1 |   |   |
| Hypertrophy                       | 2 | 1 | 1 | 1 |   |   | 2 | 1 | 1 | 1 |   | 1 | 1 | 1 | 1 |   |   | 1 |   | 1 | 2 | 1 | 1 | 2 |   |   |   |   |   |
| Necrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thrombus                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolation, Cytoplasmic          | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                       | 3 |   | 1 |   | 2 |   |   | 1 |   |   | 1 |   |   |   | 4 |   | 3 |   | 1 | 1 |   |   |   |   |   |   |   |   |   |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                       | 2 |   |   |   |   |   | 2 | 2 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |
| Parathyroid Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + |   |
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia                       | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 2 |   |   |   | 1 | 2 |   |   | 1 | 2 |   |   | 1 | 2 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr       | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|  | 0731        | 0733  | 0733  | 0731  | 0751  | 0771  | 0771  | 0771  | 0771  | 0733  | 0733  | 0771  | 0733  | 0733  | 0733  | 0733  | 0733  | 0733  | 0733  | 0733  | 0733  | 0733  | 0733  | 0733  |                    |
| ANIMAL ID  | 01578       | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 | 01157 |                    |
| Preputial Gland Fibrosis                                     | +           | +     | +     | +     | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                    |
| Inflammation, Chronic Active                                 | 3           |       | 1     |       | 2     |       |       | 3     | 3     |       | 2     |       |       | 1     | 2     |       | 2     | 2     |       |       | 2     |       |       | 2     |                    |
| Metaplasia, Squamous Duct, Dilation                          | 3           | 4     | 3     | 3     | 4     |       | 3     |       | 3     |       | 1     |       | 3     | 2     | 3     | 3     |       |       |       |       | 1     | 3     |       | 2     | 2                  |
| Prostate   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                    |
| Decreased Secretory Fluid Hemorrhage                         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |                    |
| Inflammation, Chronic Active                                 | 3           |       |       |       |       |       |       |       |       |       | 4     |       |       | 2     |       |       | 1     |       |       |       |       |       |       |       |                    |
| Artery, Inflammation, Chronic Active Epithelium, Hyperplasia |             |       |       |       |       |       |       |       |       |       | 2     |       | 2     |       |       |       | 3     |       |       |       | 2     |       |       | 2     |                    |
| Seminal Vesicle  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                    |
| Decreased Secretory Fluid                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       | 4     |       |       |       | 3     |                    |
| Developmental Malformation Dilation                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |                    |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Inflammation, Acute  |             |       |       |       |       |       |       |       |       |       |       |       | 1     |       |       |       |       |       |       |       |       |       |       |       |                    |
| Lumen, Hemorrhage  |             |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |                    |
| Testis   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                    |
| Artery, Inflammation, Chronic Active                         |             | 4     | 1     |       |       |       |       | 3     |       |       |       |       |       |       |       | 2     | 3     |       |       | 2     | 2     |       | 2     | 2     |                    |
| Germ Cell, Degeneration                                      |             |       |       |       |       |       |       |       |       |       |       |       |       | 1     |       |       |       |       |       | 2     | 3     |       |       |       |                    |
| Seminiferous Tubule, Dilation                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |

HEMATOPOIETIC SYSTEM

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked







Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|
|  | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>1 | 0<br>5<br>9<br>5 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>2 | 0<br>3<br>8<br>3 | 0<br>7<br>3<br>4 | 0<br>3<br>9<br>3 | 0<br>7<br>3<br>0 | 0<br>6<br>3<br>6 | 0<br>7<br>3<br>7 | 0<br>6<br>0<br>4 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>0 | 0<br>6<br>7<br>7 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>3 | 0<br>6<br>9<br>4 |           |                    |
| Compression  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2         |                    |
| Inflammation, Suppurative                              |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3         |                    |
| Mineral  | 1                |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Necrosis   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Meninges, Hyperplasia                                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Pineal Gland, Mineral                                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Pineal Gland, Vacuolation, Cytoplasmic                 | 2                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Nerve Trigeminal<br>Degeneration                       | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         |                    |
|  | 2                |                  | 3                | 3                | 2                | 1                | 3                |                  |                  |                  |                  | 3                |                  |                  |                  | 2                | 3                |                  |                  | 2                | 1                | 3                | 1                |                  | 3         | 2                  |
| Peripheral Nerve, Sciatic<br>Degeneration              | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         |                    |
|  | 3                | 3                | 4                | 3                | 2                | 3                | 3                | 4                | 3                | 1                | 3                |                  | 4                | 2                | 4                | 4                | 1                | 4                | 3                | 3                | 2                | 3                | 1                | 3                | 2         |                    |
| Infiltration Cellular, Histiocyte                      | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Peripheral Nerve, Tibial<br>Degeneration               | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         |                    |
|  | 3                | 3                | 4                | 4                | 2                | 3                | 3                | 4                | 2                | 1                | 3                | 1                | 3                | 2                | 4                | 4                | 1                | 4                | 3                | 3                | 3                | 3                | 2                | 3                | 3         |                    |
| Spinal Cord, Cervical<br>Degeneration                  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         |                    |
|  |                  |                  | 1                | 1                |                  | 1                | 1                |                  |                  | 1                |                  | 1                |                  |                  | 1                | 1                |                  | 1                | 1                |                  | 1                | 1                |                  | 1                | 1         |                    |
| Meninges, Inflammation, Suppurative                    |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2         |                    |
| Spinal Cord, Lumbar<br>Degeneration                    | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         |                    |
|  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1         |                    |
| Nerve, Degeneration                                    | 3                | 3                | 3                | 4                | 2                | 2                | 2                | 4                | 4                |                  | 4                |                  | 4                | 2                | 2                | 4                |                  | 3                | 3                | 3                | 3                | 3                | 2                | 4                | 4         |                    |
| Spinal Cord, Thoracic<br>Degeneration                  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         |                    |
|  | 1                | 2                | 2                | 3                | 1                | 2                | 1                | 1                | 3                |                  | 2                |                  | 2                |                  | 2                | 2                | 1                | 2                | 1                |                  | 3                | 2                | 2                | 2                | 1         |                    |
| Meninges, Inflammation, Suppurative                    |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1         |                    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

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|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST | 0731  | 0733  | 0731  | 0739  | 0735  | 0733  | 0733  | 0732  | 0732  | 0733  | 0734  | 0733  | 0730  | 0736  | 0737  | 0734  | 0734  | 0732  | 0733  | 0737  | 0733  | 0731  | 0733  | 0731  | 0737  | 0736  | 0739  | 0734  | males<br>(cont...) |
|  | ANIMAL ID   | 01578 | 01579 | 01580 | 01581 | 01582 | 01583 | 01584 | 01585 | 01586 | 01587 | 01588 | 01589 | 01590 | 01591 | 01592 | 01593 | 01594 | 01595 | 01596 | 01597 | 01598 | 01599 | 01600 | 01601 | 01602 | 01603 | 01604 | 01605 |                    |
|  |             | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |                    |

Trigeminal Ganglion Degeneration

+ + + + + + + + + + + I + + + + + M + + + + +

RESPIRATORY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Lung  | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Congestion  | 3 2   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Hemorrhage  | 3   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Inflammation, Granulomatous                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Inflammation, Chronic                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Metaplasia, Osseous                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Alveolus, Infiltration Cellular, Histiocyte           | 1   | 1 | 1 | 1 | 1 |   |   |   |   | 1 | 1 | 1 |   |   | 1 | 1 |   |   | 1 | 1 | 1 | 1 | 2 | 1 | 1 |   |  |  |
| Artery, Inflammation, Chronic Active                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Epithelium Alveolus, Hyperplasia                      | 1   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Interstitial, Mineral                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Mediastinum, Inflammation, Suppurative                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Perivascular, Infiltration Cellular, Lymphocyte       | 2   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Nose  | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Inflammation, Suppurative                             | 1 1   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 2   | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 2 |  |  |
| Olfactory Epithelium, Metaplasia, Respiratory         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet | 1   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | males<br>(cont...)    |   |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
|  | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>1      | 0<br>5<br>9<br>5      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>3<br>8<br>3      | 0<br>7<br>3<br>4      | 0<br>3<br>9<br>3      | 0<br>6<br>0<br>6      | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>4      | 0<br>6<br>0<br>4      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>0      | 0<br>6<br>7<br>7      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>3      | 0<br>6<br>9<br>4      |                       |   |
| ANIMAL ID  | 0<br>1<br>5<br>7<br>8 | 0<br>1<br>5<br>7<br>9 | 0<br>1<br>5<br>8<br>0 | 0<br>1<br>5<br>8<br>2 | 0<br>1<br>5<br>8<br>3 | 0<br>1<br>5<br>8<br>4 | 0<br>1<br>5<br>8<br>5 | 0<br>1<br>5<br>8<br>6 | 0<br>1<br>5<br>8<br>7 | 0<br>1<br>5<br>8<br>8 | 0<br>1<br>5<br>8<br>8 | 0<br>1<br>5<br>9<br>9 | 0<br>1<br>5<br>9<br>9 | 0<br>1<br>5<br>9<br>9 | 0<br>1<br>5<br>9<br>9 | 0<br>1<br>5<br>9<br>9 | 0<br>1<br>5<br>9<br>9 | 0<br>1<br>6<br>0<br>0 | 0<br>1<br>6<br>0<br>0 | 0<br>1<br>6<br>0<br>0 | 0<br>1<br>6<br>0<br>0 | 0<br>1<br>6<br>0<br>0 | 0<br>1<br>6<br>0<br>0 | 0<br>1<br>6<br>0<br>0 | 0<br>1<br>6<br>0<br>0 |   |
| Kidney   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |   |
| Mineral Necrosis                                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Nephropathy, Chronic Progressive                       | 2                     | 4                     | 2                     | 1                     | 1                     | 3                     | 3                     | 4                     | 1                     | 1                     | 2                     | 1                     | 2                     | 4                     | 2                     | 4                     | 4                     | 1                     | 4                     | 4                     | 1                     | 4                     | 4                     | 2                     | 4                     |   |
| Thrombus Artery, Inflammation, Chronic Active          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pelvis, Dilation                                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pelvis, Inflammation, Suppurative                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pelvis, Urothelium, Hyperplasia                        |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Perirenal Tissue, Thrombus                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Renal Tubule, Cyst                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Renal Tubule, Hyperplasia, Atypical                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Renal Tubule, Inflammation, Suppurative                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Urothelium, Hyperplasia                                | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Urinary Bladder  | +                     | +                     | +                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | A                     | +                     | + |
| Hemorrhage   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Inflammation, Acute                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Serosa, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Urothelium, Hyperplasia                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>MALE</b><br><b>3.0W/kg(CDMA)chr</b> | DAY ON TEST | 04 | 07 | 06 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 06 | 07 | 06 | 06 | 06 | 07 | 05 | 07 | 03 | 07 | 07 | 07 | 07 |
|   | ANIMAL ID   | 95 | 33 | 98 | 28 | 31 | 37 | 47 | 34 | 32 | 44 | 00 | 11 | 44 | 66 | 22 | 22 | 44 | 11 | 77 | 33 | 77 | 33 | 33 | 44 |
|   |             | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
|   |             | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 |
|   |             | 00 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
|   |             | 99 | 00 | 11 | 22 | 44 | 55 | 66 | 77 | 88 | 99 | 00 | 22 | 33 | 44 | 55 | 88 | 99 | 00 | 11 | 33 | 55 | 66 | 77 | 88 |
|   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

males (cont...)

ALIMENTARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum               | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |
| Necrosis                             |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 1 |   |
| Artery, Thrombus                     |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Colon               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 2 |   |
| Intestine Large, Rectum              | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | A | + | + | + |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |
| Intestine Small, Duodenum            | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Ileum               | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + | A | A | + | + |
| Hemorrhage                           |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |
| Intestine Small, Jejunum             | A | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | A | A | + | + |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Liver                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Basophilic Focus                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clear Cell Focus                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Eosinophilic Focus                   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | males<br>(cont...)    |                       |                       |                       |                  |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
|  | 0<br>4<br>9<br>5      | 0<br>7<br>3<br>3      | 0<br>6<br>9<br>8      | 0<br>7<br>2<br>8      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>7      | 0<br>6<br>4<br>7      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>1      | 0<br>6<br>1<br>4      | 0<br>7<br>2<br>6      | 0<br>6<br>5<br>2      | 0<br>6<br>4<br>2      | 0<br>6<br>8<br>4      | 0<br>7<br>3<br>1      | 0<br>5<br>7<br>7      | 0<br>7<br>1<br>3      |                       |                       | 0<br>3<br>1<br>7      | 0<br>7<br>1<br>7      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2 |
|  | 0<br>1<br>6<br>0<br>9 | 0<br>1<br>6<br>1<br>0 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>2 | 0<br>1<br>6<br>1<br>4 | 0<br>1<br>6<br>1<br>5 | 0<br>1<br>6<br>1<br>6 | 0<br>1<br>6<br>1<br>7 | 0<br>1<br>6<br>1<br>8 | 0<br>1<br>6<br>1<br>9 | 0<br>1<br>6<br>2<br>0 | 0<br>1<br>6<br>2<br>2 | 0<br>1<br>6<br>2<br>3 | 0<br>1<br>6<br>2<br>4 | 0<br>1<br>6<br>2<br>5 | 0<br>1<br>6<br>2<br>8 | 0<br>1<br>6<br>3<br>9 | 0<br>1<br>6<br>3<br>0 | 0<br>1<br>6<br>3<br>1 | 0<br>1<br>6<br>3<br>3 | 0<br>1<br>6<br>3<br>5 | 0<br>1<br>6<br>3<br>6 | 0<br>1<br>6<br>3<br>7 | 0<br>1<br>6<br>3<br>8 | 0<br>1<br>6<br>3<br>9 |                  |

Parotid Gland, Atrophy 4 2 2 4  
 Parotid Gland, Inflammation, Acute 1  
 Sublingual Gland, Atrophy

Stomach, Forestomach +  
 Edema 3  
 Inflammation, Acute  
 Inflammation, Chronic Active 3 1 1 3 1  
 Ulcer 2 3 2  
 Epithelium, Hyperplasia 3 2 3 3 4  
 Epithelium, Hyperplasia, Basal Cell

Stomach, Glandular + + + + + + + + + + + + + + + + + + A + + + +  
 Erosion 1  
 Mineral 1 3 3  
 Necrosis  
 Artery, Mineral 2

CARDIOVASCULAR SYSTEM

Aorta +  
 Dilation  
 Mineral 3 3

Blood Vessel  
 Inflammation, Chronic Active 2

Heart +  
 Cardiomyopathy 2 1 3 2 1 1 1 2 1 1 2 3 2 2 2 2 1 3 2 3 3 2 1  
 Inflammation, Suppurative

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | ANIMAL ID | males<br>(cont...) |    |    |
|--|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----------|--------------------|----|----|
|  | 04          | 07 | 06 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 06 | 07 | 06 | 06 | 06 | 07 | 05 | 07 | 03 |           |                    | 07 | 07 |
|  | 9           | 3  | 9  | 2  | 3  | 3  | 4  | 3  | 3  | 3  | 3  | 1  | 2  | 5  | 4  | 8  | 3  | 7  | 1  | 1  | 1         | 3                  | 3  | 3  |
|  | 5           | 3  | 8  | 8  | 1  | 7  | 7  | 4  | 2  | 4  | 0  | 1  | 4  | 6  | 2  | 2  | 4  | 1  | 7  | 3  | 7         | 3                  | 2  | 4  |
|  | 0           | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0         | 0                  | 0  | 0  |
|  | 1           | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1         | 1                  | 1  | 1  |
|  | 6           | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6         | 6                  | 6  | 6  |
|  | 0           | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 2  | 2  | 2  | 2  | 2  | 3  | 3  | 3  | 3         | 3                  | 3  | 3  |
|  | 9           | 0  | 1  | 2  | 4  | 5  | 6  | 7  | 8  | 9  | 0  | 2  | 2  | 3  | 4  | 5  | 8  | 9  | 0  | 1  | 3         | 5                  | 6  | 9  |

|                                      |   |   |   |   |   |   |  |  |  |  |   |   |  |  |  |  |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|--|--|--|--|---|---|--|--|--|--|---|---|---|---|---|---|---|---|---|
| Thrombus                             | 4 |   |   |   |   |   |  |  |  |  |   |   |  |  |  |  |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |  |  |  |  |   |   |  |  |  |  |   |   |   |   |   |   |   |   |   |
| Artery, Mineral                      |   |   |   |   |   |   |  |  |  |  |   | 2 |  |  |  |  |   |   |   |   |   |   |   |   |   |
| Atrium Left, Mineral                 |   |   |   |   |   |   |  |  |  |  |   | 1 |  |  |  |  |   |   |   |   |   |   |   |   |   |
| Myocardium, Mineral                  |   |   |   |   |   |   |  |  |  |  |   |   |  |  |  |  |   |   |   |   |   |   |   |   |   |
| Pericardium, Hemorrhage              |   |   |   |   |   |   |  |  |  |  |   |   |  |  |  |  |   |   |   |   |   |   |   |   |   |
| Ventricle Right, Cardiomyopathy      | 1 | 1 | 1 | 1 | 1 | 1 |  |  |  |  | 1 | 1 |  |  |  |  | 1 | 3 | 1 | 1 | 1 | 3 | 2 | 2 | 1 |
| Ventricle Right, Dilatation          |   |   |   |   |   |   |  |  |  |  |   | 3 |  |  |  |  |   |   |   |   |   |   |   |   |   |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|---|---|---|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |  |   |   |   |
| Accessory Adrenal Cortical Nodule |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |  |  |   |   |   |
| Degeneration                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |   |   |
| Extramedullary Hematopoiesis      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |   |   |
| Hyperplasia                       | 2 |   |   |   |   | 2 | 2 | 1 |   |   | 2 | 2 | 2 | 2 |   |   | 2 |   |   | 2 | 1 |   |   | 2 | 2 |  |  |   |   |   |
| Hypertrophy                       | 2 |   |   |   | 2 | 1 |   |   | 1 |   |   | 2 | 2 |   |   | 2 |   |   | 1 |   |   | 1 | 1 |   |   |  |  |   |   |   |
| Necrosis                          |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |   |   |
| Thrombus                          | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |   |   |
| Vacuolation, Cytoplasmic          | 2 |   | 2 |   |   |   |   |   |   |   |   |   |   | 2 | 2 | 1 |   |   |   |   |   |   | 1 | 1 |   |  |  |   |   |   |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |  |   |   |   |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   | 1 | 4 |   |   | 1 | 2 | 2 | 2 |   |   |   |   |   |   | 1 |  |  |   |   |   |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |  |   |   |   |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 4 |   |   |   |   |   |   |   |   |  |  |   |   |   |
| Parathyroid Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + |   |  |  |   |   |   |
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |   |   |
| Hyperplasia                       |   |   | 2 | 3 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   | 3 | 2 | 2 |   |   |   |   |  |  | 4 | 4 | 3 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
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1) Minimal 3) Moderate  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr  | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID                       | males<br>(cont...) |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------------------------------|--------------------|
|   | 0<br>4<br>9<br>5 | 0<br>7<br>3<br>3 | 0<br>6<br>9<br>8 | 0<br>7<br>2<br>8 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>7 | 0<br>6<br>4<br>7 | 0<br>7<br>3<br>4 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>4 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>1 | 0<br>6<br>1<br>4 | 0<br>7<br>2<br>6 | 0<br>6<br>5<br>2 | 0<br>6<br>4<br>2 | 0<br>6<br>8<br>4 | 0<br>7<br>3<br>1 | 0<br>5<br>7<br>3 | 0<br>7<br>1<br>7 | 0<br>3<br>1<br>7 | 0<br>7<br>1<br>3 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>4 |                                 |                    |
| Preputial Gland<br>Fibrosis   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 0<br>1<br>6<br>0<br>9           | males<br>(cont...) |
| Inflammation, Chronic Active<br>Metaplasia, Squamous<br>Duct, Dilation  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1<br>3<br>3                     |                    |
| Prostate<br>Decreased Secretory Fluid<br>Hemorrhage<br>Inflammation, Acute<br>Inflammation, Chronic Active<br>Artery, Inflammation, Chronic Active<br>Epithelium, Hyperplasia | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 1<br>2<br>3<br>2<br>1<br>1<br>1 |                    |
| Seminal Vesicle<br>Decreased Secretory Fluid<br>Developmental Malformation<br>Dilation<br>Hemorrhage<br>Inflammation, Acute<br>Lumen, Hemorrhage                              | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 4<br>X<br>2                     |                    |
| Testis<br>Artery, Inflammation, Chronic Active<br>Germ Cell, Degeneration<br>Seminiferous Tubule, Dilation  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 3<br>1<br>1<br>4                |                    |

HEMATOPOIETIC SYSTEM

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                                    | HARLAN SPRAGUE DAWLEY RATS MALE |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | ANIMAL ID | males (cont...) |
|--|---------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----------|-----------------|
|  | 04                              | 07 | 06 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 06 | 07 | 06 | 06 | 06 | 07 | 05 | 07 | 03 | 07 | 07 | 07 | 07 |           |                 |
| 3.0W/kg(CDMA)chr                               | 9                               | 3  | 9  | 2  | 3  | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 1  | 2  | 5  | 4  | 8  | 3  | 7  | 1  | 1  | 3  | 3  | 3  |           |                 |
|  | 5                               | 3  | 8  | 8  | 1  | 7  | 7  | 4  | 2  | 4  | 0  | 1  | 4  | 6  | 2  | 2  | 4  | 1  | 7  | 3  | 7  | 3  | 2  | 4  |           |                 |
|  | 0                               | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |           |                 |
|  | 1                               | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |           |                 |
|  | 6                               | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  |           |                 |
|  | 0                               | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 3  | 3  | 3  | 3  | 3  | 3  | 3  |           |                 |
|  | 9                               | 0  | 1  | 2  | 4  | 5  | 6  | 7  | 8  | 9  | 0  | 2  | 3  | 4  | 5  | 8  | 9  | 0  | 1  | 3  | 5  | 6  | 8  | 9  |           |                 |
| Hemorrhage                                     |                                 |    | 3  | 2  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 2  |    |    |    |           |                 |
| Hypercellularity                               |                                 |    |    |    |    |    | 1  |    |    | 1  |    | 4  |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Hypocellularity                                |                                 |    |    |    |    |    |    |    |    |    |    |    |    | 2  |    |    |    |    |    |    |    |    |    |    |           |                 |
| Lymph Node                                     |                                 |    |    | +  |    |    |    | +  |    |    |    |    | +  |    |    |    |    | +  | +  |    | +  |    |    | +  |           |                 |
| Iliac, Erythrophagocytosis                     |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Iliac, Hyperplasia, Lymphocyte                 |                                 |    |    |    |    |    |    |    | 1  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Iliac, Pigment                                 |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Iliac, Proliferation, Plasma Cell              |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Iliac, Lymphatic Sinus, Ectasia                |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Inguinal, Hyperplasia, Lymphocyte              |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Inguinal, Lymphatic Sinus, Ectasia             |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Lumbar, Erythrophagocytosis                    |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 3  |           |                 |
| Lumbar, Lymphatic Sinus, Ectasia               |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 2  |           |                 |
| Lymphatic Sinus, Mediastinal, Ectasia          |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Lymphatic Sinus, Renal, Ectasia                |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Mediastinal, Erythrophagocytosis               |                                 |    |    |    |    | 3  |    |    |    |    |    |    | 3  |    |    |    |    |    | 3  |    |    |    |    |    |           |                 |
| Mediastinal, Extramedullary Hematopoiesis      |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Mediastinal, Hemorrhage                        |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Mediastinal, Hyperplasia, Lymphocyte           |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Mediastinal, Infiltration Cellular, Histiocyte |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Mediastinal, Proliferation, Plasma Cell        |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Pancreatic, Erythrophagocytosis                |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 2  |    |    | 2  |    |    |    |           |                 |
| Renal, Erythrophagocytosis                     |                                 |    |    |    |    | 3  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Lymph Node, Mandibular                         | +                               | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  |           |                 |
| Congestion                                     |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Erythrophagocytosis                            |                                 |    |    |    |    |    |    |    | 1  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                 |
| Hemorrhage                                     |                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 1  |    |    |    |           |                 |
| Hyperplasia, Lymphocyte                        |                                 |    | 1  | 2  |    |    | 1  |    |    | 1  | 1  | 1  | 2  | 2  |    |    | 1  |    |    | 2  | 1  |    | 2  | 1  |           |                 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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X .. Lesion present

I .. Insufficient tissue

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

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2) Mild 4) Marked





Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | ANIMAL ID | males<br>(cont...) |    |    |    |    |    |  |
|--|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----------|--------------------|----|----|----|----|----|--|
|  | 04          | 07 | 06 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 06 | 07 | 06 | 06 | 06 | 07 | 05 | 07 | 03 |           |                    | 07 | 07 | 07 | 07 | 07 |  |
|  | 9           | 3  | 9  | 2  | 3  | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 1  | 2  | 5  | 4  | 8  | 3  | 7  | 1  | 1         | 3                  | 3  | 3  | 01 |    |    |  |
|  | 5           | 3  | 8  | 8  | 1  | 7  | 7  | 4  | 2  | 4  | 0  | 1  | 4  | 6  | 2  | 2  | 4  | 1  | 7  | 3  | 7         | 3                  | 2  | 4  | 06 |    |    |  |
|  | 0           | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0         | 0                  | 0  | 0  | 01 |    |    |  |
|  | 1           | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1         | 1                  | 1  | 1  | 06 |    |    |  |
|  | 6           | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6  | 6         | 6                  | 6  | 6  | 00 |    |    |  |
|  | 0           | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 2  | 2  | 2  | 2  | 3  | 3  | 3  | 3         | 3                  | 3  | 3  | 09 |    |    |  |
|  | 9           | 0  | 1  | 2  | 4  | 5  | 6  | 7  | 8  | 9  | 0  | 2  | 2  | 3  | 4  | 5  | 8  | 9  | 0  | 1  | 3         | 5                  | 6  | 8  |    |    |    |  |
| Compression  |             |    |    |    |    |    |    | 1  |    |    |    |    |    |    |    | 1  |    |    |    |    |           |                    |    | 1  |    |    |    |  |
| Inflammation, Suppurative                              |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                    |    |    |    |    |    |  |
| Mineral  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 1  |           |                    |    |    |    |    |    |  |
| Necrosis   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 4  |           |                    |    | 1  |    |    |    |  |
| Meninges, Hyperplasia                                  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                    |    |    |    |    |    |  |
| Pineal Gland, Mineral                                  |             |    |    | 1  |    |    | 1  |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                    |    |    |    |    |    |  |
| Pineal Gland, Vacuolation, Cytoplasmic                 |             |    |    | 2  | 1  | 1  | 2  | 1  |    |    |    |    |    |    | 1  |    |    |    |    |    |           |                    |    |    |    |    |    |  |
| Nerve Trigeminal Degeneration                          | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +         | +                  | +  | +  |    |    |    |  |
|  | 1           | 2  | 3  | 1  | 1  | 1  | 1  |    | 2  | 2  | 2  |    | 2  | 2  | 2  |    | 2  | 2  | 3  | 2  |           | 2                  |    | 3  |    |    |    |  |
| Peripheral Nerve, Sciatic Degeneration                 | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +         | +                  | +  | +  |    |    |    |  |
|  | 2           | 3  | 2  | 3  | 4  | 3  | 2  | 3  | 3  | 3  | 2  | 3  | 1  | 3  | 2  | 2  | 4  | 4  | 3  | 4  |           | 2                  | 4  | 4  | 4  |    |    |  |
| Peripheral Nerve, Tibial Degeneration                  | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +         | +                  | +  | +  |    |    |    |  |
|  | 2           | 3  | 3  | 2  | 3  | 3  | 2  | 3  | 2  | 3  | 3  | 3  | 2  | 3  | 2  | 2  | 3  | 3  | 3  | 3  |           | 3                  | 4  | 3  | 4  |    |    |  |
| Spinal Cord, Cervical Degeneration                     | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +         | +                  | +  | +  |    |    |    |  |
|  |             |    | 1  |    | 1  |    |    | 1  |    |    |    |    | 1  |    |    | 1  |    |    | 1  |    |           |                    | 1  | 1  |    |    |    |  |
| Meninges, Inflammation, Suppurative                    |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                    |    |    |    |    |    |  |
| Spinal Cord, Lumbar Degeneration                       | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +         | +                  | +  | +  |    |    |    |  |
|  |             | 1  |    | 1  | 1  |    |    |    |    |    |    |    | 1  | 1  |    |    |    | 2  |    |    |           |                    | 1  | 1  |    |    |    |  |
| Nerve, Degeneration                                    | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +         | +                  | +  | +  |    |    |    |  |
|  | 1           | 3  | 3  | 2  | 4  | 2  | 2  | 3  | 2  | 3  | 2  | 2  |    | 1  | 2  | 3  | 3  | 3  | 3  | 1  | 3         |                    | 2  | 3  | 3  | 4  |    |  |
| Spinal Cord, Thoracic Degeneration                     | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +         | +                  | +  | +  |    |    |    |  |
|  |             | 1  | 1  | 1  | 2  | 2  | 1  | 2  | 1  | 1  | 2  | 1  |    | 2  | 1  | 1  | 1  | 2  |    | 1  |           | 1                  | 3  | 2  | 1  |    |    |  |
| Meninges, Inflammation, Suppurative                    |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                    |    |    |    |    |    |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       | ANIMAL ID             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | males<br>(cont...)    |                       |                       |   |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
|  | 0<br>4<br>9<br>5      | 0<br>7<br>3<br>3      | 0<br>6<br>9<br>8      | 0<br>7<br>2<br>8      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>7      | 0<br>6<br>4<br>7      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>1      | 0<br>6<br>1<br>4      | 0<br>7<br>2<br>6      | 0<br>6<br>5<br>2      | 0<br>6<br>4<br>2      | 0<br>6<br>8<br>4      | 0<br>3<br>7<br>1      | 0<br>7<br>1<br>3      | 0<br>3<br>1<br>7      | 0<br>7<br>1<br>7      | 0<br>7<br>3<br>3      |                       | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>4      |   |
|  | 0<br>1<br>6<br>0<br>9 | 0<br>1<br>6<br>1<br>0 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 | 0<br>1<br>6<br>1<br>1 |   |
| Kidney   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |                       |   |
| Mineral Necrosis                                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |   |
| Nephropathy, Chronic Progressive                       | 3                     | 3                     | 4                     | 4                     | 2                     | 1                     | 2                     | 4                     | 2                     | 2                     | 3                     | 2                     | 4                     | 4                     | 4                     | 4                     | 4                     | 2                     | 3                     | 2                     | 1                     | 4                     | 4                     | 4                     | 4                     |   |
| Thrombus   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |   |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pelvis, Dilation                                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pelvis, Inflammation, Suppurative                      |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pelvis, Urothelium, Hyperplasia                        |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Perirenal Tissue, Thrombus                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Renal Tubule, Cyst                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     | X                     | X                     |                       |   |
| Renal Tubule, Hyperplasia, Atypical                    |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Renal Tubule, Inflammation, Suppurative                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Urothelium, Hyperplasia                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Urinary Bladder  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | A                     | +                     | +                     | +                     | + |
| Hemorrhage   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Inflammation, Acute                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Serosa, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Urothelium, Hyperplasia                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                            |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> |                         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 6 | 7 | 6 | 6 | 6 | 6 | 6 |
|  |                         | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 5 | 3 | 3 | 8 | 9 | 9 | 9 |
|  | <b>3.0W/kg(CDMA)chr</b> | 3 | 2 | 2 | 3 | 0 | 1 | 4 | 0 | 4 | 6 | 3 | 2 | 1 | 4 | 7 | 7 | 7 |
|  | ANIMAL ID               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |                         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  |                         | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|  |                         | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|  |                         | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 5 | 5 |
| <b>* TOTALS</b>                        |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

ALIMENTARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90    |
| Intestine Large, Cecum               | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A |   |   | 74    |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |
| Necrosis                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 7 1.9 |
| Artery, Thrombus                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |
| Intestine Large, Colon               | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A |   |   | 82    |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5 1.6 |
| Intestine Large, Rectum              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 80    |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |
| Intestine Small, Duodenum            | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + |   |   | 83    |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 2.3 |
| Intestine Small, Ileum               | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A |   |   | 77    |
| Hemorrhage                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0 |
| Intestine Small, Jejunum             | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + |   |   | 75    |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |
| Liver                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 89    |
| Basophilic Focus                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2     |
| Clear Cell Focus                     |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   | 5     |
| Eosinophilic Focus                   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 11    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |        |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------|
|  | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>6      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>6      |                       |        |
| ANIMAL ID  | 0<br>1<br>6<br>4<br>0 | 0<br>1<br>6<br>4<br>1 | 0<br>1<br>6<br>4<br>2 | 0<br>1<br>6<br>4<br>3 | 0<br>1<br>6<br>4<br>4 | 0<br>1<br>6<br>4<br>5 | 0<br>1<br>6<br>4<br>6 | 0<br>1<br>6<br>4<br>7 | 0<br>1<br>6<br>4<br>8 | 0<br>1<br>6<br>4<br>9 | 0<br>1<br>6<br>5<br>0 | 0<br>1<br>6<br>5<br>1 | 0<br>1<br>6<br>5<br>2 | 0<br>1<br>6<br>5<br>3 | 0<br>1<br>6<br>5<br>4 | 0<br>1<br>6<br>5<br>5 |        |
| Extramedullary Hematopoiesis                           |                       |                       |                       | 1                     |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       | 3 1.0  |
| Infiltration Cellular, Mixed Cell                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3 1.0  |
| Mixed Cell Focus                                       | X                     | X                     |                       | X                     | X                     | X                     | X                     | X                     |                       |                       |                       |                       | X                     |                       |                       |                       | 47     |
| Bile Duct, Cyst  |                       |                       |                       |                       |                       |                       |                       | X                     | X                     |                       |                       |                       |                       |                       |                       |                       | 2      |
| Bile Duct, Hyperplasia                                 |                       |                       |                       | 1                     |                       | 2                     | 2                     | 1                     |                       |                       |                       |                       |                       | 1                     |                       |                       | 26 1.2 |
| Hepatocyte, Degeneration                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0  |
| Hepatocyte, Necrosis                                   |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 6 1.8  |
| Hepatocyte, Vacuolation, Cytoplasmic                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 7 2.3  |
| Periductal, Cholangiofibrosis                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 2.5  |
| Mesentery  |                       |                       |                       |                       |                       |                       |                       | +                     | +                     |                       |                       |                       | +                     |                       |                       |                       | 17     |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 4.0  |
| Neovascularization                                     |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3 2.0  |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       | 2                     |                       |                       | 13 2.0 |
| Artery, Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 2.5  |
| Vein, Inflammation, Chronic Active                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0  |
| Oral Mucosa  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1      |
| Pancreas   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | A                     | A                     |                       | 87     |
| Acinus, Atrophy  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 10 1.3 |
| Acinus, Hyperplasia                                    | 4                     | 3                     | 4                     | 3                     | 2                     | 2                     | 2                     |                       | 4                     | 2                     |                       |                       |                       | 3                     |                       |                       | 49 2.9 |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       | 2                     |                       |                       |                       |                       | 1                     | 2                     |                       |                       |                       |                       |                       |                       | 23 2.0 |
| Duct, Crystals   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0  |
| Duct, Inflammation, Acute                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0  |
| Salivary Glands  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90     |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 2.5  |
| Artery, Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0  |
| Duct, Parotid Gland, Dilatation                        |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID |                  |  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|------------------|--|
|  | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>4 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>4 | 0<br>7<br>3<br>6 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>4 | 0<br>7<br>3<br>6 |           |                  |  |
|  | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0         | 1<br>6<br>4<br>0 |  |
| <b>* TOTALS</b>  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                  |  |

|                                    |              |
|------------------------------------|--------------|
| Parotid Gland, Atrophy             | <b>8 3.0</b> |
| Parotid Gland, Inflammation, Acute | <b>2 1.5</b> |
| Sublingual Gland, Atrophy          | <b>1 1.0</b> |

|                                     |               |
|-------------------------------------|---------------|
| Stomach, Forestomach                | <b>89</b>     |
| Edema                               | <b>1 3.0</b>  |
| Inflammation, Acute                 | <b>1 1.0</b>  |
| Inflammation, Chronic Active        | <b>10 1.8</b> |
| Ulcer                               | <b>4 2.3</b>  |
| Epithelium, Hyperplasia             | <b>11 3.1</b> |
| Epithelium, Hyperplasia, Basal Cell | <b>1 1.0</b>  |

|                    |              |
|--------------------|--------------|
| Stomach, Glandular | <b>85</b>    |
| Erosion            | <b>3 1.3</b> |
| Mineral            | <b>6 2.7</b> |
| Necrosis           | <b>3 1.3</b> |
| Artery, Mineral    | <b>1 2.0</b> |

**CARDIOVASCULAR SYSTEM**

|          |              |
|----------|--------------|
| Aorta    | <b>90</b>    |
| Dilation | <b>1 2.0</b> |
| Mineral  | <b>6 2.2</b> |

|                              |              |
|------------------------------|--------------|
| Blood Vessel                 | <b>1</b>     |
| Inflammation, Chronic Active | <b>1 2.0</b> |

|                           |               |
|---------------------------|---------------|
| Heart                     | <b>90</b>     |
| Cardiomyopathy            | <b>83 1.8</b> |
| Inflammation, Suppurative | <b>1 2.0</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|  | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>6      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>5      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>6      |          |
| ANIMAL ID  | 0<br>1<br>6<br>4<br>0 | 0<br>1<br>6<br>4<br>1 | 0<br>1<br>6<br>4<br>2 | 0<br>1<br>6<br>4<br>3 | 0<br>1<br>6<br>4<br>4 | 0<br>1<br>6<br>4<br>4 | 0<br>1<br>6<br>4<br>5 | 0<br>1<br>6<br>4<br>6 | 0<br>1<br>6<br>4<br>8 | 0<br>1<br>6<br>4<br>9 | 0<br>1<br>6<br>4<br>0 | 0<br>1<br>6<br>4<br>1 | 0<br>1<br>6<br>4<br>2 | 0<br>1<br>6<br>4<br>3 | 0<br>1<br>6<br>4<br>4 |          |

|                                      |   |   |   |  |   |   |   |  |   |   |   |  |   |   |   |    |     |
|--------------------------------------|---|---|---|--|---|---|---|--|---|---|---|--|---|---|---|----|-----|
| Thrombus                             | 2 |   |   |  |   |   |   |  |   |   |   |  |   |   |   | 3  | 3.3 |
| Artery, Inflammation, Chronic Active |   |   |   |  |   |   |   |  |   |   |   |  |   |   |   | 2  | 1.5 |
| Artery, Mineral                      |   |   |   |  |   |   |   |  |   |   |   |  |   |   |   | 2  | 2.0 |
| Atrium Left, Mineral                 |   |   |   |  |   |   |   |  |   |   |   |  |   |   |   | 1  | 1.0 |
| Myocardium, Mineral                  |   |   |   |  |   |   |   |  |   |   |   |  |   |   |   | 1  | 1.0 |
| Pericardium, Hemorrhage              |   |   |   |  |   |   |   |  |   |   |   |  |   |   |   | 1  | 4.0 |
| Ventricle Right, Cardiomyopathy      | 1 | 1 | 1 |  | 1 | 1 | 1 |  | 1 | 1 | 1 |  | 1 | 2 | 1 | 62 | 1.3 |
| Ventricle Right, Dilatation          |   |   |   |  |   |   |   |  |   |   |   |  |   |   |   | 1  | 3.0 |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |     |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|-----|-----|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90  |     |     |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 7   |     |
| Degeneration                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 1   | 1.0 |
| Extramedullary Hematopoiesis      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 1   | 1.0 |
| Hyperplasia                       | 2 | 1 | 2 | 3 |   |   | 2 | 4 |   |   |   |   | 3 |   | 1 | 45  | 1.9 |     |
| Hypertrophy                       | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   | 1 |   |   | 2 |   |   | 55  | 1.3 |     |
| Necrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 1   | 2.0 |
| Thrombus                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 1   | 3.0 |
| Vacuolation, Cytoplasmic          | 2 |   |   |   |   |   |   |   |   | 2 |   | 1 |   | 2 |   | 21  | 1.5 |     |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90  |     |     |
| Hyperplasia                       | 1 |   | 1 |   |   |   | 4 |   | 3 |   |   |   | 2 |   |   | 32  | 2.0 |     |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A | 87  |     |     |
| Hyperplasia                       | 1 |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 13  | 2.0 |     |
| Parathyroid Gland                 | + | + | + | + | + | M | M | M | + | + | + | + | + | I | + | 83  |     |     |
| Fibrosis                          | 1 |   |   | 1 |   |   |   |   |   |   |   |   |   |   | 3 | 1.3 |     |     |
| Hyperplasia                       | 1 | 2 | 1 |   |   |   |   |   | 3 | 3 |   | 3 |   |   | 2 | 32  | 2.0 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                                | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0      |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
|  | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 6 | 7 | 6 | 6 | 6 | 6 | 6      |
| <b>HARLAN SPRAGUE DAWLEY RATS<br/>MALE</b> | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 5 | 3 | 3 | 8 | 9 | 9 | 9      |
|  | 3 | 2 | 2 | 3 | 0 | 1 | 4 | 0 | 4 | 6 | 3 | 2 | 1 | 4 | 7 |   |   |        |
| <b>3.0W/kg(CDMA)chr</b>                    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0      |
|  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1      |
| ANIMAL ID                                  | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6      |
|  | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5      |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 9 |   |   |   |   |   |   |   |   |        |
| <b>* TOTALS</b>                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
| Pituitary Gland                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90     |
| Pars Distalis, Cyst                        |   |   |   |   | X | X |   |   |   |   |   |   |   | X |   |   |   | 7      |
| Pars Distalis, Hyperplasia                 | 3 |   |   |   | 4 | 1 | 4 |   |   |   |   |   |   | 1 |   |   |   | 34 2.5 |
| Pars Intermedia, Cyst                      |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | 5      |
| Thyroid Gland                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 86     |
| C-cell, Hyperplasia                        |   |   |   |   |   |   |   | 2 | 1 |   |   |   |   | 4 |   |   |   | 17 2.1 |
| <b>GENERAL BODY SYSTEM</b>                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
| Tissue NOS                                 |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   | 3      |
| Fat, Hemorrhage                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0  |
| Fat, Necrosis                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0  |
| <b>GENITAL SYSTEM</b>                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
| Coagulating Gland                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3      |
| Inflammation, Suppurative                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0  |
| Inflammation, Chronic Active               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 2.0  |
| Ductus Deferens                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1      |
| Epididymis                                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90     |
| Exfoliated Germ Cell                       |   |   |   |   |   |   |   |   |   | 2 | 1 |   | 2 |   | 3 |   |   | 33 1.7 |
| Hypospermia                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 13 3.7 |
| Inflammation, Chronic Active               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Artery, Inflammation, Chronic Active       |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   | 3 2.3  |
| Penis                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2      |
| Concretion                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 1.5  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|  | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>6      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>5      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>9      |          |
| ANIMAL ID  | 0<br>1<br>6<br>4<br>0 | 0<br>1<br>6<br>4<br>1 | 0<br>1<br>6<br>4<br>2 | 0<br>1<br>6<br>4<br>3 | 0<br>1<br>6<br>4<br>4 | 0<br>1<br>6<br>4<br>4 | 0<br>1<br>6<br>4<br>5 | 0<br>1<br>6<br>4<br>6 | 0<br>1<br>6<br>4<br>8 | 0<br>1<br>6<br>4<br>9 | 0<br>1<br>6<br>4<br>0 | 0<br>1<br>6<br>4<br>1 | 0<br>1<br>6<br>4<br>2 | 0<br>1<br>6<br>4<br>3 | 0<br>1<br>6<br>4<br>4 |          |
| Preputial Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 89       |
| Fibrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 1.5    |
| Inflammation, Chronic Active                           |                       |                       |                       | 1                     | 3                     | 4                     | 2                     |                       | 2                     | 4                     |                       | 2                     | 1                     |                       | 2                     | 46 2.0   |
| Metaplasia, Squamous                                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0    |
| Duct, Dilation   |                       | 4                     | 4                     | 2                     | 3                     |                       | 2                     |                       | 2                     |                       |                       | 2                     | 1                     |                       |                       | 50 2.7   |
| Prostate   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |
| Decreased Secretory Fluid                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 7 2.0    |
| Hemorrhage   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 4.0    |
| Inflammation, Acute                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4 3.0    |
| Inflammation, Chronic Active                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 10 2.0   |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       | 3 2.3    |
| Epithelium, Hyperplasia                                |                       | 2                     |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       | 2                     |                       |                       | 9 1.7    |
| Seminal Vesicle  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |
| Decreased Secretory Fluid                              |                       |                       |                       |                       |                       |                       |                       |                       | 2                     | 2                     |                       | 3                     |                       |                       |                       | 18 2.8   |
| Developmental Malformation                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1        |
| Dilation   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0    |
| Hemorrhage   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0    |
| Inflammation, Acute                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3 2.3    |
| Lumen, Hemorrhage                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0    |
| Testis   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       | 4                     | 3                     |                       |                       |                       | 2                     |                       | 30 2.5   |
| Germ Cell, Degeneration                                |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       | 2                     |                       | 2                     |                       | 31 2.2   |
| Seminiferous Tubule, Dilation                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |

HEMATOPOIETIC SYSTEM

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                                    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |              |            |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|------------|
|  | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 6 | 7 | 6 | 6 | 6 | 6 | 6         |              |            |
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b>         | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 5 | 3 | 3 | 8 | 9 | 9 | 9         |              |            |
|  | 3 | 2 | 2 | 3 | 0 | 1 | 4 | 0 | 4 | 6 | 3 | 2 | 1 | 4 | 7 |   |   |           |              |            |
| <b>3.0W/kg(CDMA)chr</b>                        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |              |            |
|  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1         |              |            |
| ANIMAL ID                                      | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6         |              |            |
|  | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5         |              |            |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |   |   |           |              |            |
| <b>* TOTALS</b>                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |              |            |
| Hemorrhage                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3</b>  | <b>2.3</b>   |            |
| Hypercellularity                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>18</b> | <b>1.8</b>   |            |
| Hypocellularity                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>2.0</b>   |            |
| Lymph Node                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>24</b> |              |            |
| Iliac, Erythrophagocytosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |            |
| Iliac, Hyperplasia, Lymphocyte                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2 1.0</b> |            |
| Iliac, Pigment                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |            |
| Iliac, Proliferation, Plasma Cell              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b> |            |
| Iliac, Lymphatic Sinus, Ectasia                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 3.0</b> |            |
| Inguinal, Hyperplasia, Lymphocyte              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b> |            |
| Inguinal, Lymphatic Sinus, Ectasia             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |            |
| Lumbar, Erythrophagocytosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 3.0</b> |            |
| Lumbar, Lymphatic Sinus, Ectasia               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |            |
| Lymphatic Sinus, Mediastinal, Ectasia          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |            |
| Lymphatic Sinus, Renal, Ectasia                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>3 1.7</b> |            |
| Mediastinal, Erythrophagocytosis               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>7 2.6</b> |            |
| Mediastinal, Extramedullary Hematopoiesis      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |            |
| Mediastinal, Hemorrhage                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 3.0</b> |            |
| Mediastinal, Hyperplasia, Lymphocyte           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b> |            |
| Mediastinal, Infiltration Cellular, Histiocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 3.0</b> |            |
| Mediastinal, Proliferation, Plasma Cell        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b> |            |
| Pancreatic, Erythrophagocytosis                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>4 2.5</b> |            |
| Renal, Erythrophagocytosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>4 2.5</b> |            |
| Lymph Node, Mandibular                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |              |            |
| Congestion                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  | <b>2.0</b>   |            |
| Erythrophagocytosis                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  | <b>1.0</b>   |            |
| Hemorrhage                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>1.0</b>   |            |
| Hyperplasia, Lymphocyte                        | 2 | 1 | 1 | 1 | 2 | 1 |   | 1 | 2 |   |   |   |   |   |   |   |   |           | <b>52</b>    | <b>1.4</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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1-4 .. Lesion qualified as:

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Experiment Number: 20105 - 56

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Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS  |            |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|------------|
|  | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>6      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>6      |           |            |
| ANIMAL ID  | 0<br>1<br>6<br>4<br>0 | 0<br>1<br>6<br>4<br>1 | 0<br>1<br>6<br>4<br>2 | 0<br>1<br>6<br>4<br>3 | 0<br>1<br>6<br>4<br>4 | 0<br>1<br>6<br>4<br>5 | 0<br>1<br>6<br>4<br>6 | 0<br>1<br>6<br>4<br>8 | 0<br>1<br>6<br>4<br>9 | 0<br>1<br>6<br>4<br>0 | 0<br>1<br>6<br>4<br>1 | 0<br>1<br>6<br>4<br>2 | 0<br>1<br>6<br>4<br>3 | 0<br>1<br>6<br>4<br>4 | 0<br>1<br>6<br>4<br>5 |           |            |
| Proliferation, Plasma Cell Lymphatic Sinus, Ectasia    | 2                     | 1                     | 1                     | 2                     | 2                     | 1                     |                       | 1                     | 2                     | 2                     |                       | 3                     |                       | 1                     |                       | <b>62</b> | <b>1.6</b> |
| Lymph Node, Mesenteric Erythrophagocytosis             | +                     | +                     | +                     | +                     | +                     | +                     |                       | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | <b>88</b> |            |
| Hyperplasia, Lymphocyte Lymphatic Sinus, Ectasia       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       | <b>5</b>  | <b>1.8</b> |
| Spleen Congestion                                      | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | <b>90</b> | <b>1</b>   |
| Extramedullary Hematopoiesis                           | 2                     | 1                     | 1                     | 2                     | 3                     | 3                     | 2                     | 2                     |                       |                       | 1                     |                       | 1                     |                       | 2                     | <b>56</b> | <b>1.9</b> |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       | <b>2</b>  | <b>2.0</b> |
| Pigment  | 1                     | 1                     | 2                     |                       | 2                     |                       | 1                     | 1                     | 1                     | 2                     |                       |                       | 1                     | 2                     | 3                     | <b>64</b> | <b>1.9</b> |
| Red Pulp, Atrophy                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       | <b>12</b> | <b>2.1</b> |
| White Pulp, Atrophy                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       | <b>10</b> | <b>2.4</b> |
| Thymus Atrophy   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | <b>87</b> |            |
| Cyst   | 1                     | 1                     | 3                     | 1                     | 1                     | 1                     | 2                     | 1                     | 3                     | 4                     |                       |                       | 4                     | 1                     | 4                     | <b>3</b>  | <b>80</b>  |
| Ectopic Parathyroid Gland                              | X                     |                       |                       | X                     | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>10</b> |            |
| Hemorrhage   |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>7</b>  |            |
| Hyperplasia, Epithelial                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>2</b>  | <b>2.5</b> |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       | 1                     |                       | <b>4</b>  | <b>1.8</b> |
|  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>2</b>  | <b>1.5</b> |
| <b>INTEGUMENTARY SYSTEM</b>                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |           |            |
| Mammary Gland Atrophy                                  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | I                     | +                     | +                     | +                     | <b>80</b> |            |
| Galactocele  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>3</b>  | <b>2.0</b> |
|  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>2</b>  |            |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 6 | 7 | 6 | 6 | 6 | 6 |
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 5 | 3 | 3 | 8 | 9 | 9 |
|  | 3 | 2 | 2 | 3 | 0 | 1 | 4 | 0 | 4 | 6 | 3 | 2 | 1 | 4 | 7 |   |   |
| <b>3.0W/kg(CDMA)chr</b>                | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| ANIMAL ID                              | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|  | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |   |   |
| <b>* TOTALS</b>                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Duct, Dilation 9 1.9

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |              |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Skin  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>    |
| Cyst Epithelial Inclusion                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3</b>     |
| Inflammation, Chronic Active                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 3.0</b> |
| Ulcer   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   | <b>4 2.8</b> |
| Hair Follicle, Degeneration                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 3.0</b> |
| Subcutaneous Tissue, Inflammation, Suppurative    |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b> |
| Subcutaneous Tissue, Inflammation, Chronic        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b> |
| Subcutaneous Tissue, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   | <b>2 3.5</b> |
| Subcutaneous Tissue, Necrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b> |

**MUSCULOSKELETAL SYSTEM**

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Bone                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |
| Fibrous Osteodystrophy                |   |   |   |   |   |   |   |   | 1 | 1 |   | 1 |   | 2 |   | <b>15 1.6</b> |
| Cranium, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Bone, Vertebra                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |
| Developmental Malformation            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |
| Skeletal Muscle                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |
| Degeneration                          |   |   |   |   |   |   | 1 |   |   | 1 | 3 | 2 |   |   |   | <b>30 1.6</b> |
| Inflammation, Chronic Active          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |
| Mineral                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |

**NERVOUS SYSTEM**

|       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>MALE</b><br><b>3.0W/kg(CDMA)chr</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   | ANIMAL ID   | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 6 | 7 | 6 | 6 | 6 |
|   |             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 5 | 3 | 3 | 8 | 9 | 9 |
|   |             | 3 | 2 | 2 | 3 | 0 | 1 | 4 | 0 | 4 | 6 | 3 | 2 | 1 | 4 | 7 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|   |             | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|   |             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
|   |             | 0 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 |
| <b>* TOTALS</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Trigeminal Ganglion Degeneration | M | M | + | + | + | + | + | + | + | + | + | + | M | M | + | <b>79</b>     |
|                                  |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | <b>21 1.0</b> |

**RESPIRATORY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |
| Congestion  |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | <b>11 2.1</b> |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |
| Hemorrhage  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 2.5</b>  |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Inflammation, Granulomatous                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Inflammation, Chronic                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 3.0</b>  |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Metaplasia, Osseous                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Alveolus, Infiltration Cellular, Histiocyte           |   |   |   | 1 | 1 | 1 |   | 1 |   | 1 | 1 |   |   | 1 | 1 | <b>42 1.2</b> |
| Artery, Inflammation, Chronic Active                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Epithelium Alveolus, Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Interstitial, Mineral                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Mediastinum, Inflammation, Suppurative                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 3.0</b>  |
| Perivascular, Infiltration Cellular, Lymphocyte       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3</b>      |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | <b>10 1.2</b> |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 4 | 2 | <b>90 2.0</b> |
| Olfactory Epithelium, Metaplasia, Respiratory         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 1.0</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                            |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> |           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 6 | 7 | 6 | 6 | 6 |   |
|  |           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 5 | 3 | 3 | 8 | 9 | 9 |   |
|  |           | 3 | 2 | 2 | 3 | 0 | 1 | 4 | 0 | 4 | 6 | 3 | 2 | 1 | 4 | 7 | 7 |   |
| <b>3.0W/kg(CDMA)chr</b>                | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |
|  |           | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |   |
|  |           | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |   |
|  |           | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 5 |   |

\* TOTALS

Respiratory Epithelium, Hyperplasia

8 1.6

Trachea

+ + + + + + + + + + + + + + +

88

SPECIAL SENSES SYSTEM

Eye

+ + + + + + + + + + + + + A A

81

Phthisis Bulbi

1 3.0

Retinal Detachment

1 3.0

Anterior Chamber, Inflammation, Acute

1

5 1.4

Cornea, Fibrosis

2 1.0

Cornea, Inflammation, Acute

1 2 4

19 1.7

Cornea, Neovascularization

14 1.0

Cornea, Epithelium, Degeneration

1 1.0

Cornea, Epithelium, Hyperplasia

1 2 4

17 1.9

Retina, Atrophy

1 1 1

17 1.0

Harderian Gland

+ + + + + + + + + + + + + + +

90

Atrophy

2 1.0

Degeneration

1 2.0

Degeneration, Cystic

1 1.0

Inflammation, Granulomatous

2 1.0

Inflammation, Chronic Active

1 2.0

Lacrimal Gland

1

Metaplasia, Harderian Gland

1 3.0

Zymbal's Gland

1

URINARY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>6      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>5      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>6      |                       |
| ANIMAL ID  | 0<br>1<br>6<br>4<br>0 | 0<br>1<br>6<br>4<br>1 | 0<br>1<br>6<br>4<br>2 | 0<br>1<br>6<br>4<br>3 | 0<br>1<br>6<br>4<br>4 | 0<br>1<br>6<br>4<br>5 | 0<br>1<br>6<br>4<br>6 | 0<br>1<br>6<br>4<br>7 | 0<br>1<br>6<br>4<br>8 | 0<br>1<br>6<br>4<br>9 | 0<br>1<br>6<br>4<br>0 | 0<br>1<br>6<br>4<br>1 | 0<br>1<br>6<br>4<br>2 | 0<br>1<br>6<br>4<br>3 | 0<br>1<br>6<br>4<br>4 | 0<br>1<br>6<br>4<br>5 |
| Kidney   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90                    |
| Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 2.0                 |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Nephropathy, Chronic Progressive                       | 3                     | 3                     | 4                     | 2                     | 2                     | 3                     | 4                     | 3                     | 4                     | 4                     | 2                     | 4                     | 4                     | 4                     | 4                     | 90 3.0                |
| Thrombus   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0                 |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 4.0                 |
| Pelvis, Dilation                                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |
| Pelvis, Inflammation, Suppurative                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |
| Pelvis, Urothelium, Hyperplasia                        |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |
| Perirenal Tissue, Thrombus                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Renal Tubule, Cyst                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       | 9                     |
| Renal Tubule, Hyperplasia, Atypical                    |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       | 3 3.3                 |
| Renal Tubule, Inflammation, Suppurative                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |
| Urothelium, Hyperplasia                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 4.0                 |
| Urinary Bladder  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | A                     | A                     | 83                    |
| Hemorrhage   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 4.0                 |
| Inflammation, Acute                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0                 |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0                 |
| Serosa, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Urothelium, Hyperplasia                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 1.0                 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|------------------|
|  | 0<br>7<br>3<br>4 | 0<br>7<br>3<br>4 | 0<br>5<br>2<br>8 | 0<br>5<br>8<br>0 | 0<br>5<br>8<br>1 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>2 | 0<br>6<br>6<br>5 | 0<br>7<br>3<br>4 | 0<br>5<br>6<br>2 | 0<br>4<br>5<br>9 | 0<br>6<br>4<br>5 | 0<br>7<br>6<br>8 | 0<br>6<br>4<br>3 | 0<br>4<br>7<br>3 | 0<br>6<br>9<br>7 | 0<br>5<br>3<br>1 | 0<br>7<br>3<br>6 | 0<br>5<br>3<br>3 | 0<br>7<br>3<br>4 |           |                    | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>0 |
| Degeneration, Cystic                                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Hyperplasia  |                  |                  |                  | 2                |                  | 1                | 2                | 2                | 2                | 2                |                  | 2                |                  |                  |                  |                  |                  |                  | 3                | 2                | 2         | 3                  | 3                |                  |
| Hypertrophy  | 1                |                  |                  |                  | 1                |                  | 1                | 3                | 1                |                  |                  |                  |                  | 2                |                  |                  | 1                |                  | 2                | 2                | 1         | 2                  | 1                |                  |
| Necrosis   |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Pigment  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Vacuolation, Cytoplasmic                               |                  |                  |                  |                  |                  |                  |                  | 1                | 1                | 1                |                  |                  |                  |                  |                  |                  |                  | 3                |                  | 1                |           |                    |                  |                  |
| Adrenal Medulla  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                  | +                | +                |
| Hyperplasia  |                  | 1                |                  | 2                |                  | 1                | 4                | 3                | 4                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    | 1                | 2                |
| Islets, Pancreatic                                     | +                | +                | A                | A                | A                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                  | +                | +                |
| Hyperplasia  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Parathyroid Gland                                      | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | M                | +                | +         | +                  | +                | +                |
| Hyperplasia  |                  |                  |                  |                  |                  |                  |                  | 3                |                  | 1                |                  |                  |                  | 2                | 2                |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Pituitary Gland  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                  | +                | +                |
| Craniopharyngeal Duct, Cyst                            | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Pars Distalis, Angiectasis                             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Pars Distalis, Atrophy                                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Pars Distalis, Cyst                                    |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    | X                |                  |
| Pars Distalis, Hyperplasia                             |                  | 4                |                  |                  |                  | 3                |                  |                  | 1                |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  | 2                |           |                    |                  |                  |
| Pars Intermedia, Cyst                                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |           | X                  |                  |                  |
| Pars Intermedia, Hyperplasia                           |                  | 3                |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Thyroid Gland  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | A                | +                | +         | +                  | +                | +                |
| C-cell, Hyperplasia                                    |                  |                  |                  | 3                |                  | 2                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           | 3                  | 2                | 2                |
| Follicle, Cyst   | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |

GENERAL BODY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked





Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | males<br>(cont...)    |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>4      | 0<br>5<br>2<br>8      | 0<br>5<br>8<br>0      | 0<br>5<br>8<br>1      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>2      | 0<br>6<br>5<br>5      | 0<br>7<br>3<br>4      | 0<br>5<br>6<br>2      | 0<br>4<br>5<br>9      | 0<br>5<br>6<br>5      | 0<br>6<br>4<br>8      | 0<br>7<br>6<br>3      | 0<br>6<br>4<br>3      | 0<br>4<br>7<br>7      | 0<br>5<br>3<br>1      | 0<br>5<br>6<br>7      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>4      |                       |                       | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>0      |
|  | 0<br>1<br>7<br>6<br>1 | 0<br>1<br>7<br>6<br>2 | 0<br>1<br>7<br>6<br>3 | 0<br>1<br>7<br>6<br>4 | 0<br>1<br>7<br>6<br>5 | 0<br>1<br>7<br>6<br>6 | 0<br>1<br>7<br>6<br>7 | 0<br>1<br>7<br>6<br>8 | 0<br>1<br>7<br>6<br>9 | 0<br>1<br>7<br>6<br>0 | 0<br>1<br>7<br>6<br>1 | 0<br>1<br>7<br>6<br>2 | 0<br>1<br>7<br>6<br>3 | 0<br>1<br>7<br>6<br>4 | 0<br>1<br>7<br>6<br>5 | 0<br>1<br>7<br>6<br>6 | 0<br>1<br>7<br>6<br>7 | 0<br>1<br>7<br>6<br>8 | 0<br>1<br>7<br>6<br>9 | 0<br>1<br>7<br>6<br>0 | 0<br>1<br>7<br>6<br>1 | 0<br>1<br>7<br>6<br>2 | 0<br>1<br>7<br>6<br>3 | 0<br>1<br>7<br>6<br>4 | 0<br>1<br>7<br>6<br>5 |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymph Node, Mesenteric                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Erythrophagocytosis                      |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 1 |   |   |   |   |
| Hyperplasia, Lymphocyte                  |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphatic Sinus, Ectasia                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spleen                       | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Extramedullary Hematopoiesis |   |   | 2 |   |   | 1 | 2 |   | 1 |   |   |   |   | 3 | 1 |   | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| Pigment                      | 2 | 1 |   | 2 |   | 1 | 2 | 2 | 1 | 2 |   |   | 1 |   | 3 |   | 2 |   | 2 |   | 1 | 2 | 2 | 2 | 1 |
| Red Pulp, Atrophy            | 1 |   |   |   |   |   |   | 2 |   | 2 |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |
| White Pulp, Atrophy          |   |   |   | 2 |   |   |   | 2 |   | 2 | 1 |   | 2 |   | 2 | 3 |   |   |   |   |   |   |   |   |   |

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus                               | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | I | + | + | + | + | + | + | + |
| Atrophy                              | 2 | 2 | 2 | 4 | 3 | 2 | 1 | 4 |   |   |   | 2 | 3 |   | 2 | 2 | 1 |   | 3 | 1 | 2 | 2 | 2 | 2 | 2 |
| Cyst                                 |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X |   |   | X | X | X |   |   |
| Ectopic Parathyroid Gland            | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                           |   |   |   |   |   |   |   |   |   | 4 |   |   | 2 |   | 3 | 3 |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Epithelial              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

INTEGUMENTARY SYSTEM

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland  | + | + | + | + | + | + | + | + | + | + | + | + | M | + | M | M | + | + | + | M | + | + | + | + | + |
| Duct, Dilation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Skin                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst Epithelial Inclusion    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adnexa, Atrophy              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Dermis, Fibrosis             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
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I .. Insufficient tissue  
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BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|------------------|------------------|------------------|
|  | 0<br>7<br>3<br>4 | 0<br>7<br>3<br>4 | 0<br>5<br>2<br>8 | 0<br>5<br>8<br>0 | 0<br>5<br>8<br>1 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>2 | 0<br>6<br>6<br>5 | 0<br>7<br>3<br>4 | 0<br>7<br>5<br>2 | 0<br>5<br>6<br>9 | 0<br>4<br>6<br>5 | 0<br>5<br>4<br>2 | 0<br>6<br>0<br>8 | 0<br>7<br>6<br>3 | 0<br>6<br>4<br>7 | 0<br>7<br>9<br>3 | 0<br>5<br>3<br>1 | 0<br>5<br>6<br>7 | 0<br>7<br>3<br>4 |           |                    | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>0 |
| Degeneration   | 3                | 3                | 2                | 1                | 1                | 3                | 3                | 3                | 3                | 1                |                  |                  |                  | 2                | 2                | 3                | 2                | 3                | 1                | 1                | 3         | 3                  | 4                | 4                | 3                | 3                |
| Spinal Cord, Cervical<br>Degeneration                  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                  | +                | +                | +                | +                |
| Spinal Cord, Lumbar<br>Degeneration                    | 1                | 1                |                  | 1                |                  |                  | 1                | 1                | 1                |                  |                  |                  |                  | 1                | 1                |                  | 1                |                  |                  |                  |           |                    |                  | 1                | 1                | 1                |
| Spinal Cord, Lumbar<br>Nerve, Degeneration             | 3                | 4                | 1                | 2                |                  | 2                | 3                | 3                | 3                | 3                | 1                | 2                | 2                | 2                | 2                |                  | 3                | 2                | 1                | 3                | 3         | 3                  | 3                | 4                | 3                |                  |
| Spinal Cord, Thoracic<br>Degeneration                  | 2                | 3                |                  |                  |                  | 4                | 2                | 2                | 3                |                  | 1                |                  |                  | 1                | 1                |                  | 2                |                  | 1                | 1                | 1         | 1                  | 2                | 2                | 2                |                  |
| Trigeminal Ganglion<br>Degeneration                    | +                | +                | +                | +                | +                | +                | +                | M                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                  | +                | +                | +                |                  |
|  |                  | 1                |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  | 1                | 1                |                  |                  |                  |                  |                  |                  | 1         |                    |                  |                  |                  |                  |

**RESPIRATORY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Congestion                                  |   |   | 4 | 3 | 3 |   |   |   |   | 4 | 3 |   | 2 |   | 2 | 3 |   |   | 2 |   |   |   |   |   |   |
| Foreign Body                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                                  |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative                   |   |   |   |   |   |   |   |   | 3 |   | 1 |   |   |   |   | 1 |   | 1 |   | 1 |   | 1 |   | 1 |   |
| Alveolus, Infiltration Cellular, Histiocyte |   | 1 | 3 |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium Alveolus, Hyperplasia            |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nose  | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Foreign Body                                |   |   |   | X |   |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   | X |
| Inflammation, Suppurative                   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1 |   | 2 |   | 2 |   |   |   |   | 1 |   | 1 |
| Inflammation, Chronic Active                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineral                                     |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr                                  | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |                  |                  |                  |   |  |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|------------------|------------------|---|--|
|   | 0<br>7<br>3<br>4 | 0<br>7<br>3<br>4 | 0<br>5<br>2<br>8 | 0<br>5<br>8<br>0 | 0<br>5<br>8<br>1 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>2 | 0<br>6<br>6<br>5 | 0<br>7<br>3<br>4 | 0<br>5<br>6<br>2 | 0<br>4<br>5<br>9 | 0<br>6<br>4<br>5 | 0<br>7<br>0<br>8 | 0<br>6<br>1<br>3 | 0<br>4<br>9<br>3 | 0<br>6<br>9<br>7 | 0<br>5<br>3<br>1 | 0<br>7<br>3<br>6 | 0<br>5<br>3<br>3 | 0<br>7<br>3<br>4 |           |                    | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>0 |   |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet                                     | 1                | 2                | 2                | 2                |                  | 3                | 2                |                  | 3                | 2                | 2                | 2                | 2                | 2                | 1                |                  | 2                | 3                | 1                | 1                |           | 1                  | 2                | 2                | 3                |   |  |
| Olfactory Epithelium, Metaplasia, Respiratory Epithelium, Accumulation, Hyaline Droplet |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  | 1                |                  |                  |           |                    | 1                |                  | 3                |   |  |
| Respiratory Epithelium, Hyperplasia   |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |   |  |
| Trachea   | +                | +                | +                | A                | A                | +                | +                | +                | +                | A                | +                | +                | +                | +                | +                | A                | +                | +                | A                | +                | +         | +                  | +                | +                | +                |   |  |
| <b>SPECIAL SENSES SYSTEM</b>  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |   |  |
| Eye   | +                | +                | A                | A                | A                | +                | +                | A                | +                | A                | +                | +                | +                | +                | +                | A                | +                | +                | A                | +                | +         | +                  | +                | +                | +                |   |  |
| Anterior Chamber, Inflammation, Acute   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |   |  |
| Cornea, Fibrosis  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |   |  |
| Cornea, Inflammation, Acute   |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  | 1                | 1                |                  |                  |                  |           | 3                  |                  |                  |                  |   |  |
| Cornea, Neovascularization  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                | 2                |                  |                  |                  |           | 2                  |                  | 1                |                  | 1 |  |
| Cornea, Epithelium, Degeneration  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |   |  |
| Cornea, Epithelium, Hyperplasia   |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |           | 4                  |                  | 3                |                  | 1 |  |
| Retina, Atrophy   |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  | 1 |  |
| Retina, Dysplasia   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |   |  |
| Harderian Gland   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                  | +                | +                | +                |   |  |
| Atrophy   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  | 1 |  |
| Degeneration  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |   |  |
| Hyperplasia   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |   |  |
| Infiltration Cellular, Lymphocyte   |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  | 3 |  |
| Inflammation, Chronic   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |   |  |
| Inflammation, Chronic Active  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |   |  |
| Lacrimal Gland  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  | + |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked







Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                    |
|--|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr | DAY ON TEST | 06 | 07 | 07 | 05 | 05 | 02 | 07 | 07 | 07 | 07 | 07 | 07 | 05 | 07 | 07 | 07 | 07 | 07 | 07 | 04 | 06 | 06 | 05 | males<br>(cont...) |
|  | ANIMAL ID   | 06 | 03 | 03 | 08 | 00 | 00 | 03 | 03 | 03 | 03 | 03 | 01 | 02 | 03 | 01 | 03 | 03 | 04 | 04 | 03 | 03 | 04 | 06 |                    |

Bile Duct, Cyst  
 Bile Duct, Fibrosis  
 Bile Duct, Hyperplasia  
 Hepatocyte, Degeneration  
 Hepatocyte, Necrosis  
 Hepatocyte, Vacuolation, Cytoplasmic

1

1

2

2

1

2

Mesentery  
 Hemorrhage  
 Necrosis  
 Artery, Inflammation, Chronic Active

+

2

Pancreas  
 Cyst  
 Acinus, Atrophy  
 Acinus, Hyperplasia  
 Artery, Inflammation, Chronic Active

+ + + + + A + + + + + + + + + + + + + + + + A +

1

2

1

1

2 2 3

2 1 3

3

2

3

Salivary Glands  
 Artery, Inflammation, Chronic Active  
 Parotid Gland, Atrophy  
 Sublingual Gland, Atrophy  
 Sublingual Gland, Mineral

+ A +

Stomach, Forestomach  
 Edema  
 Inflammation, Chronic  
 Inflammation, Chronic Active  
 Ulcer  
 Epithelium, Hyperplasia

+ +

2

4

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

















Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr                                  | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|
|   | 0665        | 0732 | 0732 | 0582 | 0550 | 0270 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0579 | 0773 | 0773 | 0773 | 0773 |           |                    | 0773 | 0466 | 0665 |
| Olfactory Epithelium, Accumulation, Hyaline Droplet                                     | 3           | 2    | 1    | 2    |      | 1    | 1    | 2    | 2    | 1    | 2    | 3    |      | 3    | 2    | 2    | 2    | 3    | 3    | 2    |           | 2                  | 1    |      |      |
| Olfactory Epithelium, Metaplasia, Respiratory Epithelium, Accumulation, Hyaline Droplet | 1           |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Respiratory Epithelium, Hyperplasia   |             |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      | 1    |           |                    |      |      |      |
| Trachea   | A           | +    | +    | A    | A    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +         | +                  | +    | A    | +    |

SPECIAL SENSES SYSTEM

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Eye                                   | + | + | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | A | + | A | A   |
| Anterior Chamber, Inflammation, Acute |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
| Cornea, Fibrosis                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3 |
| Cornea, Inflammation, Acute           |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   | 1   |
| Cornea, Neovascularization            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1 |
| Cornea, Epithelium, Degeneration      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |
| Cornea, Epithelium, Hyperplasia       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 2 |
| Retina, Atrophy                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |
| Retina, Dysplasia                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |
| Harderian Gland                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | +   |
| Atrophy                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |
| Degeneration                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
| Hyperplasia                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |
| Infiltration Cellular, Lymphocyte     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
| Inflammation, Chronic                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
| Inflammation, Chronic Active          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
| Lacrimal Gland                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked









Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | males<br>(cont...)    |                       |   |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
|  | 0<br>7<br>3<br>1      | 0<br>3<br>7<br>1      | 0<br>5<br>6<br>7      | 0<br>4<br>8<br>8      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>0      | 0<br>2<br>8<br>9      | 0<br>5<br>9<br>2      | 0<br>4<br>7<br>5      | 0<br>7<br>3<br>2      | 0<br>6<br>5<br>0      | 0<br>5<br>4<br>7      | 0<br>5<br>9<br>4      | 0<br>6<br>2<br>2      | 0<br>7<br>3<br>3      | 0<br>6<br>8<br>0      | 0<br>4<br>3<br>3      | 0<br>6<br>2<br>1      | 0<br>3<br>4<br>8      | 0<br>7<br>3<br>1      | 0<br>5<br>9<br>0      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>4      | 0<br>1<br>5<br>3      |                       | 0<br>7<br>3<br>0      |   |
| ANIMAL ID  | 0<br>1<br>8<br>1<br>6 | 0<br>1<br>8<br>1<br>7 | 0<br>1<br>8<br>2<br>0 | 0<br>1<br>8<br>2<br>1 | 0<br>1<br>8<br>2<br>2 | 0<br>1<br>8<br>2<br>2 | 0<br>1<br>8<br>2<br>5 | 0<br>1<br>8<br>2<br>6 | 0<br>1<br>8<br>2<br>7 | 0<br>1<br>8<br>2<br>8 | 0<br>1<br>8<br>2<br>9 | 0<br>1<br>8<br>3<br>0 | 0<br>1<br>8<br>3<br>1 | 0<br>1<br>8<br>3<br>2 | 0<br>1<br>8<br>3<br>3 | 0<br>1<br>8<br>3<br>4 | 0<br>1<br>8<br>3<br>5 | 0<br>1<br>8<br>3<br>6 | 0<br>1<br>8<br>3<br>7 | 0<br>1<br>8<br>3<br>8 | 0<br>1<br>8<br>3<br>9 | 0<br>1<br>8<br>4<br>0 | 0<br>1<br>8<br>4<br>1 | 0<br>1<br>8<br>4<br>2 | 0<br>1<br>8<br>4<br>3 | 0<br>1<br>8<br>4<br>4 |   |
| Degeneration, Cystic                                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Hyperplasia  | 3                     |                       | 1                     |                       | 1                     |                       |                       |                       | 3                     |                       | 1                     |                       |                       | 1                     | 1                     |                       |                       | 1                     |                       |                       | 2                     | 2                     |                       |                       |                       |                       |   |
| Hypertrophy  | 2                     |                       |                       |                       | 1                     | 3                     |                       | 1                     |                       | 1                     |                       |                       |                       | 3                     | 1                     | 1                     |                       |                       |                       |                       | 2                     | 1                     | 2                     |                       |                       |                       |   |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pigment  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Vacuolation, Cytoplasmic                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |   |
| Adrenal Medulla  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | + |
| Hyperplasia  | 1                     |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       | 1                     |                       |                       |                       |   |
| Islets, Pancreatic                                     | +                     | +                     | +                     | A                     | +                     | +                     | +                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | A                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | + |
| Hyperplasia  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       | 1                     | 1                     |                       |                       |                       |                       | 1 |
| Parathyroid Gland                                      | +                     | +                     | +                     | +                     | M                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | M                     | +                     | +                     | +                     |   |
| Hyperplasia  |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     | 1                     |                       |                       |                       |                       | 2                     |                       | 2                     |                       |                       | 2                     |   |
| Pituitary Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | + |
| Craniopharyngeal Duct, Cyst                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pars Distalis, Angiectasis                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pars Distalis, Atrophy                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pars Distalis, Cyst                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pars Distalis, Hyperplasia                             | 1                     |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       | 2                     |                       |   |
| Pars Intermedia, Cyst                                  |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |   |
| Pars Intermedia, Hyperplasia                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Thyroid Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | + |
| C-cell, Hyperplasia                                    |                       |                       |                       |                       | 4                     |                       |                       |                       | 3                     |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       | 1                     | 3                     |                       | 4                     |                       |                       | 2 |
| Follicle, Cyst   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |

GENERAL BODY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
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1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|------------------|------------------|------------------|
|  | 0<br>7<br>3<br>1 | 0<br>3<br>7<br>1 | 0<br>5<br>6<br>7 | 0<br>4<br>8<br>8 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>0 | 0<br>2<br>8<br>9 | 0<br>5<br>9<br>2 | 0<br>4<br>7<br>5 | 0<br>7<br>3<br>2 | 0<br>6<br>5<br>0 | 0<br>5<br>4<br>7 | 0<br>5<br>9<br>2 | 0<br>6<br>2<br>3 | 0<br>7<br>3<br>0 | 0<br>6<br>4<br>3 | 0<br>4<br>2<br>1 | 0<br>6<br>3<br>8 | 0<br>3<br>7<br>1 | 0<br>5<br>9<br>0 |           |                    | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>4 | 0<br>1<br>5<br>3 | 0<br>7<br>3<br>0 |
| Degeneration   | 3                | 1                | 1                |                  | 3                | 2                |                  | 2                | 1                | 3                | 2                | 1                | 3                | 2                | 3                | 2                |                  | 2                |                  | 3                | 1         | 3                  | 2                |                  | 3                |                  |
| Spinal Cord, Cervical<br>Degeneration                  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                  | +                | +                | +                |                  |
| Spinal Cord, Lumbar<br>Degeneration                    | 1                |                  | 1                |                  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                  | +                | +                |                  |                  |
| Nerve, Degeneration                                    | 3                |                  |                  | 1                | 4                | 3                |                  | 1                |                  | 3                | 3                | 2                | 3                | 3                | 4                | 2                | 1                | 2                |                  | 4                | 1         | 3                  | 3                |                  | 4                |                  |
| Spinal Cord, Thoracic<br>Degeneration                  | 2                |                  |                  |                  | 3                | 2                |                  | 1                |                  | 3                | 1                |                  | 1                | 1                | 1                | 1                |                  | 1                |                  | 2                |           | 2                  | 2                |                  | 2                |                  |
| Trigeminal Ganglion<br>Degeneration                    | +                | +                | +                | M                | +                | M                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                  | +                | +                |                  |                  |
| <b>RESPIRATORY SYSTEM</b>                              |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |                  |
| Lung   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                  | +                | +                | +                |                  |
| Congestion   |                  | 2                | 3                | 3                | 2                |                  |                  | 3                | 2                |                  | 3                | 4                |                  | 2                |                  | 3                | 1                |                  | 3                |                  | 1         |                    |                  |                  |                  |                  |
| Foreign Body   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |                  |
| Hemorrhage   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |                  |
| Inflammation, Suppurative                              |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  | 3                |                  |                  |
| Alveolus, Infiltration Cellular, Histiocyte            | 1                |                  |                  | 3                | 1                | 1                |                  | 1                |                  | 1                | 1                | 1                | 1                | 1                | 1                |                  |                  | 1                | 1                | 1                |           | 1                  | 1                |                  | 1                |                  |
| Epithelium Alveolus, Hyperplasia                       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |                  |
| Nose   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | A                | +                | +         | +                  | +                | +                | +                |                  |
| Foreign Body   |                  |                  |                  | X                |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |                  |
| Inflammation, Suppurative                              |                  |                  |                  | 1                |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1         |                    | 1                |                  |                  |                  |
| Inflammation, Chronic Active                           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |                  |
| Mineral  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |                  |                  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | males<br>(cont...)    |                       |                       |                       |                       |                       |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>7<br>3<br>1      | 0<br>3<br>7<br>1      | 0<br>5<br>6<br>7      | 0<br>4<br>8<br>8      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>0      | 0<br>2<br>8<br>9      | 0<br>5<br>9<br>2      | 0<br>4<br>7<br>5      | 0<br>7<br>3<br>2      | 0<br>6<br>5<br>0      | 0<br>5<br>4<br>7      | 0<br>5<br>9<br>4      | 0<br>6<br>2<br>2      | 0<br>7<br>3<br>3      | 0<br>6<br>8<br>0      | 0<br>4<br>3<br>3      | 0<br>6<br>2<br>1      | 0<br>3<br>4<br>8      | 0<br>7<br>3<br>1      |                       |                       | 0<br>5<br>9<br>0      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>4      | 0<br>1<br>5<br>3      | 0<br>7<br>3<br>0      |                       |                       |                       |
|  | 0<br>1<br>8<br>1<br>6 | 0<br>1<br>8<br>1<br>7 | 0<br>1<br>8<br>2<br>0 | 0<br>1<br>8<br>2<br>1 | 0<br>1<br>8<br>2<br>2 | 0<br>1<br>8<br>2<br>2 | 0<br>1<br>8<br>2<br>5 | 0<br>1<br>8<br>2<br>6 | 0<br>1<br>8<br>2<br>7 | 0<br>1<br>8<br>2<br>8 | 0<br>1<br>8<br>2<br>9 | 0<br>1<br>8<br>3<br>0 | 0<br>1<br>8<br>3<br>1 | 0<br>1<br>8<br>3<br>2 | 0<br>1<br>8<br>3<br>3 | 0<br>1<br>8<br>3<br>4 | 0<br>1<br>8<br>3<br>5 | 0<br>1<br>8<br>3<br>6 | 0<br>1<br>8<br>3<br>7 | 0<br>1<br>8<br>3<br>8 | 0<br>1<br>8<br>3<br>9 | 0<br>1<br>8<br>4<br>0 | 0<br>1<br>8<br>4<br>1 | 0<br>1<br>8<br>4<br>2 | 0<br>1<br>8<br>4<br>3 | 0<br>1<br>8<br>4<br>4 | 0<br>1<br>8<br>4<br>5 | 0<br>1<br>8<br>4<br>6 | 0<br>1<br>8<br>4<br>7 | 0<br>1<br>8<br>4<br>8 |

Olfactory Epithelium, Accumulation, Hyaline Droplet 1 2 2 1 1 3 3 2 2 2 2 1 2 1 3 3 2 1 2 3 2 1

Olfactory Epithelium, Metaplasia, Respiratory Epithelium, Accumulation, Hyaline Droplet

Respiratory Epithelium, Hyperplasia

Trachea + + A A + + + + A + + A + + + A + + + + + + + +

SPECIAL SENSES SYSTEM

Eye + + + A + + + M A + + + + + + A A + A + + + + + +

Anterior Chamber, Inflammation, Acute 1

Cornea, Fibrosis

Cornea, Inflammation, Acute 1 1 2

Cornea, Neovascularization 1 1

Cornea, Epithelium, Degeneration

Cornea, Epithelium, Hyperplasia 1 1 2 2

Retina, Atrophy 1

Retina, Dysplasia X

Harderian Gland +

Atrophy

Degeneration

Hyperplasia

Infiltration Cellular, Lymphocyte 1

Inflammation, Chronic

Inflammation, Chronic Active 1

Lacrimal Gland

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                            |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> |           | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 4 | 7 |   |   |
|  |           | 3 | 3 | 3 | 0 | 9 | 3 | 3 | 2 | 8 | 3 | 0 | 3 | 3 | 2 | 3 |   |
|  |           | 1 | 4 | 7 | 8 | 4 | 0 | 1 | 0 | 6 | 7 | 8 | 1 | 7 | 5 | 0 |   |
| <b>6.0W/kg(CDMA)chr</b>                | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |
|  |           | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |   |
|  |           | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 |   |
|  |           | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | 1 | 2 | 3 | 4 | 5 |   |
| <b>* TOTALS</b>                        |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

ALIMENTARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |              |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Esophagus                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +         | <b>90</b>    |
| Intestine Large, Cecum               | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | <b>68</b> |              |
| Erosion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |           | <b>2 2.5</b> |
| Epithelium, Regeneration             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |
| Intestine Large, Colon               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +         | <b>76</b>    |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |
| Intestine Large, Rectum              | + | + | + | + | + | A | + | A | + | + | A | + | + | M | + | <b>76</b> |              |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 3.0</b> |
| Intestine Small, Duodenum            | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | +         | <b>66</b>    |
| Intestine Small, Ileum               | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | +         | <b>63</b>    |
| Intestine Small, Jejunum             | + | + | + | A | A | + | + | A | + | + | + | + | + | + | + | +         | <b>62</b>    |
| Liver                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +         | <b>88</b>    |
| Angiectasis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b> |
| Clear Cell Focus                     |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |           | <b>5</b>     |
| Eosinophilic Focus                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>4</b>     |
| Extramedullary Hematopoiesis         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b> |
| Hepatodiaphragmatic Nodule           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>     |
| Infiltration Cellular, Mixed Cell    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2 1.0</b> |
| Mixed Cell Focus                     | X | X | X |   |   |   | X | X |   | X |   |   |   |   | X |           | <b>37</b>    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>7      | 0<br>6<br>0<br>8      | 0<br>5<br>9<br>4      | 0<br>6<br>3<br>0      | 0<br>7<br>3<br>1      | 0<br>7<br>2<br>0      | 0<br>5<br>8<br>6      | 0<br>7<br>3<br>7      | 0<br>7<br>0<br>8      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>7      | 0<br>4<br>2<br>5      | 0<br>7<br>3<br>0      |                       |
| ANIMAL ID  | 0<br>1<br>8<br>4<br>9 | 0<br>1<br>8<br>5<br>1 | 0<br>1<br>8<br>5<br>2 | 0<br>1<br>8<br>5<br>3 | 0<br>1<br>8<br>5<br>4 | 0<br>1<br>8<br>5<br>5 | 0<br>1<br>8<br>5<br>6 | 0<br>1<br>8<br>5<br>7 | 0<br>1<br>8<br>5<br>8 | 0<br>1<br>8<br>5<br>9 | 0<br>1<br>8<br>6<br>0 | 0<br>1<br>8<br>6<br>1 | 0<br>1<br>8<br>6<br>2 | 0<br>1<br>8<br>6<br>3 | 0<br>1<br>8<br>6<br>4 | 0<br>1<br>8<br>6<br>5 |
| Bile Duct, Cyst  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |
| Bile Duct, Fibrosis                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |
| Bile Duct, Hyperplasia                                 |                       |                       |                       |                       |                       | 1                     | 1                     |                       |                       | 1                     | 2                     |                       |                       |                       |                       | 14 1.1                |
| Hepatocyte, Degeneration                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Hepatocyte, Necrosis                                   |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 6 1.5                 |
| Hepatocyte, Vacuolation, Cytoplasmic                   |                       |                       |                       |                       | 3                     |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       | 7 1.7                 |
| Mesentery  |                       |                       |                       |                       |                       | +                     |                       | +                     |                       |                       |                       |                       | +                     |                       |                       | 6                     |
| Hemorrhage   |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 4.0                 |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       |                       | 3 3.0                 |
| Pancreas   | +                     | +                     | +                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 78                    |
| Cyst   |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |
| Acinus, Atrophy  |                       |                       |                       |                       |                       |                       | 1                     | 1                     |                       |                       |                       |                       |                       |                       |                       | 8 1.1                 |
| Acinus, Hyperplasia                                    |                       |                       |                       |                       |                       |                       |                       | 3                     |                       | 1                     | 4                     |                       | 3                     |                       | 4                     | 28 2.6                |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     | 2                     | 2                     |                       |                       | 5 2.2                 |
| Salivary Glands  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 86                    |
| Artery, Inflammation, Chronic Active                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Parotid Gland, Atrophy                                 |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3 3.0                 |
| Sublingual Gland, Atrophy                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Sublingual Gland, Mineral                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |
| Stomach, Forestomach                                   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90                    |
| Edema  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Inflammation, Chronic                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Inflammation, Chronic Active                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Ulcer  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0                 |
| Epithelium, Hyperplasia                                |                       |                       |                       |                       |                       |                       |                       | 1                     |                       | 2                     |                       | 2                     |                       |                       |                       | 6 2.3                 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                    | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 4 | 7 | 7 |
| HARLAN SPRAGUE DAWLEY RATS<br>MALE | 3 | 3 | 3 | 0 | 9 | 3 | 3 | 2 | 8 | 3 | 0 | 3 | 3 | 2 | 3 |
|                                    | 1 | 4 | 7 | 8 | 4 | 0 | 1 | 0 | 6 | 7 | 8 | 1 | 7 | 5 | 0 |
| 6.0W/kg(CDMA)chr                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                    | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| ANIMAL ID                          | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
|                                    | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|                                    | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | 1 | 2 | 3 | 4 | 5 |

\* TOTALS

Epithelium, Hyperplasia, Basal Cell 3 1 3.0

Stomach, Glandular + + + + + A + + + + A + + + + 78

Mineral 1 2.0

Epithelium, Hyperplasia, Focal 1 2.0

CARDIOVASCULAR SYSTEM

Aorta + + + + + + + + + + + + + + 90

Mineral 2 1.5

Heart + + + + + + + + + + + + + + 90

Cardiomyopathy 1 1 2 1 2 2 1 3 2 1 2 1 1 1 1 85 1.3

Hemorrhage 2 1 2.0

Artery, Mineral 1 2.0

Artery, Pericardium, Inflammation, Chronic Active 1 3.0

Atrium, Dilation 4 4 3.5

Atrium, Thrombus 3 1 3.0

Atrium, Myocardium, Hypertrophy 1 2.0

Endocardium, Hyperplasia, Schwann Cell 3 2.0

Myocardium, Necrosis 2 1 2.0

Ventricle Right, Cardiomyopathy 2 1 1 2 4 3 3 3 1 2 1 1 2 2 74 1.7

ENDOCRINE SYSTEM

Adrenal Cortex + + + + + + + + + + + + + + 89

Accessory Adrenal Cortical Nodule 7

Atrophy 1 3.0

Degeneration 2 2.5

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>7      | 0<br>6<br>0<br>8      | 0<br>5<br>9<br>4      | 0<br>6<br>3<br>0      | 0<br>7<br>3<br>1      | 0<br>7<br>2<br>0      | 0<br>5<br>8<br>6      | 0<br>7<br>3<br>7      | 0<br>7<br>0<br>8      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>7      | 0<br>4<br>2<br>5      | 0<br>7<br>3<br>0      |                       |
| ANIMAL ID  | 0<br>1<br>8<br>4<br>9 | 0<br>1<br>8<br>5<br>1 | 0<br>1<br>8<br>5<br>2 | 0<br>1<br>8<br>5<br>3 | 0<br>1<br>8<br>5<br>4 | 0<br>1<br>8<br>5<br>5 | 0<br>1<br>8<br>5<br>6 | 0<br>1<br>8<br>5<br>7 | 0<br>1<br>8<br>5<br>8 | 0<br>1<br>8<br>5<br>9 | 0<br>1<br>8<br>6<br>0 | 0<br>1<br>8<br>6<br>1 | 0<br>1<br>8<br>6<br>2 | 0<br>1<br>8<br>6<br>3 | 0<br>1<br>8<br>6<br>4 | 0<br>1<br>8<br>6<br>5 |
| Degeneration, Cystic                                   |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Hyperplasia  | 3                     | 2                     |                       |                       |                       | 1                     | 2                     |                       |                       |                       | 1                     |                       |                       | 2                     | 1                     | 44 1.9                |
| Hypertrophy  |                       |                       | 1                     | 2                     |                       | 2                     | 2                     |                       |                       | 1                     |                       |                       |                       |                       | 1                     | 44 1.4                |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |
| Pigment  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |
| Vacuolation, Cytoplasmic                               | 1                     | 2                     |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       | 12 1.4                |
| Adrenal Medulla  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90                    |
| Hyperplasia  |                       | 1                     | 4                     |                       |                       |                       |                       |                       |                       | 1                     |                       |                       | 3                     |                       | 4                     | 21 2.3                |
| Islets, Pancreatic                                     | +                     | +                     | +                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 79                    |
| Hyperplasia  | 3                     |                       | 2                     |                       |                       |                       |                       | 2                     |                       |                       |                       |                       | 1                     |                       |                       | 12 1.9                |
| Parathyroid Gland                                      | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | M                     | +                     | 82                    |
| Hyperplasia  | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     | 2                     | 2                     |                       | 2                     | 17 1.8                |
| Pituitary Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90                    |
| Craniopharyngeal Duct, Cyst                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |
| Pars Distalis, Angiectasis                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |
| Pars Distalis, Atrophy                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       | 1 3.0                 |
| Pars Distalis, Cyst                                    | X                     |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       | 6                     |
| Pars Distalis, Hyperplasia                             | 2                     | 2                     |                       |                       |                       |                       | 4                     |                       |                       | 2                     |                       |                       | 2                     |                       |                       | 27 2.2                |
| Pars Intermedia, Cyst                                  | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 7                     |
| Pars Intermedia, Hyperplasia                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 2.0                 |
| Thyroid Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 85                    |
| C-cell, Hyperplasia                                    | 4                     |                       |                       | 2                     |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       | 2                     | 22 2.6                |
| Follicle, Cyst   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |

**GENERAL BODY SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  | ANIMAL ID   | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 |  |
|  |             | 3 | 3 | 3 | 0 | 9 | 3 | 3 | 2 | 8 | 3 | 0 | 3 | 3 | 2 | 3 |  |
|  |             | 1 | 4 | 7 | 8 | 4 | 0 | 1 | 0 | 6 | 7 | 8 | 1 | 7 | 5 | 0 |  |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |
|  |             | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |  |
|  |             | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |  |
|  |             | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | 1 | 2 | 3 | 4 | 5 |  |
| <b>* TOTALS</b>  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

|               |              |
|---------------|--------------|
| Tissue NOS    | <b>3</b>     |
| Fat, Necrosis | <b>1 3.0</b> |

**GENITAL SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Epididymis                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |
| Exfoliated Germ Cell                    | 1 |   |   |   | 2 |   |   |   |   | 1 |   | 2 | 1 |   | 2 | <b>17 1.5</b> |
| Hypospermia                             |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   | 3 | <b>13 3.0</b> |
| Inflammation, Chronic                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Artery, Inflammation, Chronic Active    |   |   | 3 |   |   |   |   |   |   |   |   |   | 3 |   |   | <b>3 2.7</b>  |
| Artery, Thrombus                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |
| Penis                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |
| Concretion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |
| Preputial Gland                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>89</b>     |
| Inflammation, Acute                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Inflammation, Chronic Active            | 1 | 2 | 1 | 2 | 1 | 2 |   |   | 1 | 1 | 2 |   | 2 |   | 1 | <b>49 1.9</b> |
| Duct, Dilation                          | 3 | 4 | 2 | 2 | 2 |   | 3 |   |   | 1 |   | 1 | 1 |   | 2 | <b>48 2.4</b> |
| Duct, Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Prostate                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>85</b>     |
| Decreased Secretory Fluid               |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | <b>3 1.7</b>  |
| Infiltration Cellular, Mononuclear Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Inflammation, Acute                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 1.5</b>  |
| Inflammation, Chronic Active            |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   | 1 | <b>5 2.0</b>  |
| Epithelium, Hyperplasia                 |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   | <b>15 2.2</b> |
| Seminal Vesicle                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |
| Decreased Secretory Fluid               |   |   |   |   | 2 |   |   |   |   |   |   | 3 | 2 |   |   | <b>7 3.0</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
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**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST             | 0                                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                         | <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 |
| <b>6.0W/kg(CDMA)chr</b> | 3                                      | 3 | 3 | 0 | 9 | 3 | 3 | 2 | 8 | 3 | 0 | 3 | 3 | 2 | 3 |   |
| <b>ANIMAL ID</b>        | 1                                      | 4 | 7 | 8 | 4 | 0 | 1 | 0 | 6 | 7 | 8 | 1 | 7 | 5 | 0 |   |
|                         | 0                                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                         | 1                                      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |
|                         | 8                                      | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |   |
|                         | 4                                      | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |   |
|                         | 9                                      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | 1 | 2 | 3 | 4 | 5 |   |
|                         | <b>* TOTALS</b>                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                       |   |   |     |
|-----------------------|---|---|-----|
| Hyperplasia, Atypical | 3 | 1 | 3.0 |
| Inflammation, Acute   |   | 1 | 2.0 |

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |            |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|
| Testis                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |            |
| Artery, Inflammation, Chronic Active | 2 |   |   |   |   |   |   |   |   | 3 | 4 | 3 |   |   | <b>12</b> | <b>3.1</b> |
| Germ Cell, Degeneration              |   |   |   | 2 |   |   |   |   |   | 1 | 3 | 1 |   | 2 | <b>24</b> | <b>2.1</b> |
| Interstitial Cell, Hyperplasia       |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | <b>1</b>  | <b>2.0</b> |

**HEMATOPOIETIC SYSTEM**

|                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |            |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|
| Bone Marrow      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |            |
| Hypercellularity |   |   |   |   |   |   |   | 2 |   |   |   | 2 | 2 |   | <b>13</b> | <b>1.9</b> |
| Hypocellularity  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>3.0</b> |

|   |  |  |  |   |  |  |   |  |  |   |   |  |  |  |           |            |
|---|--|--|--|---|--|--|---|--|--|---|---|--|--|--|-----------|------------|
| Lymph Node                                    |  |  |  | + |  |  | + |  |  | + | + |  |  |  | <b>16</b> |            |
| Lumbar, Erythrophagocytosis                   |  |  |  |   |  |  |   |  |  |   |   |  |  |  | <b>1</b>  | <b>1.0</b> |
| Lumbar, Lymphatic Sinus, Ectasia              |  |  |  |   |  |  |   |  |  |   |   |  |  |  | <b>2</b>  | <b>1.5</b> |
| Lymphatic Sinus, Mediastinal, Ectasia         |  |  |  |   |  |  |   |  |  |   | 2 |  |  |  | <b>1</b>  | <b>2.0</b> |
| Mediastinal, Erythrophagocytosis              |  |  |  |   |  |  |   |  |  |   | 2 |  |  |  | <b>3</b>  | <b>2.7</b> |
| Mediastinal, Hemorrhage                       |  |  |  |   |  |  |   |  |  |   |   |  |  |  | <b>1</b>  | <b>3.0</b> |
| Pancreatic, Erythrophagocytosis               |  |  |  |   |  |  |   |  |  | 2 |   |  |  |  | <b>3</b>  | <b>2.0</b> |
| Pancreatic, Infiltration Cellular, Mixed Cell |  |  |  |   |  |  |   |  |  |   |   |  |  |  | <b>1</b>  | <b>2.0</b> |
| Renal, Infiltration Cellular, Mixed Cell      |  |  |  |   |  |  |   |  |  |   |   |  |  |  | <b>1</b>  | <b>2.0</b> |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |            |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|
| Lymph Node, Mandibular            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>88</b> |            |
| Erythrophagocytosis               |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>1.0</b> |
| Hyperplasia, Lymphocyte           |   | 2 |   |   |   |   | 1 |   |   | 2 | 2 |   | 1 |   | <b>40</b> | <b>1.4</b> |
| Infiltration Cellular, Histiocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>2.0</b> |
| Proliferation, Plasma Cell        | 1 | 2 | 1 |   | 2 |   |   | 2 |   | 1 |   | 3 |   | 2 | <b>57</b> | <b>1.6</b> |
| Lymphatic Sinus, Ectasia          |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | <b>14</b> | <b>1.9</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             |  |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|
|  | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>7      | 0<br>6<br>0<br>8      | 0<br>5<br>9<br>4      | 0<br>6<br>3<br>0      | 0<br>7<br>3<br>1      | 0<br>7<br>2<br>0      | 0<br>5<br>8<br>6      | 0<br>7<br>3<br>7      | 0<br>7<br>0<br>8      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>7      | 0<br>4<br>2<br>5      | 0<br>7<br>3<br>0      |                       |  |
|  | 0<br>1<br>8<br>4<br>9 | 0<br>1<br>8<br>5<br>1 | 0<br>1<br>8<br>5<br>2 | 0<br>1<br>8<br>5<br>3 | 0<br>1<br>8<br>5<br>4 | 0<br>1<br>8<br>5<br>5 | 0<br>1<br>8<br>5<br>6 | 0<br>1<br>8<br>5<br>7 | 0<br>1<br>8<br>5<br>8 | 0<br>1<br>8<br>5<br>9 | 0<br>1<br>8<br>6<br>0 | 0<br>1<br>8<br>6<br>1 | 0<br>1<br>8<br>6<br>2 | 0<br>1<br>8<br>6<br>3 | 0<br>1<br>8<br>6<br>4 | 0<br>1<br>8<br>6<br>5 |  |
|  | <b>* TOTALS</b>       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |  |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |              |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Lymph Node, Mesenteric                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>88</b> |              |
| Erythrophagocytosis                      |   |   |   | 2 |   |   |   |   | 2 |   |   |   |   |   |   |           | <b>9 1.4</b> |
| Hyperplasia, Lymphocyte                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>3 1.0</b> |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b> |
| Lymphatic Sinus, Ectasia                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b> |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |               |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---------------|
| Spleen                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>85</b> |               |
| Extramedullary Hematopoiesis | 2 | 2 | 1 |   |   |   | 1 |   |   | 2 |   |   |   |   | 2 |           | <b>48 1.6</b> |
| Pigment                      | 1 | 2 |   | 2 |   | 2 | 1 |   | 2 | 2 | 2 | 2 | 2 |   | 3 |           | <b>63 1.9</b> |
| Red Pulp, Atrophy            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>13 2.0</b> |
| White Pulp, Atrophy          |   |   |   |   |   | 2 |   |   | 2 |   |   |   |   |   |   |           | <b>24 1.9</b> |

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |               |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---------------|
| Thymus                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>82</b> |               |
| Atrophy                              | 2 | 2 | 2 |   |   | 4 | 2 | 3 | 3 |   | 2 | 1 | 2 | 2 | 2 |           | <b>65 2.3</b> |
| Cyst                                 |   |   | X |   |   |   | X |   |   | X | X | X |   |   |   |           | <b>17</b>     |
| Ectopic Parathyroid Gland            |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |           | <b>5</b>      |
| Hemorrhage                           |   |   |   | 3 |   |   |   |   | 3 |   | 2 |   |   |   |   |           | <b>20 2.9</b> |
| Hyperplasia, Epithelial              |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |           | <b>4 1.5</b>  |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b>  |

**INTEGUMENTARY SYSTEM**

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |              |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Mammary Gland  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>80</b> |              |
| Duct, Dilation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>3 1.0</b> |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |              |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Skin                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |              |
| Cyst Epithelial Inclusion    |   |   |   |   |   |   |   |   |   |   |   | X |   |   | X |           | <b>2</b>     |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |
| Adnexa, Atrophy              |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b> |
| Dermis, Fibrosis             |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                    | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 |   |
| HARLAN SPRAGUE DAWLEY RATS<br>MALE | 3 | 3 | 3 | 0 | 9 | 3 | 3 | 2 | 8 | 3 | 0 | 3 | 3 | 2 | 3 |   |
|                                    | 1 | 4 | 7 | 8 | 4 | 0 | 1 | 0 | 6 | 7 | 8 | 1 | 7 | 5 | 0 |   |
| 6.0W/kg(CDMA)chr                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                                    | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |
| ANIMAL ID                          | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |   |
|                                    | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 |   |
|                                    | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | 1 | 2 | 3 | 4 | 5 |   |

\* TOTALS

|  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |   |     |
|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|---|---|-----|
| Epidermis, Hyperplasia                         |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  | 2 | 1 | 2.0 |
| Hair Follicle, Congestion                      |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   | 1 | 3.0 |
| Prepuce, Hyperplasia                           |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   | 1 | 3.0 |
| Prepuce, Inflammation, Acute                   |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   | 1 | 2.0 |
| Prepuce, Ulcer                                 |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   | 1 | 2.0 |
| Subcutaneous Tissue, Inflammation, Suppurative |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |   | 2 | 3.5 |

MUSCULOSKELETAL SYSTEM

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |    |     |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|----|-----|
| Bone                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  | 90 |     |
| Fibrous Osteodystrophy |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |  | 5  | 1.6 |
| Skeletal Muscle        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  | 90 |     |
| Degeneration           |   |   |   |   |   |   |   |   | 1 |   |   | 2 | 2 | 2 |   |  | 26 | 1.7 |

NERVOUS SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |    |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|----|-----|
| Brain                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  | 90 |     |
| Compression                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | 3  | 1.3 |
| Mineral                                |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |  | 4  | 1.0 |
| Glial Cell, Hyperplasia                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | 2  | 2.5 |
| Pineal Gland, Vacuolation, Cytoplasmic |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | 2 |  | 4  | 1.5 |
| Nerve Trigeminal                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  | 90 |     |
| Degeneration                           | 1 | 2 | 2 | 2 |   |   |   |   | 3 | 2 | 2 |   | 2 | 2 | 3 |  | 49 | 2.2 |
| Peripheral Nerve, Sciatic              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  | 90 |     |
| Degeneration                           | 3 | 2 | 3 | 1 | 1 | 2 | 3 | 2 | 2 | 4 | 3 | 4 | 3 |   | 2 |  | 84 | 2.3 |
| Peripheral Nerve, Tibial               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  | 89 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                 |            |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------|------------|
|  | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>4      | 0<br>7<br>3<br>7      | 0<br>6<br>0<br>8      | 0<br>5<br>9<br>4      | 0<br>6<br>3<br>0      | 0<br>7<br>3<br>1      | 0<br>7<br>2<br>0      | 0<br>5<br>8<br>6      | 0<br>7<br>3<br>7      | 0<br>7<br>0<br>8      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>7      | 0<br>4<br>2<br>5      | 0<br>7<br>3<br>0      |                       |                 |            |
| ANIMAL ID  | 0<br>1<br>8<br>4<br>9 | 0<br>1<br>8<br>5<br>1 | 0<br>1<br>8<br>5<br>2 | 0<br>1<br>8<br>5<br>3 | 0<br>1<br>8<br>5<br>4 | 0<br>1<br>8<br>5<br>5 | 0<br>1<br>8<br>5<br>6 | 0<br>1<br>8<br>5<br>7 | 0<br>1<br>8<br>5<br>8 | 0<br>1<br>8<br>5<br>9 | 0<br>1<br>8<br>6<br>0 | 0<br>1<br>8<br>6<br>1 | 0<br>1<br>8<br>6<br>2 | 0<br>1<br>8<br>6<br>3 | 0<br>1<br>8<br>6<br>4 | 0<br>1<br>8<br>6<br>5 | <b>* TOTALS</b> |            |
| Degeneration   | 3                     | 3                     | 3                     | 2                     | 1                     | 2                     | 4                     | 2                     | 2                     | 4                     | 3                     | 4                     | 3                     | 2                     |                       |                       |                 |            |
| Spinal Cord, Cervical<br>Degeneration                  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |                       | <b>90</b>       |            |
|  | 1                     |                       |                       | 1                     |                       |                       |                       |                       | 1                     |                       |                       | 1                     |                       | 1                     |                       |                       | <b>35</b>       | <b>1.0</b> |
| Spinal Cord, Lumbar<br>Degeneration                    | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |                       | <b>90</b>       |            |
| Nerve, Degeneration                                    | 4                     | 4                     | 4                     | 1                     | 2                     | 1                     | 4                     | 3                     |                       | 4                     | 2                     | 4                     | 3                     |                       | 3                     |                       | <b>24</b>       | <b>1.0</b> |
|  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>76</b>       | <b>2.8</b> |
| Spinal Cord, Thoracic<br>Degeneration                  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |                       | <b>90</b>       |            |
|  | 2                     | 2                     | 2                     | 1                     |                       | 1                     | 2                     | 3                     | 2                     | 2                     | 2                     | 1                     | 2                     |                       | 3                     |                       | <b>62</b>       | <b>1.8</b> |
| Trigeminal Ganglion<br>Degeneration                    | +                     | +                     | +                     | M                     | M                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |                       | <b>83</b>       |            |
|  |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       | 1                     | 1                     |                       |                       | <b>16</b>       | <b>1.2</b> |
| <b>RESPIRATORY SYSTEM</b>                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                 |            |
| Lung   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |                       | <b>90</b>       |            |
| Congestion   |                       |                       |                       | 3                     |                       | 3                     |                       |                       | 3                     |                       |                       |                       |                       | 2                     |                       |                       | <b>33</b>       | <b>2.6</b> |
| Foreign Body   |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>        |            |
| Hemorrhage   |                       |                       |                       |                       |                       | 3                     |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       | <b>4</b>        | <b>3.3</b> |
| Inflammation, Suppurative                              |                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>2</b>        | <b>3.5</b> |
| Alveolus, Infiltration Cellular, Histiocyte            |                       | 2                     | 1                     | 1                     | 1                     |                       | 2                     |                       |                       | 2                     | 1                     | 2                     |                       | 2                     |                       |                       | <b>47</b>       | <b>1.3</b> |
| Epithelium Alveolus, Hyperplasia                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>        | <b>1.0</b> |
| Nose   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |                       | <b>87</b>       |            |
| Foreign Body   |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       | <b>8</b>        |            |
| Inflammation, Suppurative                              |                       | 1                     |                       |                       | 3                     | 2                     | 1                     |                       |                       | 4                     |                       |                       |                       |                       |                       |                       | <b>17</b>       | <b>1.5</b> |
| Inflammation, Chronic Active                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       | <b>2</b>        | <b>1.5</b> |
| Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>        | <b>2.0</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 |   |
| <b>HARLAN SPRAGUE DAWLEY RATS MALE</b> | 3 | 3 | 3 | 0 | 9 | 3 | 3 | 2 | 8 | 3 | 0 | 3 | 3 | 2 | 3 |   |
| <b>6.0W/kg(CDMA)chr</b>                | 1 | 4 | 7 | 8 | 4 | 0 | 1 | 0 | 6 | 7 | 8 | 1 | 7 | 5 | 0 |   |
| ANIMAL ID                              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |
|  | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |   |
|  | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 |   |
|  | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | 1 | 2 | 3 | 4 | 5 |   |
| <b>* TOTALS</b>                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |            |           |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|-----------|--|
| Olfactory Epithelium, Accumulation, Hyaline Droplet                                     | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 1 | 2 | 2 | <b>76</b> | <b>2.0</b> |           |  |
| Olfactory Epithelium, Metaplasia, Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>4</b>  | <b>1.5</b> |           |  |
| Respiratory Epithelium, Hyperplasia   |   |   |   |   |   |   | 2 |   |   | 2 |   | 1 |   | <b>7</b>  | <b>1.3</b> |           |  |
| Trachea   | + | + | + | A | + | + | + | A | + | + | A | + | + | +         | +          | <b>72</b> |  |

**SPECIAL SENSES SYSTEM**

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |            |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|
| Eye                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>72</b> |            |
| Anterior Chamber, Inflammation, Acute |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>1.0</b> |
| Cornea, Fibrosis                      | 1 |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | <b>4</b>  | <b>1.5</b> |
| Cornea, Inflammation, Acute           | 1 |   |   | 1 |   |   |   |   |   | 1 | 4 | 1 |   |   |   | <b>17</b> | <b>1.4</b> |
| Cornea, Neovascularization            | 1 |   |   | 1 |   |   |   |   |   | 1 |   | 2 | 2 |   | 2 | <b>21</b> | <b>1.3</b> |
| Cornea, Epithelium, Degeneration      |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | <b>2</b>  | <b>1.0</b> |
| Cornea, Epithelium, Hyperplasia       | 1 |   |   | 1 |   |   |   |   |   | 1 | 4 | 2 | 2 |   | 1 | <b>20</b> | <b>1.9</b> |
| Retina, Atrophy                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>8</b>  | <b>1.0</b> |
| Retina, Dysplasia                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  |            |
| Harderian Gland                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>89</b> |            |
| Atrophy                               |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | <b>3</b>  | <b>1.0</b> |
| Degeneration                          |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | <b>1</b>  | <b>1.0</b> |
| Hyperplasia                           | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  | <b>1.5</b> |
| Infiltration Cellular, Lymphocyte     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3</b>  | <b>1.7</b> |
| Inflammation, Chronic                 |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   | <b>1</b>  | <b>1.0</b> |
| Inflammation, Chronic Active          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>1.0</b> |
| Lacrimal Gland                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  |            |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6.0W/kg(CDMA)chr | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  | ANIMAL ID   | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 |  |
|  |             | 3 | 3 | 3 | 0 | 9 | 3 | 3 | 2 | 8 | 3 | 0 | 3 | 3 | 2 | 3 |  |
|  |             | 1 | 4 | 7 | 8 | 4 | 0 | 1 | 0 | 6 | 7 | 8 | 1 | 7 | 5 | 0 |  |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |
|  |             | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |  |
|  |             | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |  |
|  |             | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 0 | 1 | 2 | 3 | 4 | 5 |  |
| <b>* TOTALS</b>  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

Metaplasia, Harderian Gland

1 1.0

Zymbal's Gland

1

URINARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |            |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|
| Kidney                                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>87</b> |            |
| Nephropathy, Chronic Progressive            | 3 | 4 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 1 | 4 | <b>86</b> | <b>2.3</b> |
| Pelvis, Dilation                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>3.0</b> |
| Perirenal Tissue, Hemorrhage                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>4.0</b> |
| Renal Tubule, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>2.0</b> |
| Renal Tubule, Cyst                          |   | X |   |   |   |   |   |   |   |   | X |   |   | X |   | <b>6</b>  |            |
| Renal Tubule, Necrosis                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>3.0</b> |
| Urinary Bladder                             | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | <b>78</b> |            |
| Hemorrhage                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>2.0</b> |
| Artery, Inflammation, Chronic Active        |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | <b>1</b>  | <b>4.0</b> |
| Urothelium, Hyperplasia                     |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | <b>1</b>  | <b>1.0</b> |

\*\*\* END OF MALE DATA \*\*\*

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0.0W/kg(CDMA)chr | DAY ON TEST | 050   | 062   | 073   | 073   | 074   | 077   | 066   | 022   | 077   | 057   | 077   | 077   | 057   | 066   | 057   | 057   | 077   | 077   | 077   | 044   | 077   | 077   | 057   | 057   | females<br>(cont...) |
|  | ANIMAL ID   | 00607 | 00608 | 00609 | 00610 | 00611 | 00613 | 00614 | 00615 | 00616 | 00618 | 00619 | 00620 | 00621 | 00622 | 00623 | 00624 | 00625 | 00626 | 00627 | 00628 | 00629 | 00630 | 00631 | 00632 |                      |
|  |             | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |                      |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum                            | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | A |
| Intestine Large, Colon                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum                         | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum<br>Hyperplasia, Lymphocyte | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + |
| Intestine Small, Jejunum                          | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | A |
| Liver   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                                       | 1 |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                                  |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clear Cell Focus                                  |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus                                |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   | X |   |   |   |   |   |   | X |   |
| Extramedullary Hematopoiesis                      |   | 1 |   |   |   | 1 |   |   | 1 |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |
| Hepatodiaphragmatic Nodule                        |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Mixed Cell                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |
| Mixed Cell Focus                                  |   |   |   |   | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   | X | X |   |
| Bile Duct, Cyst                                   |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Bile Duct, Fibrosis                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bile Duct, Hyperplasia                            |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |
| Hepatocyte, Hypertrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>0.0W/kg(CDMA)chr</b> | DAY ON TEST | 050  | 062  | 073  | 073  | 074  | 077  | 066  | 022  | 077  | 057  | 077  | 077  | 057  | 066  | 055  | 055  | 077  | 077  | 044  | 077  | 077  | 055  |
|   | ANIMAL ID   | 0067 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 |
|   |             | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

females (cont...)

|                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Epithelium, Hyperplasia             | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia, Basal Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Stomach, Glandular Erosion          |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Tongue                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

CARDIOVASCULAR SYSTEM

|                                 |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aorta                           |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart                           |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy                  |  |   |   |   |   | 1 |   | 1 | 1 | 1 | 1 |   |   | 1 |   |   | 2 | 1 |   |   | 1 |   |   |
| Ventricle Right, Cardiomyopathy |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

ENDOCRINE SYSTEM

|                                   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                    |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accessory Adrenal Cortical Nodule |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Atrophy                           |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic              |  |   |   | 1 | 1 | 1 |   | 2 |   |   | 2 |   |   |   |   |   | 2 | 3 |   |   |   |   |   |
| Hyperplasia                       |  |   |   |   |   |   |   |   |   | 2 |   |   | 2 |   |   |   |   | 3 |   |   |   |   |   |
| Hypertrophy                       |  | 2 |   | 1 | 2 | 2 |   | 1 |   |   | 2 | 2 | 1 |   |   |   | 2 | 2 |   | 1 |   | 1 | 1 |
| Necrosis                          |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigment                           |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolation, Cytoplasmic          |  |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   | 2 |   |   | 1 |   |
| Adrenal Medulla                   |  | + | + | I | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + |
| Hyperplasia                       |  |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 2 |   |   |   |   |   |   |

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   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----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|  | 0500        | 0600 | 0700 | 0703 | 0704 | 0707 | 0708 | 0709 | 0710 | 0711 | 0712 | 0713 | 0714 | 0715 | 0716 | 0717 | 0718 | 0719 | 0720 | 0721 | 0722 | 0723 | 0724 | 0725 |           |                      | 0726 | 0727 | 0728 | 0729 | 0730 | 0731 | 0732 | 0733 | 0734 | 0735 | 0736 | 0737 | 0738 | 0739 | 0740 | 0741 | 0742 | 0743 | 0744 | 0745 | 0746 | 0747 | 0748 | 0749 | 0750 | 0751 | 0752 | 0753 | 0754 | 0755 | 0756 | 0757 | 0758 | 0759 | 0760 | 0761 | 0762 | 0763 | 0764 | 0765 | 0766 | 0767 | 0768 | 0769 | 0770 | 0771 | 0772 | 0773 | 0774 | 0775 | 0776 | 0777 | 0778 | 0779 | 0780 | 0781 | 0782 | 0783 | 0784 | 0785 | 0786 | 0787 | 0788 | 0789 | 0790 | 0791 | 0792 | 0793 | 0794 | 0795 | 0796 | 0797 | 0798 | 0799 | 0800 | 0801 | 0802 | 0803 | 0804 | 0805 | 0806 | 0807 | 0808 | 0809 | 0810 | 0811 | 0812 | 0813 | 0814 | 0815 | 0816 | 0817 | 0818 | 0819 | 0820 | 0821 | 0822 | 0823 | 0824 | 0825 | 0826 | 0827 | 0828 | 0829 | 0830 | 0831 | 0832 | 0833 | 0834 | 0835 | 0836 | 0837 | 0838 | 0839 | 0840 | 0841 | 0842 | 0843 | 0844 | 0845 | 0846 | 0847 | 0848 | 0849 | 0850 | 0851 | 0852 | 0853 | 0854 | 0855 | 0856 | 0857 | 0858 | 0859 | 0860 | 0861 | 0862 | 0863 | 0864 | 0865 | 0866 | 0867 | 0868 | 0869 | 0870 | 0871 | 0872 | 0873 | 0874 | 0875 | 0876 | 0877 | 0878 | 0879 | 0880 | 0881 | 0882 | 0883 | 0884 | 0885 | 0886 | 0887 | 0888 | 0889 | 0890 | 0891 | 0892 | 0893 | 0894 | 0895 | 0896 | 0897 | 0898 | 0899 | 0900 | 0901 | 0902 | 0903 | 0904 | 0905 | 0906 | 0907 | 0908 | 0909 | 0910 | 0911 | 0912 | 0913 | 0914 | 0915 | 0916 | 0917 | 0918 | 0919 | 0920 | 0921 | 0922 | 0923 | 0924 | 0925 | 0926 | 0927 | 0928 | 0929 | 0930 | 0931 | 0932 | 0933 | 0934 | 0935 | 0936 | 0937 | 0938 | 0939 | 0940 | 0941 | 0942 | 0943 | 0944 | 0945 | 0946 | 0947 | 0948 | 0949 | 0950 | 0951 | 0952 | 0953 | 0954 | 0955 | 0956 | 0957 | 0958 | 0959 | 0960 | 0961 | 0962 | 0963 | 0964 | 0965 | 0966 | 0967 | 0968 | 0969 | 0970 | 0971 | 0972 | 0973 | 0974 | 0975 | 0976 | 0977 | 0978 | 0979 | 0980 | 0981 | 0982 | 0983 | 0984 | 0985 | 0986 | 0987 | 0988 | 0989 | 0990 | 0991 | 0992 | 0993 | 0994 | 0995 | 0996 | 0997 | 0998 | 0999 | 1000 | 1001 | 1002 | 1003 | 1004 | 1005 | 1006 | 1007 | 1008 | 1009 | 1010 | 1011 | 1012 | 1013 | 1014 | 1015 | 1016 | 1017 | 1018 | 1019 | 1020 | 1021 | 1022 | 1023 | 1024 | 1025 | 1026 | 1027 | 1028 | 1029 | 1030 | 1031 | 1032 | 1033 | 1034 | 1035 | 1036 | 1037 | 1038 | 1039 | 1040 | 1041 | 1042 | 1043 | 1044 | 1045 | 1046 | 1047 | 1048 | 1049 | 1050 | 1051 | 1052 | 1053 | 1054 | 1055 | 1056 | 1057 | 1058 | 1059 | 1060 | 1061 | 1062 | 1063 | 1064 | 1065 | 1066 | 1067 | 1068 | 1069 | 1070 | 1071 | 1072 | 1073 | 1074 | 1075 | 1076 | 1077 | 1078 | 1079 | 1080 | 1081 | 1082 | 1083 | 1084 | 1085 | 1086 | 1087 | 1088 | 1089 | 1090 | 1091 | 1092 | 1093 | 1094 | 1095 | 1096 | 1097 | 1098 | 1099 | 1100 | 1101 | 1102 | 1103 | 1104 | 1105 | 1106 | 1107 | 1108 | 1109 | 1110 | 1111 | 1112 | 1113 | 1114 | 1115 | 1116 | 1117 | 1118 | 1119 | 1120 | 1121 | 1122 | 1123 | 1124 | 1125 | 1126 | 1127 | 1128 | 1129 | 1130 | 1131 | 1132 | 1133 | 1134 | 1135 | 1136 | 1137 | 1138 | 1139 | 1140 | 1141 | 1142 | 1143 | 1144 | 1145 | 1146 | 1147 | 1148 | 1149 | 1150 | 1151 | 1152 | 1153 | 1154 | 1155 | 1156 | 1157 | 1158 | 1159 | 1160 | 1161 | 1162 | 1163 | 1164 | 1165 | 1166 | 1167 | 1168 | 1169 | 1170 | 1171 | 1172 | 1173 | 1174 | 1175 | 1176 | 1177 | 1178 | 1179 | 1180 | 1181 | 1182 | 1183 | 1184 | 1185 | 1186 | 1187 | 1188 | 1189 | 1190 | 1191 | 1192 | 1193 | 1194 | 1195 | 1196 | 1197 | 1198 | 1199 | 1200 | 1201 | 1202 | 1203 | 1204 | 1205 | 1206 | 1207 | 1208 | 1209 | 1210 | 1211 | 1212 | 1213 | 1214 | 1215 | 1216 | 1217 | 1218 | 1219 | 1220 | 1221 | 1222 | 1223 | 1224 | 1225 | 1226 | 1227 | 1228 | 1229 | 1230 | 1231 | 1232 | 1233 | 1234 | 1235 | 1236 | 1237 | 1238 | 1239 | 1240 | 1241 | 1242 | 1243 | 1244 | 1245 | 1246 | 1247 | 1248 | 1249 | 1250 | 1251 | 1252 | 1253 | 1254 | 1255 | 1256 | 1257 | 1258 | 1259 | 1260 | 1261 | 1262 | 1263 | 1264 | 1265 | 1266 | 1267 | 1268 | 1269 | 1270 | 1271 | 1272 | 1273 | 1274 | 1275 | 1276 | 1277 | 1278 | 1279 | 1280 | 1281 | 1282 | 1283 | 1284 | 1285 | 1286 | 1287 | 1288 | 1289 | 1290 | 1291 | 1292 | 1293 | 1294 | 1295 | 1296 | 1297 | 1298 | 1299 | 1300 | 1301 | 1302 | 1303 | 1304 | 1305 | 1306 | 1307 | 1308 | 1309 | 1310 | 1311 | 1312 | 1313 | 1314 | 1315 | 1316 | 1317 | 1318 | 1319 | 1320 | 1321 | 1322 | 1323 | 1324 | 1325 | 1326 | 1327 | 1328 | 1329 | 1330 | 1331 | 1332 | 1333 | 1334 | 1335 | 1336 | 1337 | 1338 | 1339 | 1340 | 1341 | 1342 | 1343 | 1344 | 1345 | 1346 | 1347 | 1348 | 1349 | 1350 | 1351 | 1352 | 1353 | 1354 | 1355 | 1356 | 1357 | 1358 | 1359 | 1360 | 1361 | 1362 | 1363 | 1364 | 1365 | 1366 | 1367 | 1368 | 1369 | 1370 | 1371 | 1372 | 1373 | 1374 | 1375 | 1376 | 1377 | 1378 | 1379 | 1380 | 1381 | 1382 | 1383 | 1384 | 1385 | 1386 | 1387 | 1388 | 1389 | 1390 | 1391 | 1392 | 1393 | 1394 | 1395 | 1396 | 1397 | 1398 | 1399 | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 1413 | 1414 | 1415 | 1416 | 1417 | 1418 | 1419 | 1420 | 1421 | 1422 | 1423 | 1424 | 1425 | 1426 | 1427 | 1428 | 1429 | 1430 | 1431 | 1432 | 1433 | 1434 | 1435 | 1436 | 1437 | 1438 | 1439 | 1440 | 1441 | 1442 | 1443 | 1444 | 1445 | 1446 | 1447 | 1448 | 1449 | 1450 | 1451 | 1452 | 1453 | 1454 | 1455 | 1456 | 1457 | 1458 | 1459 | 1460 | 1461 | 1462 | 1463 | 1464 | 1465 | 1466 | 1467 | 1468 | 1469 | 1470 | 1471 | 1472 | 1473 | 1474 | 1475 | 1476 | 1477 | 1478 | 1479 | 1480 | 1481 | 1482 | 1483 | 1484 | 1485 | 1486 | 1487 | 1488 | 1489 | 1490 | 1491 | 1492 | 1493 | 1494 | 1495 | 1496 | 1497 | 1498 | 1499 | 1500 | 1501 | 1502 | 1503 | 1504 | 1505 | 1506 | 1507 | 1508 | 1509 | 1510 | 1511 | 1512 | 1513 | 1514 | 1515 | 1516 | 1517 | 1518 | 1519 | 1520 | 1521 | 1522 | 1523 | 1524 | 1525 | 1526 | 1527 | 1528 | 1529 | 1530 | 1531 | 1532 | 1533 | 1534 | 1535 | 1536 | 1537 | 1538 | 1539 | 1540 | 1541 | 1542 | 1543 | 1544 | 1545 | 1546 | 1547 | 1548 | 1549 | 1550 | 1551 | 1552 | 1553 | 1554 | 1555 | 1556 | 1557 | 1558 | 1559 | 1560 | 1561 | 1562 | 1563 | 1564 | 1565 | 1566 | 1567 | 1568 | 1569 | 1570 | 1571 | 1572 | 1573 | 1574 | 1575 | 1576 | 1577 | 1578 | 1579 | 1580 | 1581 | 1582 | 1583 | 1584 | 1585 | 1586 | 1587 | 1588 | 1589 | 1590 | 1591 | 1592 | 1593 | 1594 | 1595 | 1596 | 1597 | 1598 | 1599 | 1600 | 1601 | 1602 | 1603 | 1604 | 1605 | 1606 | 1607 | 1608 | 1609 | 1610 | 1611 | 1612 | 1613 | 1614 | 1615 | 1616 | 1617 | 1618 | 1619 | 1620 | 1621 | 1622 | 1623 | 1624 | 1625 | 1626 | 1627 | 1628 | 1629 | 1630 | 1631 | 1632 | 1633 | 1634 | 1635 | 1636 | 1637 | 1638 | 1639 | 1640 | 1641 | 1642 | 1643 | 1644 | 1645 | 1646 | 1647 | 1648 | 1649 | 1650 | 1651 | 1652 | 1653 | 1654 | 1655 | 1656 | 1657 | 1658 | 1659 | 1660 | 1661 | 1662 | 1663 | 1664 | 1665 | 1666 | 1667 | 1668 | 1669 | 1670 | 1671 | 1672 | 1673 | 1674 | 1675 | 1676 | 1677 | 1678 | 1679 | 1680 | 1681 | 1682 | 1683 | 1684 | 1685 | 1686 | 1687 | 1688 | 1689 | 1690 | 1691 | 1692 | 1693 | 1694 | 1695 | 1696 | 1697 | 1698 | 1699 | 1700 | 1701 | 1702 | 1703 | 1704 | 1705 | 1706 | 1707 | 1708 | 1709 | 1710 | 1711 | 1712 | 1713 | 1714 | 1715 | 1716 | 1717 | 1718 | 1719 | 1720 | 1721 | 1722 | 1723 | 1724 | 1725 | 1726 | 1727 | 1728 | 1729 | 1730 | 1731 | 1732 | 1733 | 1734 | 1735 | 1736 | 1737 | 1738 | 1739 | 1740 | 1741 | 1742 | 1743 | 1744 | 1745 | 1746 | 1747 | 1748 | 1749 | 1750 | 1751 | 1752 | 1753 | 1754 | 1755 | 1756 | 1757 | 1758 | 1759 | 1760 | 1761 | 1762 | 1763 | 1764 | 1765 | 1766 | 1767 | 1768 | 1769 | 1770 | 1771 | 1772 | 1773 | 1774 | 1775 | 1776 | 1777 | 1778 | 1779 | 1780 | 1781 | 1782 | 1783 | 1784 | 1785 | 1786 | 1787 | 1788 | 1789 | 1790 | 1791 | 1792 | 1793 | 1794 | 1795 | 1796 | 1797 | 1798 | 1799 | 1800 | 1801 | 1802 | 1803 | 1804 | 1805 | 1806 | 1807 | 1808 | 1809 | 1810 | 1811 | 1812 | 1813 | 1814 | 1815 | 1816 | 1817 | 1818 | 1819 | 1820 | 1821 | 1822 | 1823 | 1824 | 1825 | 1826 | 1827 | 1828 | 1829 | 1830 | 1831 | 1832 | 1833 | 1834 | 1835 | 1836 | 1837 | 1838 | 1839 | 1840 | 1841 | 1842 | 1843 | 1844 | 1845 | 1846 | 1847 | 1848 | 1849 | 1850 | 1851 | 1852 | 1853 | 1854 | 1855 | 1856 | 1857 | 1858 | 1859 | 1860 | 1861 | 1862 | 1863 | 1864 | 1865 | 1866 | 1867 | 1868 | 1869 | 1870 | 1871 | 1872 | 1873 | 1874 | 1875 | 1876 | 1877 | 1878 | 1879 | 1880 | 1881 | 1882 | 1883 | 1884 | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 | 1895 | 1896 | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0.0W/kg(CDMA)chr | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | ANIMAL ID | females<br>(cont...) |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |                      |
|  | 5           | 6 | 7 | 7 | 7 | 4 | 7 | 6 | 2 | 7 | 5 | 7 | 7 | 7 | 5 | 6 | 5 | 5 | 7 | 7 | 7 | 4 | 7 | 7 | 5 |           |                      |
|  | 5           | 6 | 3 | 3 | 4 | 9 | 4 | 6 | 6 | 4 | 0 | 4 | 4 | 1 | 6 | 2 | 7 | 3 | 1 | 3 | 1 | 6 | 3 | 3 | 4 |           |                      |
|  | 0           | 2 | 9 | 8 | 0 | 3 | 5 | 0 | 8 | 1 | 8 | 4 | 5 | 2 | 5 | 2 | 8 | 1 | 1 | 8 | 9 | 4 | 8 | 7 |   |           |                      |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |                      |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |                      |
|  | 6           | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |           |                      |
|  | 0           | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |           |                      |
|  | 7           | 8 | 9 | 0 | 1 | 3 | 4 | 5 | 6 | 8 | 9 | 1 | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 |           |                      |
| Bone Marrow  | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |           |                      |
| Hypercellularity   | 3           | 4 |   |   |   | 3 | 1 |   | 2 |   | 3 | 3 |   | 2 |   | 4 | 3 | 4 | 4 |   | 4 | 1 | 1 | 2 |   |           |                      |
| Lymph Node   | +           |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   | + |   |   |   |   |   |           |                      |
| Axillary, Proliferation, Plasma Cell                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Iliac, Erythrophagocytosis                               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Iliac, Hyperplasia, Lymphocyte                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Iliac, Inflammation, Acute                               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Iliac, Pigment   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Iliac, Proliferation, Plasma Cell                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Inguinal, Erythrophagocytosis                            |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |           |                      |
| Inguinal, Proliferation, Plasma Cell                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |           |                      |
| Inguinal, Lymphatic Sinus, Ectasia                       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |           |                      |
| Lumbar, Erythrophagocytosis                              | 3           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Mediastinal, Congestion                                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Mediastinal, Proliferation, Plasma Cell                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Pancreatic, Erythrophagocytosis                          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Lymph Node, Mandibular                                   | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |           |                      |
| Hemorrhage   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Hyperplasia, Lymphocyte                                  |             |   | 1 | 1 | 1 |   | 1 |   |   | 1 |   |   |   |   | 2 | 1 | 1 |   | 1 | 1 |   | 2 |   | 2 |   |           |                      |
| Proliferation, Plasma Cell                               | 2           | 3 | 1 | 1 | 1 | 1 | 2 |   |   | 1 |   |   | 1 |   | 2 | 2 | 2 | 1 | 2 | 1 | 2 |   | 2 | 2 |   |           |                      |
| Lymphatic Sinus, Ectasia                                 |             |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Lymph Node, Mesenteric                                   | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |           |                      |
| Atrophy  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Erythrophagocytosis                                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                      |
| Infiltration Cellular, Histiocyte                        |             |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |           |                      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked







Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST | HARLAN SPRAGUE DAWLEY RATS FEMALE |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | ANIMAL ID | females (cont...) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    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   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      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|             | 050                               | 062 | 073 | 073 | 074 | 074 | 079 | 079 | 080 | 086 | 086 | 088 | 091 | 095 | 097 | 097 | 101 | 101 | 102 | 103 | 103 | 104 | 104 | 107 |           |                   | 107 | 108 | 108 | 111 | 111 | 113 | 113 | 114 | 114 | 117 | 117 | 118 | 118 | 121 | 121 | 122 | 122 | 123 | 123 | 124 | 124 | 127 | 127 | 128 | 128 | 131 | 131 | 133 | 133 | 134 | 134 | 137 | 137 | 138 | 138 | 141 | 141 | 142 | 142 | 143 | 143 | 144 | 144 | 147 | 147 | 148 | 148 | 151 | 151 | 153 | 153 | 154 | 154 | 157 | 157 | 158 | 158 | 161 | 161 | 162 | 162 | 163 | 163 | 164 | 164 | 167 | 167 | 168 | 168 | 171 | 171 | 173 | 173 | 174 | 174 | 177 | 177 | 178 | 178 | 181 | 181 | 182 | 182 | 183 | 183 | 184 | 184 | 187 | 187 | 188 | 188 | 191 | 191 | 192 | 192 | 193 | 193 | 194 | 194 | 197 | 197 | 198 | 198 | 201 | 201 | 202 | 202 | 203 | 203 | 204 | 204 | 207 | 207 | 208 | 208 | 211 | 211 | 212 | 212 | 213 | 213 | 214 | 214 | 217 | 217 | 218 | 218 | 221 | 221 | 222 | 222 | 223 | 223 | 224 | 224 | 227 | 227 | 228 | 228 | 231 | 231 | 232 | 232 | 233 | 233 | 234 | 234 | 237 | 237 | 238 | 238 | 241 | 241 | 242 | 242 | 243 | 243 | 244 | 244 | 247 | 247 | 248 | 248 | 251 | 251 | 252 | 252 | 253 | 253 | 254 | 254 | 257 | 257 | 258 | 258 | 261 | 261 | 262 | 262 | 263 | 263 | 264 | 264 | 267 | 267 | 268 | 268 | 271 | 271 | 272 | 272 | 273 | 273 | 274 | 274 | 277 | 277 | 278 | 278 | 281 | 281 | 282 | 282 | 283 | 283 | 284 | 284 | 287 | 287 | 288 | 288 | 291 | 291 | 292 | 292 | 293 | 293 | 294 | 294 | 297 | 297 | 298 | 298 | 301 | 301 | 302 | 302 | 303 | 303 | 304 | 304 | 307 | 307 | 308 | 308 | 311 | 311 | 312 | 312 | 313 | 313 | 314 | 314 | 317 | 317 | 318 | 318 | 321 | 321 | 322 | 322 | 323 | 323 | 324 | 324 | 327 | 327 | 328 | 328 | 331 | 331 | 332 | 332 | 333 | 333 | 334 | 334 | 337 | 337 | 338 | 338 | 341 | 341 | 342 | 342 | 343 | 343 | 344 | 344 | 347 | 347 | 348 | 348 | 351 | 351 | 352 | 352 | 353 | 353 | 354 | 354 | 357 | 357 | 358 | 358 | 361 | 361 | 362 | 362 | 363 | 363 | 364 | 364 | 367 | 367 | 368 | 368 | 371 | 371 | 372 | 372 | 373 | 373 | 374 | 374 | 377 | 377 | 378 | 378 | 381 | 381 | 382 | 382 | 383 | 383 | 384 | 384 | 387 | 387 | 388 | 388 | 391 | 391 | 392 | 392 | 393 | 393 | 394 | 394 | 397 | 397 | 398 | 398 | 401 | 401 | 402 | 402 | 403 | 403 | 404 | 404 | 407 | 407 | 408 | 408 | 411 | 411 | 412 | 412 | 413 | 413 | 414 | 414 | 417 | 417 | 418 | 418 | 421 | 421 | 422 | 422 | 423 | 423 | 424 | 424 | 427 | 427 | 428 | 428 | 431 | 431 | 432 | 432 | 433 | 433 | 434 | 434 | 437 | 437 | 438 | 438 | 441 | 441 | 442 | 442 | 443 | 443 | 444 | 444 | 447 | 447 | 448 | 448 | 451 | 451 | 452 | 452 | 453 | 453 | 454 | 454 | 457 | 457 | 458 | 458 | 461 | 461 | 462 | 462 | 463 | 463 | 464 | 464 | 467 | 467 | 468 | 468 | 471 | 471 | 472 | 472 | 473 | 473 | 474 | 474 | 477 | 477 | 478 | 478 | 481 | 481 | 482 | 482 | 483 | 483 | 484 | 484 | 487 | 487 | 488 | 488 | 491 | 491 | 492 | 492 | 493 | 493 | 494 | 494 | 497 | 497 | 498 | 498 | 501 | 501 | 502 | 502 | 503 | 503 | 504 | 504 | 507 | 507 | 508 | 508 | 511 | 511 | 512 | 512 | 513 | 513 | 514 | 514 | 517 | 517 | 518 | 518 | 521 | 521 | 522 | 522 | 523 | 523 | 524 | 524 | 527 | 527 | 528 | 528 | 531 | 531 | 532 | 532 | 533 | 533 | 534 | 534 | 537 | 537 | 538 | 538 | 541 | 541 | 542 | 542 | 543 | 543 | 544 | 544 | 547 | 547 | 548 | 548 | 551 | 551 | 552 | 552 | 553 | 553 | 554 | 554 | 557 | 557 | 558 | 558 | 561 | 561 | 562 | 562 | 563 | 563 | 564 | 564 | 567 | 567 | 568 | 568 | 571 | 571 | 572 | 572 | 573 | 573 | 574 | 574 | 577 | 577 | 578 | 578 | 581 | 581 | 582 | 582 | 583 | 583 | 584 | 584 | 587 | 587 | 588 | 588 | 591 | 591 | 592 | 592 | 593 | 593 | 594 | 594 | 597 | 597 | 598 | 598 | 601 | 601 | 602 | 602 | 603 | 603 | 604 | 604 | 607 | 607 | 608 | 608 | 611 | 611 | 612 | 612 | 613 | 613 | 614 | 614 | 617 | 617 | 618 | 618 | 621 | 621 | 622 | 622 | 623 | 623 | 624 | 624 | 627 | 627 | 628 | 628 | 631 | 631 | 632 | 632 | 633 | 633 | 634 | 634 | 637 | 637 | 638 | 638 | 641 | 641 | 642 | 642 | 643 | 643 | 644 | 644 | 647 | 647 | 648 | 648 | 651 | 651 | 652 | 652 | 653 | 653 | 654 | 654 | 657 | 657 | 658 | 658 | 661 | 661 | 662 | 662 | 663 | 663 | 664 | 664 | 667 | 667 | 668 | 668 | 671 | 671 | 672 | 672 | 673 | 673 | 674 | 674 | 677 | 677 | 678 | 678 | 681 | 681 | 682 | 682 | 683 | 683 | 684 | 684 | 687 | 687 | 688 | 688 | 691 | 691 | 692 | 692 | 693 | 693 | 694 | 694 | 697 | 697 | 698 | 698 | 701 | 701 | 702 | 702 | 703 | 703 | 704 | 704 | 707 | 707 | 708 | 708 | 711 | 711 | 712 | 712 | 713 | 713 | 714 | 714 | 717 | 717 | 718 | 718 | 721 | 721 | 722 | 722 | 723 | 723 | 724 | 724 | 727 | 727 | 728 | 728 | 731 | 731 | 732 | 732 | 733 | 733 | 734 | 734 | 737 | 737 | 738 | 738 | 741 | 741 | 742 | 742 | 743 | 743 | 744 | 744 | 747 | 747 | 748 | 748 | 751 | 751 | 752 | 752 | 753 | 753 | 754 | 754 | 757 | 757 | 758 | 758 | 761 | 761 | 762 | 762 | 763 | 763 | 764 | 764 | 767 | 767 | 768 | 768 | 771 | 771 | 772 | 772 | 773 | 773 | 774 | 774 | 777 | 777 | 778 | 778 | 781 | 781 | 782 | 782 | 783 | 783 | 784 | 784 | 787 | 787 | 788 | 788 | 791 | 791 | 792 | 792 | 793 | 793 | 794 | 794 | 797 | 797 | 798 | 798 | 801 | 801 | 802 | 802 | 803 | 803 | 804 | 804 | 807 | 807 | 808 | 808 | 811 | 811 | 812 | 812 | 813 | 813 | 814 | 814 | 817 | 817 | 818 | 818 | 821 | 821 | 822 | 822 | 823 | 823 | 824 | 824 | 827 | 827 | 828 | 828 | 831 | 831 | 832 | 832 | 833 | 833 | 834 | 834 | 837 | 837 | 838 | 838 | 841 | 841 | 842 | 842 | 843 | 843 | 844 | 844 | 847 | 847 | 848 | 848 | 851 | 851 | 852 | 852 | 853 | 853 | 854 | 854 | 857 | 857 | 858 | 858 | 861 | 861 | 862 | 862 | 863 | 863 | 864 | 864 | 867 | 867 | 868 | 868 | 871 | 871 | 872 | 872 | 873 | 873 | 874 | 874 | 877 | 877 | 878 | 878 | 881 | 881 | 882 | 882 | 883 | 883 | 884 | 884 | 887 | 887 | 888 | 888 | 891 | 891 | 892 | 892 | 893 | 893 | 894 | 894 | 897 | 897 | 898 | 898 | 901 | 901 | 902 | 902 | 903 | 903 | 904 | 904 | 907 | 907 | 908 | 908 | 911 | 911 | 912 | 912 | 913 | 913 | 914 | 914 | 917 | 917 | 918 | 918 | 921 | 921 | 922 | 922 | 923 | 923 | 924 | 924 | 927 | 927 | 928 | 928 | 931 | 931 | 932 | 932 | 933 | 933 | 934 | 934 | 937 | 937 | 938 | 938 | 941 | 941 | 942 | 942 | 943 | 943 | 944 | 944 | 947 | 947 | 948 | 948 | 951 | 951 | 952 | 952 | 953 | 953 | 954 | 954 | 957 | 957 | 958 | 958 | 961 | 961 | 962 | 962 | 963 | 963 | 964 | 964 | 967 | 967 | 968 | 968 | 971 | 971 | 972 | 972 | 973 | 973 | 974 | 974 | 977 | 977 | 978 | 978 | 981 | 981 | 982 | 982 | 983 | 983 | 984 | 984 | 987 | 987 | 988 | 988 | 991 | 991 | 992 | 992 | 993 | 993 | 994 | 994 | 997 | 997 | 998 | 998 | 1001 | 1001 | 1002 | 1002 | 1003 | 1003 | 1004 | 1004 | 1007 | 1007 | 1008 | 1008 | 1011 | 1011 | 1012 | 1012 | 1013 | 1013 | 1014 | 1014 | 1017 | 1017 | 1018 | 1018 | 1021 | 1021 | 1022 | 1022 | 1023 | 1023 | 1024 | 1024 | 1027 | 1027 | 1028 | 1028 | 1031 | 1031 | 1032 | 1032 | 1033 | 1033 | 1034 | 1034 | 1037 | 1037 | 1038 | 1038 | 1041 | 1041 | 1042 | 1042 | 1043 | 1043 | 1044 | 1044 | 1047 | 1047 | 1048 | 1048 | 1051 | 1051 | 1052 | 1052 | 1053 | 1053 | 1054 | 1054 | 1057 | 1057 | 1058 | 1058 | 1061 | 1061 | 1062 | 1062 | 1063 | 1063 | 1064 | 1064 | 1067 | 1067 | 1068 | 1068 | 1071 | 1071 | 1072 | 1072 | 1073 | 1073 | 1074 | 1074 | 1077 | 1077 | 1078 | 1078 | 1081 | 1081 | 1082 | 1082 | 1083 | 1083 | 1084 | 1084 | 1087 | 1087 | 1088 | 1088 | 1091 | 1091 | 1092 | 1092 | 1093 | 1093 | 1094 | 1094 | 1097 | 1097 | 1098 | 1098 | 1101 | 1101 | 1102 | 1102 | 1103 | 1103 | 1104 | 1104 | 1107 | 1107 | 1108 | 1108 | 1111 | 1111 | 1112 | 1112 | 1113 | 1113 | 1114 | 1114 | 1117 | 1117 | 1118 | 1118 | 1121 | 1121 | 1122 | 1122 | 1123 | 1123 | 1124 | 1124 | 1127 | 1127 | 1128 | 1128 | 1131 | 1131 | 1132 | 1132 | 1133 | 1133 | 1134 | 1134 | 1137 | 1137 | 1138 | 1138 | 1141 | 1141 | 1142 | 1142 | 1143 | 1143 | 1144 | 1144 | 1147 | 1147 | 1148 | 1148 | 1151 | 1151 | 1152 | 1152 | 1153 | 1153 | 1154 | 1154 | 1157 | 1157 | 1158 | 1158 | 1161 | 1161 | 1162 | 1162 | 1163 | 1163 | 1164 | 1164 | 1167 | 1167 | 1168 | 1168 | 1171 | 1171 | 1172 | 1172 | 1173 | 1173 | 1174 | 1174 | 1177 | 1177 | 1178 | 1178 | 1181 | 1181 | 1182 | 1182 | 1183 | 1183 | 1184 | 1184 | 1187 | 1187 | 1188 | 1188 | 1191 | 1191 | 1192 | 1192 | 1193 | 1193 | 1194 | 1194 | 1197 | 1197 | 1198 | 1198 | 1201 | 1201 | 1202 | 1202 | 1203 | 1203 | 1204 | 1204 | 1207 | 1207 | 1208 | 1208 | 1211 | 1211 | 1212 | 1212 | 1213 | 1213 | 1214 | 1214 | 1217 | 1217 | 1218 | 1218 | 1221 | 1221 | 1222 | 1222 | 1223 | 1223 | 1224 | 1224 | 1227 | 1227 | 1228 | 1228 | 1231 | 1231 | 1232 | 1232 | 1233 | 1233 | 1234 | 1234 | 1237 | 1237 | 1238 | 1238 | 1241 | 1241 | 1242 | 1242 | 1243 | 1243 | 1244 | 1244 | 1247 | 1247 | 1248 | 1248 | 1251 | 1251 | 1252 | 1252 | 1253 | 1253 | 1254 | 1254 | 1257 | 1257 | 1258 | 1258 | 1261 | 1261 | 1262 | 1262 | 1263 | 1263 | 1264 | 1264 | 1267 | 1267 | 1268 | 1268 | 1271 | 1271 | 1272 | 1272 | 1273 | 1273 | 1274 | 1274 | 1277 | 1277 | 1278 | 1278 | 1281 | 1281 | 1282 | 1282 | 1283 | 1283 |



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>0.0W/kg(CDMA)chr</b> | DAY ON TEST | 05 | 06 | 07 | 07 | 07 | 04 | 07 | 06 | 02 | 07 | 05 | 07 | 07 | 07 | 05 | 06 | 05 | 05 | 07 | 07 | 07 | 04 | 07 | 07 | 05 |
|   | ANIMAL ID   | 56 | 63 | 73 | 44 | 94 | 34 | 54 | 08 | 18 | 04 | 54 | 25 | 25 | 28 | 11 | 18 | 31 | 31 | 38 | 49 | 44 | 83 | 83 | 74 | 74 |
|   |             | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 |

females  
(cont...)

Dilation  
 Inflammation, Acute  
 Necrosis  
 Urothelium, Hyperplasia

2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 20105 - 56

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | females<br>(cont...) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|
|  | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>8      | 0<br>4<br>8<br>9      | 0<br>7<br>4<br>1      | 0<br>6<br>5<br>4      | 0<br>4<br>6<br>4      | 0<br>6<br>5<br>4      | 0<br>7<br>7<br>4      | 0<br>7<br>7<br>4      | 0<br>7<br>7<br>4      | 0<br>6<br>4<br>4      | 0<br>7<br>4<br>4      | 0<br>7<br>4<br>4      | 0<br>5<br>5<br>0      | 0<br>6<br>9<br>0      | 0<br>7<br>4<br>5      | 0<br>7<br>4<br>3      | 0<br>5<br>3<br>3      | 0<br>7<br>4<br>4      | 0<br>7<br>4<br>4      | 0<br>2<br>0<br>4      | 0<br>7<br>7<br>2      | 0<br>7<br>4<br>0      | 0<br>7<br>3<br>9      |                      |
| ANIMAL ID  | 0<br>0<br>6<br>3<br>5 | 0<br>0<br>6<br>3<br>6 | 0<br>0<br>6<br>3<br>7 | 0<br>0<br>6<br>3<br>9 | 0<br>0<br>6<br>4<br>1 | 0<br>0<br>6<br>4<br>2 | 0<br>0<br>6<br>4<br>3 | 0<br>0<br>6<br>4<br>4 | 0<br>0<br>6<br>4<br>5 | 0<br>0<br>6<br>4<br>6 | 0<br>0<br>6<br>4<br>7 | 0<br>0<br>6<br>4<br>8 | 0<br>0<br>6<br>4<br>9 | 0<br>0<br>6<br>5<br>1 | 0<br>0<br>6<br>5<br>2 | 0<br>0<br>6<br>5<br>3 | 0<br>0<br>6<br>5<br>4 | 0<br>0<br>6<br>5<br>5 | 0<br>0<br>6<br>5<br>6 | 0<br>0<br>6<br>5<br>7 | 0<br>0<br>6<br>5<br>8 | 0<br>0<br>6<br>5<br>9 | 0<br>0<br>6<br>6<br>0 | 0<br>0<br>6<br>6<br>1 |                      |
| Hepatocyte, Increased Mitoses                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Hepatocyte, Necrosis                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                    |
| Hepatocyte, Vacuolation, Cytoplasmic                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Kupffer Cell, Hyperplasia                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Kupffer Cell, Hypertrophy                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                    |
| Periductal, Cholangiofibrosis                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Serosa, Inflammation, Chronic Active                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Mesentery  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Inflammation, Chronic Active                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                    |
| Oral Mucosa  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Pancreas   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Ectopic Liver  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Inflammation, Chronic Active                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Acinus, Atrophy  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Acinus, Hyperplasia                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Salivary Glands  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Duct, Parotid Gland, Dilation                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Parotid Gland, Atrophy                                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                    |
| Stomach, Forestomach                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Edema  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Erosion  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Fibrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Inflammation, Chronic Active                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Ulcer  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked







Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                      | HARLAN SPRAGUE DAWLEY RATS FEMALE |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | ANIMAL ID | females (cont...) |                                       |
|----------------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------------------|---------------------------------------|
|                                  | 0737                              | 0738  | 0749  | 0761  | 0764  | 0766  | 0777  | 0777  | 0777  | 0777  | 0766  | 0777  | 0777  | 0777  | 0755  | 0766  | 0777  | 0777  | 0777  | 0755  | 0777  | 0777  | 0777  | 0722  |           |                   | 0777                                  |
| 0.0W/kg(CDMA)chr                 | 00635                             | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663     | 00663             |                                       |
| Inflammation, Suppurative        |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           | 2                 |                                       |
| Inflammation, Chronic Active     |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           | 2                 | 2                                     |
| Duct, Dilation                   |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           | 4                 | 4 3 4 3 4 4 2 1 1 1 2 2 4             |
| Ovary                            |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           | +                 | +                                     |
| Atrophy                          |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           | 3                 | 4 3 4 3 2 2 3 4 2 2 3 4 4 3 3 3 2 4 2 |
| Congestion                       |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   |                                       |
| Cyst                             |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   | X X X X                               |
| Bursa, Dilation                  |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   |                                       |
| Rete Ovarii, Hyperplasia         |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           | 1                 | 1 2 1 2                               |
| Oviduct                          |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   |                                       |
| Cyst                             |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   | +                                     |
| Uterus                           |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           | +                 | +                                     |
| Angiectasis                      |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   |                                       |
| Cyst                             |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   |                                       |
| Dilation                         |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           | 3                 | 1 2 2                                 |
| Fibrosis                         |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   | 3                                     |
| Inflammation, Suppurative        |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           | 3                 | 4                                     |
| Inflammation, Acute              |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   |                                       |
| Thrombus                         |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   |                                       |
| Cervix, Hyperplasia, Stromal     |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   |                                       |
| Cervix, Serosa, Fibrosis         |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   |                                       |
| Endometrium, Hyperplasia, Cystic |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   | 1 1 1 2 3 3 2 1 1 3 4 4 2 1 3 3 2 2   |
| Epithelium, Metaplasia, Squamous |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           | 4                 | 1 1 1 1 1 1 1 3 1 4 4 2 1 3 1 2       |
| Vagina                           |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                   | +                                     |

HEMATOPOIETIC SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | females<br>(cont...) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|
|  | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>8      | 0<br>4<br>8<br>9      | 0<br>7<br>4<br>1      | 0<br>6<br>5<br>4      | 0<br>4<br>6<br>4      | 0<br>6<br>5<br>4      | 0<br>7<br>4<br>4      | 0<br>7<br>7<br>4      | 0<br>7<br>7<br>4      | 0<br>6<br>4<br>4      | 0<br>7<br>4<br>4      | 0<br>7<br>7<br>4      | 0<br>5<br>5<br>0      | 0<br>6<br>9<br>0      | 0<br>7<br>4<br>5      | 0<br>7<br>4<br>3      | 0<br>5<br>3<br>3      | 0<br>7<br>4<br>4      | 0<br>7<br>4<br>4      | 0<br>7<br>4<br>4      | 0<br>2<br>0<br>2      | 0<br>7<br>3<br>9      |                       |                      |
| ANIMAL ID  | 0<br>0<br>6<br>3<br>5 | 0<br>0<br>6<br>3<br>6 | 0<br>0<br>6<br>3<br>7 | 0<br>0<br>6<br>3<br>9 | 0<br>0<br>6<br>4<br>1 | 0<br>0<br>6<br>4<br>2 | 0<br>0<br>6<br>4<br>3 | 0<br>0<br>6<br>4<br>4 | 0<br>0<br>6<br>4<br>4 | 0<br>0<br>6<br>4<br>5 | 0<br>0<br>6<br>4<br>6 | 0<br>0<br>6<br>4<br>7 | 0<br>0<br>6<br>4<br>8 | 0<br>0<br>6<br>5<br>9 | 0<br>0<br>6<br>5<br>2 | 0<br>0<br>6<br>5<br>3 | 0<br>0<br>6<br>5<br>4 | 0<br>0<br>6<br>5<br>5 | 0<br>0<br>6<br>5<br>6 | 0<br>0<br>6<br>5<br>7 | 0<br>0<br>6<br>5<br>8 | 0<br>0<br>6<br>5<br>9 | 0<br>0<br>6<br>6<br>0 | 0<br>0<br>6<br>6<br>1 |                      |
| Bone Marrow<br>Hypercellularity                          | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |                      |
|  | 2                     | 2                     | 2                     |                       | 1                     | 2                     | 4                     | 3                     |                       |                       |                       | 2                     | 4                     | 2                     |                       | 3                     | 4                     |                       |                       |                       | 4                     | 3                     | 4                     |                       |                      |
| Lymph Node   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     |                       |                       |                       | +                     | +                     |                       |                       |                       | +                     |                       |                       |                      |
| Axillary, Proliferation, Plasma Cell                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Iliac, Erythrophagocytosis                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                      |
| Iliac, Hyperplasia, Lymphocyte                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Iliac, Inflammation, Acute                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                      |
| Iliac, Pigment   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Iliac, Proliferation, Plasma Cell                        |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                      |
| Inguinal, Erythrophagocytosis                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Inguinal, Proliferation, Plasma Cell                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Inguinal, Lymphatic Sinus, Ectasia                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Lumbar, Erythrophagocytosis                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Mediastinal, Congestion                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                      |
| Mediastinal, Proliferation, Plasma Cell                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                      |
| Pancreatic, Erythrophagocytosis                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                      |
| Lymph Node, Mandibular                                   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |                      |
| Hemorrhage   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                      |
| Hyperplasia, Lymphocyte                                  |                       |                       |                       | 1                     | 1                     | 1                     |                       |                       |                       |                       | 1                     |                       |                       |                       | 1                     |                       | 1                     |                       |                       | 1                     |                       | 1                     |                       |                       |                      |
| Proliferation, Plasma Cell                               |                       |                       | 1                     | 1                     | 1                     | 3                     | 2                     | 2                     |                       |                       |                       |                       | 3                     |                       | 1                     | 1                     | 2                     | 1                     |                       | 2                     | 2                     | 1                     |                       | 1                     |                      |
| Lymphatic Sinus, Ectasia                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                      |
| Lymph Node, Mesenteric                                   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |                      |
| Atrophy  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Erythrophagocytosis                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                      |
| Infiltration Cellular, Histiocyte                        |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 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     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---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|             | 0737                              | 0738 | 0749 | 0761 | 0764 | 0766 | 0771 | 0774 | 0777 | 0779 | 0781 | 0784 | 0787 | 0790 | 0791 | 0794 | 0797 | 0798 | 0799 | 0801 | 0804 | 0807 | 0809 | 0811 |           |                   | 0814 | 0817 | 0819 | 0821 | 0824 | 0827 | 0829 | 0831 | 0834 | 0837 | 0839 | 0841 | 0844 | 0847 | 0849 | 0851 | 0854 | 0857 | 0859 | 0861 | 0864 | 0867 | 0869 | 0871 | 0874 | 0877 | 0879 | 0881 | 0884 | 0887 | 0889 | 0891 | 0894 | 0897 | 0899 | 0901 | 0904 | 0907 | 0909 | 0911 | 0914 | 0917 | 0919 | 0921 | 0924 | 0927 | 0929 | 0931 | 0934 | 0937 | 0939 | 0941 | 0944 | 0947 | 0949 | 0951 | 0954 | 0957 | 0959 | 0961 | 0964 | 0967 | 0969 | 0971 | 0974 | 0977 | 0979 | 0981 | 0984 | 0987 | 0989 | 0991 | 0994 | 0997 | 0999 | 1001 | 1004 | 1007 | 1009 | 1011 | 1014 | 1017 | 1019 | 1021 | 1024 | 1027 | 1029 | 1031 | 1034 | 1037 | 1039 | 1041 | 1044 | 1047 | 1049 | 1051 | 1054 | 1057 | 1059 | 1061 | 1064 | 1067 | 1069 | 1071 | 1074 | 1077 | 1079 | 1081 | 1084 | 1087 | 1089 | 1091 | 1094 | 1097 | 1099 | 1101 | 1104 | 1107 | 1109 | 1111 | 1114 | 1117 | 1119 | 1121 | 1124 | 1127 | 1129 | 1131 | 1134 | 1137 | 1139 | 1141 | 1144 | 1147 | 1149 | 1151 | 1154 | 1157 | 1159 | 1161 | 1164 | 1167 | 1169 | 1171 | 1174 | 1177 | 1179 | 1181 | 1184 | 1187 | 1189 | 1191 | 1194 | 1197 | 1199 | 1201 | 1204 | 1207 | 1209 | 1211 | 1214 | 1217 | 1219 | 1221 | 1224 | 1227 | 1229 | 1231 | 1234 | 1237 | 1239 | 1241 | 1244 | 1247 | 1249 | 1251 | 1254 | 1257 | 1259 | 1261 | 1264 | 1267 | 1269 | 1271 | 1274 | 1277 | 1279 | 1281 | 1284 | 1287 | 1289 | 1291 | 1294 | 1297 | 1299 | 1301 | 1304 | 1307 | 1309 | 1311 | 1314 | 1317 | 1319 | 1321 | 1324 | 1327 | 1329 | 1331 | 1334 | 1337 | 1339 | 1341 | 1344 | 1347 | 1349 | 1351 | 1354 | 1357 | 1359 | 1361 | 1364 | 1367 | 1369 | 1371 | 1374 | 1377 | 1379 | 1381 | 1384 | 1387 | 1389 | 1391 | 1394 | 1397 | 1399 | 1401 | 1404 | 1407 | 1409 | 1411 | 1414 | 1417 | 1419 | 1421 | 1424 | 1427 | 1429 | 1431 | 1434 | 1437 | 1439 | 1441 | 1444 | 1447 | 1449 | 1451 | 1454 | 1457 | 1459 | 1461 | 1464 | 1467 | 1469 | 1471 | 1474 | 1477 | 1479 | 1481 | 1484 | 1487 | 1489 | 1491 | 1494 | 1497 | 1499 | 1501 | 1504 | 1507 | 1509 | 1511 | 1514 | 1517 | 1519 | 1521 | 1524 | 1527 | 1529 | 1531 | 1534 | 1537 | 1539 | 1541 | 1544 | 1547 | 1549 | 1551 | 1554 | 1557 | 1559 | 1561 | 1564 | 1567 | 1569 | 1571 | 1574 | 1577 | 1579 | 1581 | 1584 | 1587 | 1589 | 1591 | 1594 | 1597 | 1599 | 1601 | 1604 | 1607 | 1609 | 1611 | 1614 | 1617 | 1619 | 1621 | 1624 | 1627 | 1629 | 1631 | 1634 | 1637 | 1639 | 1641 | 1644 | 1647 | 1649 | 1651 | 1654 | 1657 | 1659 | 1661 | 1664 | 1667 | 1669 | 1671 | 1674 | 1677 | 1679 | 1681 | 1684 | 1687 | 1689 | 1691 | 1694 | 1697 | 1699 | 1701 | 1704 | 1707 | 1709 | 1711 | 1714 | 1717 | 1719 | 1721 | 1724 | 1727 | 1729 | 1731 | 1734 | 1737 | 1739 | 1741 | 1744 | 1747 | 1749 | 1751 | 1754 | 1757 | 1759 | 1761 | 1764 | 1767 | 1769 | 1771 | 1774 | 1777 | 1779 | 1781 | 1784 | 1787 | 1789 | 1791 | 1794 | 1797 | 1799 | 1801 | 1804 | 1807 | 1809 | 1811 | 1814 | 1817 | 1819 | 1821 | 1824 | 1827 | 1829 | 1831 | 1834 | 1837 | 1839 | 1841 | 1844 | 1847 | 1849 | 1851 | 1854 | 1857 | 1859 | 1861 | 1864 | 1867 | 1869 | 1871 | 1874 | 1877 | 1879 | 1881 | 1884 | 1887 | 1889 | 1891 | 1894 | 1897 | 1899 | 1901 | 1904 | 1907 | 1909 | 1911 | 1914 | 1917 | 1919 | 1921 | 1924 | 1927 | 1929 | 1931 | 1934 | 1937 | 1939 | 1941 | 1944 | 1947 | 1949 | 1951 | 1954 | 1957 | 1959 | 1961 | 1964 | 1967 | 1969 | 1971 | 1974 | 1977 | 1979 | 1981 | 1984 | 1987 | 1989 | 1991 | 1994 | 1997 | 1999 | 2001 | 2004 | 2007 | 2009 | 2011 | 2014 | 2017 | 2019 | 2021 | 2024 | 2027 | 2029 | 2031 | 2034 | 2037 | 2039 | 2041 | 2044 | 2047 | 2049 | 2051 | 2054 | 2057 | 2059 | 2061 | 2064 | 2067 | 2069 | 2071 | 2074 | 2077 | 2079 | 2081 | 2084 | 2087 | 2089 | 2091 | 2094 | 2097 | 2099 | 2101 | 2104 | 2107 | 2109 | 2111 | 2114 | 2117 | 2119 | 2121 | 2124 | 2127 | 2129 | 2131 | 2134 | 2137 | 2139 | 2141 | 2144 | 2147 | 2149 | 2151 | 2154 | 2157 | 2159 | 2161 | 2164 | 2167 | 2169 | 2171 | 2174 | 2177 | 2179 | 2181 | 2184 | 2187 | 2189 | 2191 | 2194 | 2197 | 2199 | 2201 | 2204 | 2207 | 2209 | 2211 | 2214 | 2217 | 2219 | 2221 | 2224 | 2227 | 2229 | 2231 | 2234 | 2237 | 2239 | 2241 | 2244 | 2247 | 2249 | 2251 | 2254 | 2257 | 2259 | 2261 | 2264 | 2267 | 2269 | 2271 | 2274 | 2277 | 2279 | 2281 | 2284 | 2287 | 2289 | 2291 | 2294 | 2297 | 2299 | 2301 | 2304 | 2307 | 2309 | 2311 | 2314 | 2317 | 2319 | 2321 | 2324 | 2327 | 2329 | 2331 | 2334 | 2337 | 2339 | 2341 | 2344 | 2347 | 2349 | 2351 | 2354 | 2357 | 2359 | 2361 | 2364 | 2367 | 2369 | 2371 | 2374 | 2377 | 2379 | 2381 | 2384 | 2387 | 2389 | 2391 | 2394 | 2397 | 2399 | 2401 | 2404 | 2407 | 2409 | 2411 | 2414 | 2417 | 2419 | 2421 | 2424 | 2427 | 2429 | 2431 | 2434 | 2437 | 2439 | 2441 | 2444 | 2447 | 2449 | 2451 | 2454 | 2457 | 2459 | 2461 | 2464 | 2467 | 2469 | 2471 | 2474 | 2477 | 2479 | 2481 | 2484 | 2487 | 2489 | 2491 | 2494 | 2497 | 2499 | 2501 | 2504 | 2507 | 2509 | 2511 | 2514 | 2517 | 2519 | 2521 | 2524 | 2527 | 2529 | 2531 | 2534 | 2537 | 2539 | 2541 | 2544 | 2547 | 2549 | 2551 | 2554 | 2557 | 2559 | 2561 | 2564 | 2567 | 2569 | 2571 | 2574 | 2577 | 2579 | 2581 | 2584 | 2587 | 2589 | 2591 | 2594 | 2597 | 2599 | 2601 | 2604 | 2607 | 2609 | 2611 | 2614 | 2617 | 2619 | 2621 | 2624 | 2627 | 2629 | 2631 | 2634 | 2637 | 2639 | 2641 | 2644 | 2647 | 2649 | 2651 | 2654 | 2657 | 2659 | 2661 | 2664 | 2667 | 2669 | 2671 | 2674 | 2677 | 2679 | 2681 | 2684 | 2687 | 2689 | 2691 | 2694 | 2697 | 2699 | 2701 | 2704 | 2707 | 2709 | 2711 | 2714 | 2717 | 2719 | 2721 | 2724 | 2727 | 2729 | 2731 | 2734 | 2737 | 2739 | 2741 | 2744 | 2747 | 2749 | 2751 | 2754 | 2757 | 2759 | 2761 | 2764 | 2767 | 2769 | 2771 | 2774 | 2777 | 2779 | 2781 | 2784 | 2787 | 2789 | 2791 | 2794 | 2797 | 2799 | 2801 | 2804 | 2807 | 2809 | 2811 | 2814 | 2817 | 2819 | 2821 | 2824 | 2827 | 2829 | 2831 | 2834 | 2837 | 2839 | 2841 | 2844 | 2847 | 2849 | 2851 | 2854 | 2857 | 2859 | 2861 | 2864 | 2867 | 2869 | 2871 | 2874 | 2877 | 2879 | 2881 | 2884 | 2887 | 2889 | 2891 | 2894 | 2897 | 2899 | 2901 | 2904 | 2907 | 2909 | 2911 | 2914 | 2917 | 2919 | 2921 | 2924 | 2927 | 2929 | 2931 | 2934 | 2937 | 2939 | 2941 | 2944 | 2947 | 2949 | 2951 | 2954 | 2957 | 2959 | 2961 | 2964 | 2967 | 2969 | 2971 | 2974 | 2977 | 2979 | 2981 | 2984 | 2987 | 2989 | 2991 | 2994 | 2997 | 2999 | 3001 | 3004 | 3007 | 3009 | 3011 | 3014 | 3017 | 3019 | 3021 | 3024 | 3027 | 3029 | 3031 | 3034 | 3037 | 3039 | 3041 | 3044 | 3047 | 3049 | 3051 | 3054 | 3057 | 3059 | 3061 | 3064 | 3067 | 3069 | 3071 | 3074 | 3077 | 3079 | 3081 | 3084 | 3087 | 3089 | 3091 | 3094 | 3097 | 3099 | 3101 | 3104 | 3107 | 3109 | 3111 | 3114 | 3117 | 3119 | 3121 | 3124 | 3127 | 3129 | 3131 | 3134 | 3137 | 3139 | 3141 | 3144 | 3147 | 3149 | 3151 | 3154 | 3157 | 3159 | 3161 | 3164 | 3167 | 3169 | 3171 | 3174 | 3177 | 3179 | 3181 | 3184 | 3187 | 3189 | 3191 | 3194 | 3197 | 3199 | 3201 | 3204 | 3207 | 3209 | 3211 | 3214 | 3217 | 3219 | 3221 | 3224 | 3227 | 3229 | 3231 | 3234 | 3237 | 3239 | 3241 | 3244 | 3247 | 3249 | 3251 | 3254 | 3257 | 3259 | 3261 | 3264 | 3267 | 3269 | 3271 | 3274 | 3277 | 3279 | 3281 | 3284 | 3287 | 3289 | 3291 | 3294 | 3297 | 3299 | 3301 | 3304 | 3307 | 3309 | 3311 | 3314 | 3317 | 3319 | 3321 | 3324 | 3327 | 3329 | 3331 | 3334 | 3337 | 3339 | 3341 | 3344 | 3347 | 3349 | 3351 | 3354 | 3357 | 3359 | 3361 | 3364 | 3367 | 3369 | 3371 | 3374 | 3377 | 3379 | 3381 | 3384 | 3387 | 3389 | 3391 | 3394 | 3397 | 3399 | 3401 | 3404 | 3407 | 3409 | 3411 | 3414 | 3417 | 3419 | 3421 | 3424 | 3427 | 3429 | 3431 | 3434 | 3437 | 3439 | 3441 | 3444 | 3447 | 3449 | 3451 | 3454 | 3457 | 3459 | 3461 | 3464 | 3467 | 3469 | 3471 | 3474 | 3477 | 3479 | 3481 | 3484 | 3487 | 3489 | 3491 | 3494 | 3497 | 3499 | 3501 | 3504 | 3507 | 3509 | 3511 | 3514 | 3517 | 3519 | 3521 | 3524 | 3527 | 3529 | 3531 | 3534 | 3537 | 3539 | 3541 | 3544 | 3547 | 3549 | 3551 | 3554 | 3557 | 3559 | 3561 | 3564 | 3567 | 3569 | 3571 | 3574 | 3577 | 3579 | 3581 | 3584 | 3587 | 3589 | 3591 | 3594 | 3597 | 3599 | 3601 | 3604 | 3607 | 3609 | 3611 | 3614 | 3617 | 3619 | 3621 | 3624 | 3627 | 3629 | 3631 | 3634 | 3637 | 3639 | 3641 | 3644 | 3647 | 3649 | 3651 | 3654 | 3657 | 3659 | 3661 | 3664 | 3667 | 3669 | 3671 | 3674 | 3677 | 3679 | 3681 | 3684 | 3687 | 3689 | 3691 | 3694 | 3697 | 3699 | 3701 | 3704 | 3707 | 3709 | 3711 | 3714 | 3717 | 3719 | 3721 | 3724 | 3727 | 3729 | 3731 | 3734 | 3737 | 3739 | 3741 | 3744 | 3747 | 3749 | 3751 | 3754 | 3757 | 3759 | 3761 | 3764 | 3767 | 3769 | 3771 | 3774 | 3777 | 3779 | 3781 | 3784 | 3787 | 3789 | 3791 | 3794 | 3797 | 3799 | 3801 | 3804 | 3807 | 3809 | 3811 | 3814 | 3817 | 3819 | 3821 | 3824 | 3827 | 3829 | 3831 | 3834 | 3837 | 3839 | 3841 | 3844 | 3847 | 3849 | 3851 | 3854 | 3857 | 3859 | 3861 | 3864 | 3867 | 3869 | 3871 | 3874 | 3877 | 3879 | 3881 | 3884 | 3887 | 3889 | 3891 | 3894 | 3897 | 3899 | 3901 | 3904 | 3907 | 3909 | 3911 | 3914 | 3917 | 3919 | 3921 | 3924 | 3927 | 3929 | 3931 | 3934 | 3937 | 3939 | 3941 | 3944 | 3947 | 3949 | 3951 | 3954 | 3957 | 3959 | 3961 | 3964 | 3967 | 3969 | 3971 | 3974 | 3977 | 3979 | 3981 | 3984 | 3987 | 3989 | 3991 | 3994 | 3997 | 3999 | 4001 | 4004 | 4007 | 4009 | 4011 | 4014 | 4017 | 4019 | 4021 |



















Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                      | HARLAN SPRAGUE DAWLEY RATS FEMALE |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | ANIMAL ID                | females (cont...) |
|----------------------------------|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------------|-------------------|
|                                  | 0                                 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                          |                   |
| 3                                | 6                                 | 5 | 7 | 7 | 7 | 6 | 4 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 5 | 6 | 7 | 7 | 7 | 000000000000000000000000 |                   |
| 5                                | 6                                 | 3 | 4 | 4 | 3 | 6 | 9 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 2 | 3 | 3 | 0 | 1 | 2 | 4 | 4 | 4 | 000000000000000000000000 |                   |
| 3                                | 2                                 | 1 | 4 | 0 | 7 | 2 | 2 | 4 | 4 | 1 | 9 | 4 | 4 | 0 | 9 | 4 | 7 | 9 | 8 | 3 | 2 | 0 | 1 | 4 | 666666666666666666666666 |                   |
|                                  | 0                                 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 666666666666666666666666 |                   |
|                                  | 6                                 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 666666666666666666666666 |                   |
|                                  | 6                                 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 45689012745789           |                   |
|                                  | 4                                 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 4 | 5 | 7 | 8 | 9 | 0 | 1 | 3 | 4 | 6 | 7 | 8 | 8 | 9 | 9 |   | 3                        |                   |
| Inflammation, Suppurative        |                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                          |                   |
| Inflammation, Chronic Active     |                                   | 3 | 2 |   |   |   | 2 |   |   |   |   | 2 | 3 | 1 | 1 |   |   |   |   |   |   |   | 2 |   |                          |                   |
| Duct, Dilation                   | 3                                 |   | 2 | 2 |   | 3 |   |   | 2 | 4 | 3 |   | 2 | 4 | 3 |   |   | 3 |   | 3 | 3 |   | 4 | 2 |                          |                   |
| Ovary                            | +                                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |                          |                   |
| Atrophy                          | 3                                 |   | 3 |   |   | 2 | 3 |   | 3 | 2 | 3 | 4 | 3 | 4 | 3 |   | 4 | 3 | 3 | 2 | 3 | 3 | 4 | 4 |                          |                   |
| Congestion                       |                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                          |                   |
| Cyst                             |                                   |   | X | X | X |   |   |   |   |   |   |   | X |   |   | X |   |   | X |   |   | X |   |   |                          |                   |
| Bursa, Dilation                  |                                   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |                          |                   |
| Rete Ovarii, Hyperplasia         |                                   |   |   |   |   | 1 |   |   |   |   |   |   |   | 2 |   |   |   | 1 |   | 4 |   | 2 |   | 3 |                          |                   |
| Oviduct                          |                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                          |                   |
| Cyst                             |                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                          |                   |
| Uterus                           | +                                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |                          |                   |
| Angiectasis                      |                                   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                          |                   |
| Cyst                             |                                   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   | X |   |                          |                   |
| Dilation                         |                                   |   |   |   |   | 2 |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                          |                   |
| Fibrosis                         |                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                          |                   |
| Inflammation, Suppurative        |                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                          |                   |
| Inflammation, Acute              |                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                          |                   |
| Thrombus                         |                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                          |                   |
| Cervix, Hyperplasia, Stromal     |                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                          |                   |
| Cervix, Serosa, Fibrosis         |                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                          |                   |
| Endometrium, Hyperplasia, Cystic |                                   |   | 3 |   |   | 2 |   | 1 |   | 2 | 1 | 2 |   |   | 2 |   |   | 1 | 1 | 1 |   |   |   | 2 |                          |                   |
| Epithelium, Metaplasia, Squamous | 1                                 |   | 2 |   |   | 3 | 3 | 1 |   | 1 | 2 | 4 |   |   | 2 |   |   |   |   | 4 | 4 | 1 | 1 | 4 |                          |                   |
| Vagina                           |                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                          | +                 |

HEMATOPOIETIC SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0.0W/kg(CDMA)chr | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | females<br>(cont...) |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------------------|------------------|------------------|------------------|
|  | 0<br>3<br>5<br>3 | 0<br>6<br>6<br>2 | 0<br>5<br>3<br>1 | 0<br>7<br>4<br>4 | 0<br>7<br>4<br>0 | 0<br>7<br>3<br>7 | 0<br>6<br>6<br>2 | 0<br>4<br>9<br>2 | 0<br>6<br>3<br>4 | 0<br>7<br>4<br>4 | 0<br>7<br>3<br>1 | 0<br>7<br>4<br>9 | 0<br>7<br>4<br>4 | 0<br>7<br>4<br>0 | 0<br>5<br>2<br>4 | 0<br>7<br>3<br>7 | 0<br>6<br>3<br>8 | 0<br>5<br>1<br>3 | 0<br>6<br>2<br>2 | 0<br>7<br>4<br>0 |           |                      | 0<br>7<br>4<br>1 | 0<br>7<br>4<br>2 | 0<br>7<br>4<br>3 |
|  | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0         | 0                    | 0                | 0066664          |                  |

Spleen  
 Extramedullary Hematopoiesis  
 Hyperplasia, Stromal  
 Pigment  
 Red Pulp, Atrophy  
 White Pulp, Atrophy

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| 1 | 4 | 2 | 3 | 2 | 1 | 3 | 3 | 3 | 4 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 2 | 1 | 2 | 3 | 2 | 1 |
| 1 |   | 1 |   | 2 |   |   |   | 1 |   | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 3 |   | 3 | 2 | 1 | 1 | 2 | 2 |

Thymus  
 Atrophy  
 Cyst  
 Ectopic Parathyroid Gland  
 Hemorrhage  
 Hyperplasia, Epithelial

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
|   | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 |   | 1 | 1 |   | 1 | 1 | 2 | 1 |   | 1 | 1 | 1 | 2 |   |
|   | X |   |   |   | X |   |   | X | X | X |   | X | X |   |   |   | X |   |   | X |   |   | X |   |
|   | 1 |   | 1 | 1 | 1 |   |   | 1 | 2 | 2 |   | 1 | 1 | 1 | 1 |   | 1 | 3 | 2 | 1 |   | 1 | 1 | 1 |

INTEGUMENTARY SYSTEM

Mammary Gland  
 Galactocele  
 Hyperplasia  
 Duct, Dilation

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|   |   |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   | X | X |   |   |   |   |
|   | 4 | 1 | 3 | 2 |   |   | 1 |   |   |   |   |   | 1 |   | 4 |   | 1 |   | 1 |   | 4 | 4 |   |
|   |   | 1 | 1 | 2 |   |   | 2 |   | 3 | 1 | 2 |   | 3 | 2 | 2 |   | 1 |   | 1 | 2 | 1 |   | 2 |

Skin  
 Cyst Epithelial Inclusion  
 Inflammation, Chronic Active  
 Epidermis, Hyperplasia

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

MUSCULOSKELETAL SYSTEM

Bone  
 Cranium, Fracture

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

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 I .. Insufficient tissue  
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 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST      | HARLAN SPRAGUE DAWLEY RATS FEMALE |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | ANIMAL ID | females (cont...) |
|------------------|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|-------------------|
|                  | 0353                              | 0662   | 0531   | 0744   | 0740   | 0773   | 0666   | 0492   | 0664   | 0774   | 0771   | 0774   | 0774   | 0774   | 0774   | 0774   | 0774   | 0574   | 0776   | 0776   | 0655   | 0662   | 0774   | 0774   |           |                   |
| 0.0W/kg(CDMA)chr | 006664                            | 006665 | 006666 | 006667 | 006668 | 006669 | 006670 | 006671 | 006672 | 006673 | 006674 | 006675 | 006676 | 006677 | 006678 | 006679 | 006680 | 006681 | 006682 | 006683 | 006684 | 006685 | 006686 | 006687 | 006688    |                   |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spinal Cord, Lumbar Degeneration Nerve, Degeneration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  |   |   | 1 |   |   |   | 1 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  |   | 1 |   | 3 | 2 | 1 | 1 |   |   | 1 | 3 | 3 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 3 | 2 |   | 2 | 3 | 3 |
| Spinal Cord, Thoracic Degeneration                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  |   |   |   | 2 | 2 | 2 | 1 |   |   | 1 | 2 | 1 | 2 | 2 | 2 | 2 |   | 2 | 2 | 1 |   | 1 | 2 | 2 | 2 |
| Trigeminal Ganglion Degeneration                     | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + |   |
|  |   |   |   | 1 | 1 | 1 |   |   | 1 |   | 1 |   | 1 |   | 1 |   | 1 |   | 1 |   | 1 |   | 1 | 1 |   |

RESPIRATORY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Congestion  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Granulomatous                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active                          |   |   | 1 |   |   |   |   |   |   |   | 1 |   | 1 |   |   |   |   |   |   |   | 1 |   |   |   |
| Alveolus, Infiltration Cellular, Histiocyte           | 1 | 1 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 3 | 3 | 1 |   |   |   |   | 3 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| Artery, Inflammation, Chronic Active                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |
| Epithelium Alveolus, Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 1 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 3 |
| Olfactory Epithelium, Metaplasia, Respiratory         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   | 1 |   |   |   |   | 1 |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   | 1 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked







Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                                  |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS<br/>FEMALE</b> | <b>0.0W/kg(CDMA)chr</b> | 7 | 6 | 7 | 4 | 7 | 7 | 4 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 6 |   |
|  |                         | 3 | 6 | 4 | 8 | 3 | 0 | 9 | 3 | 3 | 3 | 5 | 3 | 4 | 3 | 2 |   |
|  |                         | 9 | 8 | 0 | 9 | 9 | 7 | 2 | 6 | 7 | 9 | 0 | 8 | 0 | 8 | 9 |   |
| ANIMAL ID                                    |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |                         | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |
|  |                         | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |   |
|  |                         | 4 | 5 | 6 | 7 | 8 | 9 | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |   |
| <b>* TOTALS</b>                              |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**ALIMENTARY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |              |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|--------------|
| Esophagus   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |              |
| Intestine Large, Cecum                            | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | A | <b>84</b>     |              |
| Intestine Large, Colon                            | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>89</b>     |              |
| Intestine Large, Rectum                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |              |
| Intestine Small, Duodenum                         | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>88</b>     |              |
| Intestine Small, Ileum<br>Hyperplasia, Lymphocyte | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | <b>86</b>     | <b>1 2.0</b> |
| Intestine Small, Jejunum                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | <b>83</b>     |              |
| Liver   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |              |
| Angiectasis                                       |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | <b>6 1.2</b>  |              |
| Basophilic Focus                                  |   |   |   |   |   |   |   | X |   |   |   | X | X |   |   |   | <b>11</b>     |              |
| Clear Cell Focus                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>      |              |
| Eosinophilic Focus                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | <b>9</b>      |              |
| Extramedullary Hematopoiesis                      |   |   | 1 |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   | <b>15 1.1</b> |              |
| Hepatodiaphragmatic Nodule                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |              |
| Infiltration Cellular, Mixed Cell                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |              |
| Mixed Cell Focus                                  | X |   | X |   |   |   | X |   |   |   | X |   |   | X |   |   | <b>29</b>     |              |
| Bile Duct, Cyst                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>11</b>     |              |
| Bile Duct, Fibrosis                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |              |
| Bile Duct, Hyperplasia                            |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   | 1 |   | <b>9 1.2</b>  |              |
| Hepatocyte, Hypertrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 2.0</b>  |              |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

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Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0     |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|-----|
|  | 7 | 6 | 7 | 4 | 7 | 7 | 4 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 6 | 6 | 6  | 6     |     |
| <b>HARLAN SPRAGUE DAWLEY RATS<br/>FEMALE</b> | 3 | 6 | 4 | 8 | 3 | 0 | 9 | 3 | 3 | 3 | 5 | 3 | 4 | 3 | 2 | 2 | 2  | 2     |     |
|  | 9 | 8 | 0 | 9 | 9 | 7 | 2 | 6 | 7 | 9 | 0 | 8 | 0 | 8 | 9 | 9 | 9  | 9     |     |
| <b>0.0W/kg(CDMA)chr</b>                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0     |     |
|  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0     |     |
| ANIMAL ID                                    | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7  | 7     |     |
|  | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0     |     |
|  | 4 | 5 | 6 | 7 | 8 | 9 | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0  | 0     |     |
| <b>* TOTALS</b>                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |     |
| Hepatocyte, Increased Mitoses                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 1.0   |     |
| Hepatocyte, Necrosis                         | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 4     | 1.5 |
| Hepatocyte, Vacuolation, Cytoplasmic         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0   |     |
| Kupffer Cell, Hyperplasia                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 1.0   |     |
| Kupffer Cell, Hypertrophy                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 1.5   |     |
| Periductal, Cholangiofibrosis                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0   |     |
| Serosa, Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0   |     |
| Mesentery                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  |       |     |
| Inflammation, Chronic Active                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0   |     |
| Necrosis                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0   |     |
| Oral Mucosa                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |       |     |
| Pancreas                                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  |       |     |
| Ectopic Liver                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 90 | 1     |     |
| Inflammation, Chronic Active                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0   |     |
| Acinus, Atrophy                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5  | 1.0   |     |
| Acinus, Hyperplasia                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0   |     |
| Salivary Glands                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  |       |     |
| Duct, Parotid Gland, Dilation                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 90 | 1 3.0 |     |
| Parotid Gland, Atrophy                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 2.3   |     |
| Stomach, Forestomach                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  |       |     |
| Edema  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 90 | 2 2.0 |     |
| Erosion                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 1.5   |     |
| Fibrosis                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0   |     |
| Inflammation, Chronic Active                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 1.8   |     |
| Ulcer  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0   |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0.0W/kg(CDMA)chr | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID |  |
|  |             | 7 | 6 | 7 | 4 | 7 | 7 | 4 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 6 |           |  |
|  |             | 3 | 6 | 4 | 8 | 3 | 0 | 9 | 3 | 3 | 3 | 5 | 3 | 4 | 3 | 2 |           |  |
|  |             | 9 | 8 | 0 | 9 | 9 | 7 | 2 | 6 | 7 | 9 | 0 | 8 | 0 | 8 | 9 |           |  |

\* TOTALS

|                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |    |     |
|-------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|----|-----|
| Epithelium, Hyperplasia             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 | 1 | 10 | 1.8 |
| Epithelium, Hyperplasia, Basal Cell |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 1  | 1.0 |

|                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |    |   |     |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|----|---|-----|
| Stomach, Glandular Erosion | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  | 90 | 1 | 2.0 |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|----|---|-----|

|        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |
|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|
| Tongue |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|

CARDIOVASCULAR SYSTEM

|       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |    |  |  |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|----|--|--|
| Aorta | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  | 90 |  |  |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|----|--|--|

|                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |    |     |     |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|----|-----|-----|
| Heart                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  | 90 |     |     |
| Cardiomyopathy                  |   |   | 1 |   |   |   |   |   | 1 | 1 | 1 |   |   | 1 | 1 | 1 |  |    | 40  | 1.1 |
| Ventricle Right, Cardiomyopathy |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | 4  | 1.0 |     |

ENDOCRINE SYSTEM

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |    |  |  |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|----|--|--|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  | 90 |  |  |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|----|--|--|

|                                   |   |   |   |  |   |  |   |  |   |   |   |   |   |   |   |  |  |    |     |  |
|-----------------------------------|---|---|---|--|---|--|---|--|---|---|---|---|---|---|---|--|--|----|-----|--|
| Accessory Adrenal Cortical Nodule |   |   |   |  |   |  |   |  |   |   |   |   |   |   |   |  |  | 5  |     |  |
| Atrophy                           |   |   |   |  | 4 |  |   |  |   |   |   |   |   |   |   |  |  | 1  | 4.0 |  |
| Degeneration, Cystic              |   |   | 3 |  |   |  |   |  | 1 |   | 3 |   |   |   |   |  |  | 22 | 1.7 |  |
| Hyperplasia                       |   |   |   |  |   |  |   |  |   | 2 | 2 |   |   |   |   |  |  | 14 | 1.9 |  |
| Hypertrophy                       | 2 | 1 |   |  |   |  | 2 |  | 1 | 1 | 2 | 2 | 2 | 2 | 2 |  |  | 52 | 1.5 |  |
| Necrosis                          |   |   |   |  |   |  |   |  |   |   |   |   |   |   |   |  |  | 2  | 2.5 |  |
| Pigment                           |   |   |   |  | 3 |  |   |  |   |   |   |   |   |   |   |  |  | 1  | 3.0 |  |
| Vacuolation, Cytoplasmic          |   |   | 1 |  |   |  |   |  |   | 1 | 2 |   |   | 1 | 1 |  |  | 18 | 1.5 |  |

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |    |     |  |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|----|-----|--|
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  | 86 |     |  |
| Hyperplasia     |   |   |   |   |   |   |   |   | 1 | 2 |   |   |   | 1 |   |  |  | 13 | 1.5 |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0.0W/kg(CDMA)chr | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0739        | 0668  | 0764  | 0489  | 0739  | 0747  | 0462  | 0676  | 0737  | 0753  | 0775  | 0773  | 0773  | 0688  | 0679  |          |
| ANIMAL ID  | 00694       | 00665 | 00666 | 00667 | 00668 | 00669 | 00670 | 00671 | 00672 | 00673 | 00674 | 00675 | 00676 | 00677 | 00678 |          |
|  | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |          |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Necrosis  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |     |
| Islets, Pancreatic<br>Hyperplasia   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 | 15  | 1.2 |
| Parathyroid Gland<br>Fibrosis<br>Hyperplasia, Focal   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 87 | 13  | 1.2 |
|   | 1 |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   |    | 3   | 1.3 |
| Pituitary Gland<br>Cyst<br>Pars Distalis, Angiectasis<br>Pars Distalis, Cyst<br>Pars Distalis, Hyperplasia<br>Pars Intermedia, Cyst<br>Pars Intermedia, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |     |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   |     |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 2.5 |
|   |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   |    | 7   |     |
|   | 2 | 3 |   |   | 2 |   |   |   |   | 3 |   |   | 2 |   |   |    | 20  | 2.5 |
|   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |    | 3   |     |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 2.0 |
| Thyroid Gland<br>C-cell, Hyperplasia<br>Follicle, Cyst  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |     |
|   | 2 |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   | 2 |    | 28  | 2.3 |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   |     |

GENERAL BODY SYSTEM

|   |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |   |  |       |
|---|--|---|---|---|--|--|--|--|--|--|--|--|--|--|--|---|--|-------|
| Tissue NOS<br>Inflammation, Chronic Active<br>Fat, Necrosis |  | + | + |   |  |  |  |  |  |  |  |  |  |  |  | 8 |  |       |
|   |  | 4 |   |   |  |  |  |  |  |  |  |  |  |  |  |   |  | 1 4.0 |
|   |  |   |   | 3 |  |  |  |  |  |  |  |  |  |  |  |   |  | 6 2.7 |

GENITAL SYSTEM

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |  |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|--|
| Clitoral Gland | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | 87 |  |  |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|--|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         | 0          |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|
|  | 7 | 6 | 7 | 4 | 7 | 7 | 4 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 6 | 6 | 6         | 6          |
| <b>HARLAN SPRAGUE DAWLEY RATS<br/>FEMALE</b> | 3 | 6 | 4 | 8 | 3 | 0 | 9 | 3 | 3 | 3 | 5 | 3 | 4 | 3 | 2 | 2 | 2         | 2          |
|  | 9 | 8 | 0 | 9 | 9 | 7 | 2 | 6 | 7 | 9 | 0 | 8 | 0 | 8 | 9 | 9 | 9         | 9          |
| <b>0.0W/kg(CDMA)chr</b>                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         | 0          |
|  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         | 0          |
| ANIMAL ID                                    | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7         | 7          |
|  | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         | 0          |
|  | 4 | 5 | 6 | 7 | 8 | 9 | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0         | 0          |
| <b>* TOTALS</b>                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |            |
| Inflammation, Suppurative                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>2.0</b> |
| Inflammation, Chronic Active                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>28</b> | <b>1.7</b> |
| Duct, Dilation                               | 2 |   | 4 |   | 4 | 3 | 3 |   |   |   | 4 | 4 | 3 | 3 |   |   |           |            |
| Ovary  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>90</b> |            |
| Atrophy                                      | 4 | 4 | 4 | 3 | 4 | 1 |   | 3 | 4 | 3 |   | 3 | 4 |   | 2 |   |           |            |
| Congestion                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>2.0</b> |
| Cyst   |   | X |   |   |   |   |   | X | X |   | X | X |   | X |   |   |           |            |
| Bursa, Dilation                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>4</b>  | <b>2.8</b> |
| Rete Ovarii, Hyperplasia                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>15</b> | <b>2.0</b> |
| Oviduct                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  |            |
| Cyst   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  |            |
| Uterus                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>90</b> |            |
| Angiectasis                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +         |            |
| Cyst   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>5</b>  |            |
| Dilation                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>8</b>  | <b>2.1</b> |
| Fibrosis                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>3.0</b> |
| Inflammation, Suppurative                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>4</b>  | <b>2.3</b> |
| Inflammation, Acute                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>1.0</b> |
| Thrombus                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>4.0</b> |
| Cervix, Hyperplasia, Stromal                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  | <b>3.0</b> |
| Cervix, Serosa, Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>2.0</b> |
| Endometrium, Hyperplasia, Cystic             | 2 |   | 2 | 2 |   |   |   | 2 |   |   | 1 | 3 | 1 |   |   |   |           |            |
| Epithelium, Metaplasia, Squamous             | 2 |   | 2 |   |   |   | 3 | 1 | 1 |   |   | 1 |   | 3 |   |   |           |            |
| Vagina                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  |            |

**HEMATOPOIETIC SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0.0W/kg(CDMA)chr | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |    |     |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|----|-----|
|  | 0739        | 0668  | 0740  | 0489  | 0739  | 0777  | 0462  | 0676  | 0777  | 0739  | 0500  | 0777  | 0777  | 0777  | 0629  |          |    |     |
| ANIMAL ID  | 00694       | 00695 | 00696 | 00697 | 00698 | 00699 | 00700 | 00701 | 00702 | 00703 | 00704 | 00705 | 00706 | 00707 | 00708 | 00709    |    |     |
| Bone Marrow Hypercellularity                             | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 90       | 56 | 2.8 |
| Lymph Node   |             |       | +     |       |       |       |       |       |       |       |       |       |       |       | +     | 13       |    |     |
| Axillary, Proliferation, Plasma Cell                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 3.0 |
| Iliac, Erythrophagocytosis                               |             |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |          | 3  | 2.3 |
| Iliac, Hyperplasia, Lymphocyte                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 1.0 |
| Iliac, Inflammation, Acute                               |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 2.0 |
| Iliac, Pigment   |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          | 1  | 1.0 |
| Iliac, Proliferation, Plasma Cell                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |          | 6  | 2.3 |
| Inguinal, Erythrophagocytosis                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 2.0 |
| Inguinal, Proliferation, Plasma Cell                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 3.0 |
| Inguinal, Lymphatic Sinus, Ectasia                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 2.0 |
| Lumbar, Erythrophagocytosis                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 3.0 |
| Mediastinal, Congestion                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 2.0 |
| Mediastinal, Proliferation, Plasma Cell                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 3.0 |
| Pancreatic, Erythrophagocytosis                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 3.0 |
| Lymph Node, Mandibular                                   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 90       |    |     |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 1.0 |
| Hyperplasia, Lymphocyte                                  | 1           |       | 2     |       | 2     | 1     |       | 1     | 1     | 1     |       | 3     | 1     | 2     | 1     |          | 46 | 1.3 |
| Proliferation, Plasma Cell                               | 1           |       |       |       | 2     | 3     | 2     | 2     | 1     | 2     |       | 2     | 1     | 2     | 2     |          | 68 | 1.6 |
| Lymphatic Sinus, Ectasia                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 1.0 |
| Lymph Node, Mesenteric                                   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 90       |    |     |
| Atrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 1.0 |
| Erythrophagocytosis                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  | 3.0 |
| Infiltration Cellular, Histiocyte                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 2  | 1.5 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0.0W/kg(CDMA)chr | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0739        | 0668  | 0764  | 0489  | 0739  | 0707  | 0492  | 0636  | 0737  | 0739  | 0500  | 0738  | 0730  | 0738  | 0629  |          |
| ANIMAL ID  | 00694       | 00665 | 00666 | 00667 | 00668 | 00669 | 00670 | 00671 | 00672 | 00673 | 00674 | 00675 | 00676 | 00677 | 00678 |          |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Spleen                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
| Extramedullary Hematopoiesis | 3 | 4 | 4 | 3 | 1 |   | 2 |   | 2 | 2 | 3 | 3 | 1 | 3 |   | 80 | 2.4 |
| Hyperplasia, Stromal         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Pigment                      | 1 |   | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 |   | 1 | 1 | 2 | 3 | 74 | 1.9 |
| Red Pulp, Atrophy            |   |   |   |   |   | 2 |   | 3 |   |   |   |   |   |   |   | 7  | 2.3 |
| White Pulp, Atrophy          |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 3  | 1.3 |

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Thymus                    | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | 87 |     |
| Atrophy                   | 2 |   | 2 | 2 | 3 | 2 | 2 | 3 | 1 | 1 | 1 | 2 |   | 1 |   | 75 | 1.7 |
| Cyst                      |   |   |   |   | X | X |   |   | X | X |   | X |   |   |   | 39 |     |
| Ectopic Parathyroid Gland |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Hemorrhage                |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 2  | 2.0 |
| Hyperplasia, Epithelial   | 1 |   | 1 | 2 |   | 1 |   | 1 | 2 | 1 |   | 1 |   |   |   | 55 | 1.2 |

INTEGUMENTARY SYSTEM

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Mammary Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
| Galactocele                  |   |   | X | X |   |   |   | X |   | X |   |   |   |   | X | 24 |     |
| Hyperplasia                  |   |   | 2 | 3 | 3 | 4 | 1 | 1 | 4 |   | 3 |   | 1 | 4 |   | 49 | 2.1 |
| Duct, Dilation               | 1 | 2 | 3 | 3 |   |   |   | 4 | 2 |   |   | 1 | 2 |   | 3 | 56 | 2.1 |
| Skin                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
| Cyst Epithelial Inclusion    |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   | 1  |     |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Epidermis, Hyperplasia       |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 2  | 3.0 |

MUSCULOSKELETAL SYSTEM

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| Bone              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |  |
| Cranium, Fracture |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 7 | 6 | 7 | 4 | 7 | 7 | 4 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 6 | 6 | 6 |
| <b>HARLAN SPRAGUE DAWLEY RATS<br/>FEMALE</b> | 3 | 6 | 4 | 8 | 3 | 0 | 9 | 3 | 3 | 3 | 5 | 3 | 4 | 3 | 2 | 2 | 2 |
|  | 9 | 8 | 0 | 9 | 9 | 7 | 2 | 6 | 7 | 9 | 0 | 8 | 0 | 8 | 9 | 9 | 9 |
| ANIMAL ID                                    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <b>0.0W/kg(CDMA)chr</b>                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|  | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
|  | 4 | 5 | 6 | 7 | 8 | 9 | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0 |
| <b>* TOTALS</b>                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Mandible, Fracture  
Maxilla, Fracture

1  
1

Skeletal Muscle  
Degeneration

+ + + + + + + + + + + + + + +

90  
3 1.0

**NERVOUS SYSTEM**

Brain  
Compression  
Congestion  
Edema  
Meninges, Hyperplasia  
Meninges, Hyperplasia, Granular Cell  
Pineal Gland, Mineral  
Pineal Gland, Vacuolation, Cytoplasmic

+ + + + + + + + + + + + + + +  
1 2 2 2 2

90  
26 1.8  
1 1.0  
2 1.5  
1 2.0  
1 3.0  
1 1.0  
1 1.0

Nerve Trigeminal  
Degeneration

+ + + + M + + + + + + + + + +  
2 3 1 2 3 1 2 1 2 3 2

84  
64 2.0

Peripheral Nerve, Sciatic  
Degeneration  
Infiltration Cellular, Mixed Cell

+ + + + + + + + + + + + + + +  
2 1 1 1 3 2 1 1 2 2 1 1 2 1 1

90  
80 1.5  
1 1.0

Peripheral Nerve, Tibial  
Degeneration

+ + + + + + + + + + + + + + +  
1 1 1 2 2 1 1 2 1 1 1 1 1 1

90  
77 1.5

Spinal Cord, Cervical  
Degeneration

+ + + + + + + + + + + + + + +  
1 1 1 1 1 1 1 1 1 1 1 1 1

90  
24 1.1

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
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I .. Insufficient tissue  
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BLANK .. Not examined microscopically

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Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 7 | 6 | 7 | 4 | 7 | 7 | 4 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 6 | 6 | 6 |
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0.0W/kg(CDMA)chr | 3 | 6 | 4 | 8 | 3 | 0 | 9 | 3 | 3 | 3 | 5 | 3 | 4 | 3 | 2 | 2 | 9 |
|  | 9 | 8 | 0 | 9 | 9 | 7 | 2 | 6 | 7 | 9 | 0 | 8 | 0 | 8 | 9 | 9 | 9 |
| ANIMAL ID  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|  | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
|  | 4 | 5 | 6 | 7 | 8 | 9 | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0 |

**\* TOTALS**

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Spinal Cord, Lumbar Degeneration   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90     |
| Nerve, Degeneration                |   | 1 |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   | 10 1.1 |
|                                    | 3 | 3 | 1 |   | 3 | 1 | 1 | 1 | 4 | 3 | 2 | 2 | 2 | 2 | 1 |   | 74 2.1 |
| Spinal Cord, Thoracic Degeneration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90     |
|                                    | 2 | 1 | 1 |   | 2 | 1 |   | 1 | 1 | 2 |   | 1 | 2 | 2 | 1 |   | 59 1.7 |
| Trigeminal Ganglion Degeneration   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 81     |
|                                    | 1 | 1 |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   |   | 33 1.1 |

**RESPIRATORY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90     |
| Congestion  |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 2 |   | 3 2.0  |
| Hemorrhage  |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 1 1.0  |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 1.0  |
| Inflammation, Granulomatous                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0  |
| Inflammation, Chronic Active                          | 1 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   | 6 1.0  |
| Alveolus, Infiltration Cellular, Histiocyte           | 1 |   | 1 | 1 | 3 | 1 |   | 1 | 3 |   |   | 1 | 1 |   | 1 |   | 71 1.6 |
| Artery, Inflammation, Chronic Active                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Epithelium Alveolus, Hyperplasia                      |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 2 1.5  |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90     |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 3 | 3 | 3 | 1 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 2 |   | 89 2.6 |
| Olfactory Epithelium, Metaplasia, Respiratory         |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | 1 1.0  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   | 12 1.1 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 20105 - 56

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Route: Whole Body Exposure

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0.0W/kg(CDMA)chr | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  | ANIMAL ID   | 7 | 6 | 7 | 4 | 7 | 7 | 4 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 6 |  |
|  |             | 3 | 6 | 4 | 8 | 3 | 0 | 9 | 3 | 3 | 3 | 5 | 3 | 4 | 3 | 2 |  |
|  |             | 9 | 8 | 0 | 9 | 9 | 7 | 2 | 6 | 7 | 9 | 0 | 8 | 0 | 8 | 9 |  |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |  |
|  |             | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |  |
|  |             | 4 | 5 | 6 | 7 | 8 | 9 | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |  |
| <b>* TOTALS</b>  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |              |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Trachea                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | <b>89</b> |              |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b> |
| Glands, Cyst                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>     |

**SPECIAL SENSES SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |               |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---------------|
| Eye                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | <b>88</b> |               |
| Cornea, Inflammation, Acute       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b>  |
| Cornea, Epithelium, Hyperplasia   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b>  |
| Lens, Cataract                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b>  |
| Retina, Atrophy                   | 1 |   |   |   |   |   |   |   |   | 1 |   |   | 1 | 1 |   |           | <b>18 1.0</b> |
| Retina, Dysplasia                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b>  |
| Harderian Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |               |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   |   |           | <b>13 1.0</b> |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2 1.0</b>  |
| Inflammation, Granulomatous       |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |           | <b>7 1.0</b>  |
| Inflammation, Chronic             | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>7 1.3</b>  |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b>  |

**URINARY SYSTEM**

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |               |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---------------|
| Kidney                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |               |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b>  |
| Nephropathy, Chronic Progressive     | 1 |   | 2 | 1 | 1 | 1 |   | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |           | <b>74 1.2</b> |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b>  |
| Pelvis, Dilatation                   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>3 2.3</b>  |
| Renal Tubule, Cyst                   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |           | <b>3</b>      |
| Urinary Bladder                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>88</b> |               |

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+ .. Tissue examined microscopically  
X .. Lesion present  
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A .. Autolysis precludes evaluation  
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Experiment Number: 20105 - 56

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Route: Whole Body Exposure

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**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|                                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |  |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|--|
|                                   | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               |  |
|                                   |             | 7 | 6 | 7 | 4 | 7 | 7 | 4 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 6               |  |
| <b>HARLAN SPRAGUE DAWLEY RATS</b> |             | 3 | 6 | 4 | 8 | 3 | 0 | 9 | 3 | 3 | 3 | 5 | 3 | 4 | 3 | 2               |  |
| <b>FEMALE</b>                     |             | 9 | 8 | 0 | 9 | 9 | 7 | 2 | 6 | 7 | 9 | 0 | 8 | 0 | 8 | 9               |  |
| <b>0.0W/kg(CDMA)chr</b>           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               |  |
|                                   | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               |  |
|                                   |             | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7               |  |
|                                   |             | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1               |  |
|                                   |             | 4 | 5 | 6 | 7 | 8 | 9 | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0               |  |
|                                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>* TOTALS</b> |  |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |            |
|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|------------|
| Dilation                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1</b> | <b>2.0</b> |
| Inflammation, Acute     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>3</b> | <b>2.3</b> |
| Necrosis                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1</b> | <b>3.0</b> |
| Urothelium, Hyperplasia |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1</b> | <b>2.0</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 0714 | 0713 | 0712 | 0714 | 0714 | 0709 | 0703 | 0703 | 0703 | 0704 | 0707 | 0706 | 0703 | 0707 | 0707 | 0704 | 0703 | 0703 | 0707 | 0705 | 0705 | 0707 | 0703 | 0701 | 0703 | 0707 | 0707 |
|   | ANIMAL ID   | 0144 | 0144 | 0144 | 0144 | 0144 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 | 0145 |

females (cont...)

ALIMENTARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Dilation                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Muscularis, Degeneration             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Intestine Large, Cecum               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Colon               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Rectum              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Duodenum            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum               | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum             | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                     |   |   |   |   |   |   |   | X | X |   |   |   |   | X |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |
| Clear Cell Focus                     |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus                   |   |   |   |   |   |   |   | X | X |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Extramedullary Hematopoiesis         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Infiltration Cellular, Histiocyte    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Infiltration Cellular, Mixed Cell    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Inflammation, Granulomatous          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
|--|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST | 0<br>7<br>1<br>4      | 0<br>7<br>3<br>9      | 0<br>7<br>2<br>3      | 0<br>7<br>4<br>0      | 0<br>7<br>4<br>1      | 0<br>6<br>9<br>6      | 0<br>7<br>3<br>9      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>9      | 0<br>7<br>4<br>0      | 0<br>4<br>9<br>3      | 0<br>7<br>4<br>1      | 0<br>6<br>7<br>5      | 0<br>3<br>0<br>0      | 0<br>7<br>4<br>1      | 0<br>7<br>4<br>0      | 0<br>7<br>4<br>4      | 0<br>5<br>3<br>9      | 0<br>5<br>7<br>8      | 0<br>7<br>3<br>8      | 0<br>7<br>1<br>1      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>9      | females<br>(cont...) |
|  | ANIMAL ID   | 0<br>1<br>4<br>4<br>6 | 0<br>1<br>4<br>4<br>7 | 0<br>1<br>4<br>4<br>8 | 0<br>1<br>4<br>4<br>9 | 0<br>1<br>4<br>4<br>0 | 0<br>1<br>4<br>4<br>5 | 0<br>1<br>4<br>4<br>5 | 0<br>1<br>4<br>4<br>5 | 0<br>1<br>4<br>4<br>5 | 0<br>1<br>4<br>4<br>6 | 0<br>1<br>4<br>4<br>7 | 0<br>1<br>4<br>4<br>8 | 0<br>1<br>4<br>4<br>9 | 0<br>1<br>4<br>4<br>0 | 0<br>1<br>4<br>4<br>1 | 0<br>1<br>4<br>4<br>2 | 0<br>1<br>4<br>4<br>3 | 0<br>1<br>4<br>4<br>4 | 0<br>1<br>4<br>4<br>5 | 0<br>1<br>4<br>4<br>6 | 0<br>1<br>4<br>4<br>7 | 0<br>1<br>4<br>4<br>8 | 0<br>1<br>4<br>4<br>9 |                      |

Parotid Gland, Inflammation, Acute  
Sublingual Gland, Atrophy  
Sublingual Gland, Metaplasia

|                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stomach, Forestomach                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Edema                               |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |
| Erosion                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibrosis                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Inflammation, Chronic Active        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Ulcer                               |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 3 |   |
| Epithelium, Hyperplasia, Basal Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stomach, Glandular                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst                                 |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

CARDIOVASCULAR SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aorta                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy                         |   | 1 | 1 | 1 |   | 1 |   |   |   | 1 |   |   | 1 | 1 | 1 |   |   | 1 |   |   | 1 | 1 |   |   |
| Artery, Inflammation, Chronic          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Mineral                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Necrosis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Endocardium, Hyperplasia, Schwann Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ventricle Right, Cardiomyopathy        |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |

ENDOCRINE SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked













Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID        | females<br>(cont...) |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|------------------|------------------|------------------|------------------|
|  | 0<br>7<br>1<br>4 | 0<br>7<br>3<br>9 | 0<br>7<br>2<br>3 | 0<br>7<br>4<br>0 | 0<br>7<br>4<br>1 | 0<br>6<br>9<br>6 | 0<br>7<br>3<br>9 | 0<br>7<br>3<br>8 | 0<br>7<br>3<br>9 | 0<br>7<br>4<br>0 | 0<br>4<br>9<br>3 | 0<br>7<br>4<br>1 | 0<br>6<br>7<br>5 | 0<br>3<br>0<br>0 | 0<br>7<br>4<br>1 | 0<br>7<br>4<br>0 | 0<br>7<br>4<br>4 | 0<br>7<br>3<br>7 | 0<br>5<br>7<br>8 | 0<br>5<br>7<br>9 |                  |                      | 0<br>7<br>3<br>8 | 0<br>7<br>1<br>1 | 0<br>7<br>3<br>8 | 0<br>7<br>1<br>8 |
|  | 0<br>1<br>4<br>6 | 0<br>1<br>4<br>7 | 0<br>1<br>4<br>8 | 0<br>1<br>4<br>9 | 0<br>1<br>4<br>0 | 0<br>1<br>4<br>1 | 0<br>1<br>4<br>2 | 0<br>1<br>4<br>3 | 0<br>1<br>4<br>4 | 0<br>1<br>4<br>5 | 0<br>1<br>4<br>6 | 0<br>1<br>4<br>7 | 0<br>1<br>4<br>8 | 0<br>1<br>4<br>9 | 0<br>1<br>4<br>0 | 0<br>1<br>4<br>1 | 0<br>1<br>4<br>2 | 0<br>1<br>4<br>3 | 0<br>1<br>4<br>4 | 0<br>1<br>4<br>5 | 0<br>1<br>4<br>6 | 0<br>1<br>4<br>7     | 0<br>1<br>4<br>8 | 0<br>1<br>4<br>9 | 0<br>1<br>4<br>0 | 0<br>1<br>4<br>1 |

Pineal Gland, Infiltration Cellular, Mononuclear Cell

Nerve Trigeminal Degeneration

Peripheral Nerve, Sciatic Degeneration

Peripheral Nerve, Tibial Degeneration

Spinal Cord, Cervical Degeneration

Spinal Cord, Lumbar Degeneration  
Nerve, Degeneration

Spinal Cord, Thoracic Degeneration

Trigeminal Ganglion Degeneration

RESPIRATORY SYSTEM

Lung Congestion  
Foreign Body  
Hemorrhage

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST      | HARLAN SPRAGUE DAWLEY RATS FEMALE |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females (cont...) |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-------------------|
|                  | 0714                              | 0713 | 0712 | 0714 | 0714 | 0709 | 0706 | 0707 | 0707 | 0707 | 0707 | 0704 | 0707 | 0706 | 0703 | 0707 | 0707 | 0707 | 0703 | 0705 | 0705 | 0707 | 0707 | 0707 |           |                   |
| 1.5W/kg(CDMA)chr | 0                                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0714      | 1                 |
|                  | 1                                 | 3    | 2    | 4    | 4    | 9    | 3    | 3    | 3    | 4    | 9    | 4    | 7    | 6    | 3    | 7    | 7    | 7    | 7    | 3    | 7    | 7    | 5    | 5    | 0713      | 1                 |
|                  | 4                                 | 9    | 3    | 0    | 1    | 6    | 9    | 8    | 9    | 0    | 3    | 1    | 5    | 0    | 1    | 0    | 4    | 4    | 3    | 9    | 8    | 9    | 8    | 8    | 0712      | 1                 |
|                  | 0                                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0714      | 1                 |
|                  | 1                                 | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 0713      | 1                 |
|                  | 4                                 | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 0712      | 1                 |
|                  | 4                                 | 4    | 4    | 4    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 0709      | 1                 |
|                  | 6                                 | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0706      | 1                 |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|---|
| Inflammation, Granulomatous                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |  |  |   |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
| Alveolar Epithelium, Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
| Alveolar Epithelium, Metaplasia, Squamous             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
| Alveolus, Infiltration Cellular, Histiocyte           | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 |  |  |   |
| Bronchus, Hyperplasia                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
| Epithelium Alveolus, Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |  |  |   |
| Nose  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
| Foreign Body  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |  |   |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
| Inflammation, Acute                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
| Nerve, Degeneration                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 1 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 3 |  |  |   |
| Olfactory Epithelium, Metaplasia, Squamous            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |  |  |   |
| Respiratory Epithelium, Accumulation, Hyaline Droplet | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |  |  | 1 |
| Respiratory Epithelium, Hyperplasia                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
| Trachea   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
| Inflammation, Chronic Active                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |  |   |
| Epithelium, Hyperplasia                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
| Epithelium, Metaplasia, Squamous                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |
| Glands, Cyst  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |

SPECIAL SENSES SYSTEM

|     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked





Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 07 | 07 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 07 | 04 | 07 | 06 | 03 | 07 | 07 | 07 | 07 | 05 | 05 | 07 | 07 | 07 | 07 | 07 |
|   | ANIMAL ID   | 14 | 19 | 23 | 40 | 41 | 69 | 33 | 38 | 39 | 00 | 33 | 11 | 55 | 00 | 01 | 00 | 04 | 43 | 37 | 78 | 79 | 38 | 11 | 38 | 13 | 39 |
|   |             | 04 | 04 | 04 | 04 | 05 | 05 | 05 | 05 | 05 | 05 | 05 | 05 | 05 | 05 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 07 | 07 |

females  
(cont...)

Inflammation, Acute  
Inflammation, Chronic Active  
Artery, Inflammation, Chronic Active

1

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
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Experiment Number: 20105 - 56

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|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|
| <b>HARLAN SPRAGUE DAWLEY RATS FEMALE</b><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 0737 | 0738 | 0674 | 0669 | 0743 | 0773 | 0664 | 0774 | 0334 | 0734 | 0773 | 0661 | 0665 | 0774 | 0664 | 0665 | 0774 | 0774 | 0661 | 0773 | 0773 | 0667 | 0773 | 0773 | females<br>(cont...) |      |
|   | ANIMAL ID   | 0147 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 |                      | 0144 |
|   |             | 34   | 45   | 56   | 67   | 78   | 89   | 00   | 01   | 02   | 03   | 04   | 05   | 06   | 07   | 08   | 09   | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   |                      | 18   |

ALIMENTARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Dilation                             |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Muscularis, Degeneration             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Cecum               | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Colon               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Rectum              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Duodenum            | + | + | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum             | + | + | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Liver                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                     |   | X |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Clear Cell Focus                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Eosinophilic Focus                   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | X |
| Extramedullary Hematopoiesis         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Histiocyte    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |
| Infiltration Cellular, Mixed Cell    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Inflammation, Granulomatous          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
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BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
|  | 07737       | 07788 | 07674 | 07696 | 07741 | 07738 | 07649 | 07734 | 07711 | 07739 | 07341 | 07730 | 07739 | 07644 | 07667 | 07661 | 07744 | 07670 | 07664 | 07724 | 07741 | 07662 | 07737 | 07733 |                      |
| ANIMAL ID  | 01473       | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 | 01144 |                      |
| Mixed Cell Focus Pigment                                 |             |       |       |       | X     |       |       |       |       |       |       |       | X     |       |       |       | X     |       |       |       |       | X     |       |       |                      |
| Artery, Inflammation, Chronic Active                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Bile Duct, Cyst  |             |       |       |       | X     |       |       |       |       |       |       |       | X     |       | X     |       | X     |       |       |       |       |       |       |       |                      |
| Bile Duct, Fibrosis                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Bile Duct, Hyperplasia                                   |             |       |       |       |       |       |       |       |       | 1     |       |       |       |       |       |       | 1     | 1     |       |       |       |       |       |       |                      |
| Hepatocyte, Hypertrophy                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |                      |
| Hepatocyte, Necrosis                                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |                      |
| Hepatocyte, Vacuolation, Cytoplasmic                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       | 2     |                      |
| Periductal, Cholangiofibrosis                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |                      |
| Mesentery Necrosis                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Artery, Inflammation, Chronic Active                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Oral Mucosa Inflammation, Chronic Active                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Pancreas Acinus, Atrophy                                 | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                      |
| Acinus, Hyperplasia                                      |             | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Artery, Inflammation, Chronic Active                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Periductal, Cholangiofibrosis                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Salivary Glands Degeneration                             | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                      |
| Artery, Inflammation, Chronic Active                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Duct, Parotid Gland, Dilation                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Parotid Gland, Atrophy                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Parotid Gland, Inflammation, Suppurative                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST      | HARLAN SPRAGUE DAWLEY RATS FEMALE |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females (cont...) |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-------------------|------|
|                  | 0737                              | 0738 | 0674 | 0676 | 0741 | 0778 | 0778 | 0679 | 0734 | 0734 | 0641 | 0739 | 0730 | 0779 | 0647 | 0665 | 0774 | 0664 | 0674 | 0774 | 0661 | 0773 | 0773 | 0677 |           |                   | 0778 |
| 1.5W/kg(CDMA)chr | 0143                              | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144      | 1                 |      |

Parotid Gland, Inflammation, Acute  
Sublingual Gland, Atrophy  
Sublingual Gland, Metaplasia

1

Stomach, Forestomach  
Edema

+ +

Erosion  
Fibrosis  
Inflammation, Chronic Active  
Ulcer  
Epithelium, Hyperplasia  
Epithelium, Hyperplasia, Basal Cell

2  
1  
3  
1

Stomach, Glandular  
Cyst  
Artery, Inflammation, Chronic Active

+ +

CARDIOVASCULAR SYSTEM

Aorta

+ +

Heart

+ +

Cardiomyopathy  
Artery, Inflammation, Chronic  
Artery, Mineral  
Artery, Necrosis  
Endocardium, Hyperplasia, Schwann Cell  
Ventricle Right, Cardiomyopathy

1 1  
1  
1  
3

ENDOCRINE SYSTEM

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| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr  | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | females<br>(cont...) |                  |                       |                       |                       |  |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------------------|------------------|-----------------------|-----------------------|-----------------------|--|
|   | 0<br>7<br>3<br>7 | 0<br>7<br>3<br>8 | 0<br>6<br>7<br>4 | 0<br>6<br>9<br>6 | 0<br>7<br>4<br>1 | 0<br>7<br>3<br>8 | 0<br>7<br>3<br>8 | 0<br>6<br>4<br>9 | 0<br>7<br>4<br>1 | 0<br>3<br>4<br>9 | 0<br>7<br>3<br>0 | 0<br>7<br>4<br>9 | 0<br>6<br>1<br>4 | 0<br>6<br>5<br>7 | 0<br>7<br>4<br>1 | 0<br>6<br>7<br>4 | 0<br>6<br>4<br>0 | 0<br>6<br>4<br>7 | 0<br>7<br>2<br>4 | 0<br>7<br>4<br>0 |           |                      | 0<br>6<br>1<br>2 | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>8      |                       |  |
| Adrenal Cortex  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | 0<br>1<br>4<br>7<br>3 | +                     |                       |  |
| Accessory Adrenal Cortical Nodule<br>Degeneration, Cystic |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  | 1<br>1<br>4<br>7<br>3 |                       |                       |  |
| Hyperplasia   |                  |                  | 1                |                  |                  |                  | 1                |                  |                  |                  |                  | 2                | 2                |                  |                  |                  | 2                | 2                |                  | 2                |           |                      |                  | 1<br>1<br>4<br>7<br>3 |                       |                       |  |
| Hypertrophy   | 1                | 1                |                  |                  | 2                | 1                | 1                | 2                | 1                |                  | 1                | 1                |                  |                  |                  | 3                | 1                | 3                | 1                |                  | 1         | 1                    | 2                | 3                     | 2                     | 1<br>1<br>4<br>7<br>3 |  |
| Necrosis  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3                |                  |                  |                  |                  |                  |           |                      |                  |                       | 1<br>1<br>4<br>7<br>3 |                       |  |
| Vacuolation, Cytoplasmic                                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  | 1         |                      | 1                | 1                     | 1<br>1<br>4<br>7<br>3 |                       |  |
| Adrenal Medulla   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | 0<br>1<br>4<br>7<br>3 | +                     |                       |  |
| Hyperplasia   |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  | 1                |                  | 2                |                  |                  |                  | 1                | 3                |                  |                  |           | 1                    | 2                | 1                     | 1<br>1<br>4<br>7<br>3 |                       |  |
| Islets, Pancreatic  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | 0<br>1<br>4<br>7<br>3 | +                     |                       |  |
| Hyperplasia   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  | 1<br>1<br>4<br>7<br>3 |                       |                       |  |
| Parathyroid Gland   | +                | +                | +                | +                | +                | M                | +                | M                | M                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | M                | M         | +                    | +                | M                     | 0<br>1<br>4<br>7<br>3 |                       |  |
| Fibrosis  | 1                | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  | 1                |           |                      |                  |                       | 1<br>1<br>4<br>7<br>3 |                       |  |
| Hyperplasia   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                       | 1<br>1<br>4<br>7<br>3 |                       |  |
| Pituitary Gland   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | 0<br>1<br>4<br>7<br>3 | +                     |                       |  |
| Angiectasis   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                       | 1<br>1<br>4<br>7<br>3 |                       |  |
| Pars Distalis, Cyst                                       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |           |                      |                  |                       | 1<br>1<br>4<br>7<br>3 |                       |  |
| Pars Distalis, Hyperplasia                                | 4                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  |                  | 3                | 2                |                  |                  |                  |           | 2                    |                  |                       | 1<br>1<br>4<br>7<br>3 |                       |  |
| Pars Intermedia, Cyst                                     |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  | X                     | 1<br>1<br>4<br>7<br>3 |                       |  |
| Thyroid Gland   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | 0<br>1<br>4<br>7<br>3 | +                     |                       |  |
| C-cell, Hyperplasia                                       |                  |                  | 1                |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  | 2                |                  |           | 1                    | 1                | 2                     | 1<br>1<br>4<br>7<br>3 |                       |  |
| Follicular Cell, Hyperplasia                              |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                       | 1<br>1<br>4<br>7<br>3 |                       |  |

GENERAL BODY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|------|
|  | 0737        | 0738 | 0764 | 0766 | 0771 | 0773 | 0777 | 0766 | 0771 | 0773 | 0744 | 0741 | 0733 | 0744 | 0733 | 0741 | 0755 | 0774 | 0766 | 0766 |           |                      | 0777 | 0777 | 0766 |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                    | 0    | 0    | 0    |
|  | 1           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1         | 1                    | 1    | 1    | 1    |
|  | 4           | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4         | 4                    | 4    | 4    | 5    |
|  | 7           | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7         | 7                    | 7    | 7    | 7    |
|  | 3           | 4    | 5    | 6    | 7    | 8    | 9    | 8    | 8    | 1    | 2    | 3    | 5    | 6    | 7    | 9    | 0    | 1    | 2    | 3    | 4         | 5                    | 6    | 7    | 8    |

|                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Tissue NOS                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Chronic Active       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Abdominal, Fat, Necrosis           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fat, Necrosis                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mediastinum, Hemorrhage            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mediastinum, Inflammation, Chronic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**GENITAL SYSTEM**

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Clitoral Gland               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |   |   |  |
| Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Suppurative    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Acute          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Chronic Active | 3 |   |   |   | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 |   |   |   |   |   |   |   |   | 1 |   | 3 | 2 | 3 | 3 | 2 | 2 |  |
| Duct, Dilation               | 2 | 3 | 3 |   | 2 | 3 | 3 |   |   | 2 | 1 | 2 | 3 | 3 | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Duct, Hyperplasia            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Ovary                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |   |  |
| Atrophy                      | 4 | 4 | 4 | 3 |   | 4 | 4 | 2 | 4 | 3 |   | 3 | 3 | 3 | 2 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Cyst                         | X |   | X |   |   | X |   |   |   | X |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |
| Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Chronic        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Bursa, Dilation              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Rete Ovarii, Hyperplasia     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Uterus                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Adenomyosis                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Cyst                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Dilation                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
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I .. Insufficient tissue  
M .. Missing tissue  
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BLANK .. Not examined microscopically  
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1) Minimal 3) Moderate  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr                    | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | ANIMAL ID | females<br>(cont...) |  |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|-----------|----------------------|--|
|   | 0<br>7<br>3<br>7 | 0<br>7<br>3<br>8 | 0<br>6<br>7<br>4 | 0<br>6<br>9<br>6 | 0<br>7<br>4<br>1 | 0<br>7<br>3<br>8 | 0<br>7<br>3<br>8 | 0<br>6<br>4<br>9 | 0<br>7<br>4<br>1 | 0<br>3<br>4<br>9 | 0<br>7<br>3<br>0 | 0<br>7<br>4<br>9 | 0<br>6<br>1<br>4 | 0<br>6<br>5<br>7 | 0<br>7<br>4<br>1 | 0<br>6<br>7<br>4 | 0<br>6<br>4<br>5 | 0<br>6<br>4<br>7 | 0<br>7<br>2<br>4 | 0<br>7<br>4<br>0 | 0<br>6<br>1<br>2 | 0<br>7<br>3<br>7 | 0<br>7<br>3<br>8 |   |           |                      |  |
| Lymph Node, Mandibular Congestion   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |  |
| Erythrophagocytosis   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |  |
| Hyperplasia, Lymphocyte Proliferation, Plasma Cell Lymphatic Sinus, Ectasia | 1                | 1                |                  |                  |                  |                  | 3                | 3                | 1                |                  |                  | 1                |                  | 1                |                  |                  | 3                |                  |                  | 1                |                  | 3                |                  |   |           |                      |  |
|   | 2                | 1                | 2                |                  | 1                | 1                | 3                | 2                | 1                |                  |                  |                  |                  | 2                | 3                | 2                | 2                | 1                | 3                | 1                | 2                | 2                | 1                | 1 |           |                      |  |
| Lymph Node, Mesenteric Erythrophagocytosis                                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |  |
|   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |  |
| Spleen Accessory Spleen   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |  |
| Extramedullary Hematopoiesis  | 2                | 3                |                  |                  | 2                | 1                | 2                | 2                | 1                | 2                | 1                | 1                | 2                | 1                |                  | 1                | 4                | 3                | 2                |                  | 4                | 1                | 2                | 3 | 2         |                      |  |
| Fibrosis  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |  |
| Hemorrhage  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |  |
| Hyperplasia, Lymphocyte Pigment   | 1                | 1                | 3                | 4                | 3                | 1                | 1                | 3                | 1                | 1                | 3                | 1                | 2                |                  | 3                | 1                | 1                | 1                | 2                | 3                | 1                | 1                | 1                | 2 | 2         |                      |  |
| Red Pulp, Atrophy   |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |  |
| White Pulp, Atrophy   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |  |
| Thymus Atrophy  | 1                | 1                |                  | 2                | 3                | 2                | 1                | 1                | 1                | 2                | 3                | 1                | 2                | 3                | 4                | 2                | 2                | 2                | 1                | 3                | 2                |                  | 2                | 1 | 1         |                      |  |
| Cyst  | X                |                  |                  |                  |                  | X                | X                |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  | X                |                  | X                | X                |                  |   | X         |                      |  |
| Ectopic Parathyroid Gland   |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |  |
| Hemorrhage  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |  |
| Hyperplasia, Epithelial Artery, Inflammation, Chronic Active                | 1                | 1                |                  | 1                | 1                | 1                | 1                |                  | 1                |                  | 1                |                  | 2                |                  | 2                |                  | 1                | 1                | 1                | 2                | 1                | 2                | 1                | 1 |           |                      |  |

INTEGUMENTARY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
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Experiment Number: 20105 - 56

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Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

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Date Report Requested: 01/02/2018

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | females<br>(cont...) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|
|  | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>8      | 0<br>6<br>7<br>4      | 0<br>6<br>9<br>6      | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>8      | 0<br>6<br>4<br>9      | 0<br>7<br>4<br>1      | 0<br>3<br>4<br>9      | 0<br>7<br>3<br>0      | 0<br>7<br>4<br>9      | 0<br>6<br>1<br>4      | 0<br>6<br>5<br>7      | 0<br>7<br>4<br>1      | 0<br>6<br>7<br>4      | 0<br>6<br>4<br>5      | 0<br>6<br>4<br>7      | 0<br>7<br>2<br>4      | 0<br>7<br>4<br>0      | 0<br>6<br>1<br>2      | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>8      |                       |                       |                       |                      |
| ANIMAL ID  | 0<br>1<br>4<br>7<br>3 | 0<br>1<br>4<br>7<br>4 | 0<br>1<br>4<br>7<br>5 | 0<br>1<br>4<br>7<br>6 | 0<br>1<br>4<br>7<br>7 | 0<br>1<br>4<br>7<br>8 | 0<br>1<br>4<br>7<br>9 | 0<br>1<br>4<br>8<br>0 | 0<br>1<br>4<br>7<br>1 | 0<br>1<br>4<br>8<br>2 | 0<br>1<br>4<br>8<br>3 | 0<br>1<br>4<br>8<br>4 | 0<br>1<br>4<br>8<br>5 | 0<br>1<br>4<br>8<br>6 | 0<br>1<br>4<br>8<br>7 | 0<br>1<br>4<br>9<br>0 | 0<br>1<br>4<br>9<br>1 | 0<br>1<br>4<br>9<br>2 | 0<br>1<br>4<br>9<br>3 | 0<br>1<br>4<br>9<br>4 | 0<br>1<br>4<br>9<br>5 | 0<br>1<br>4<br>9<br>6 | 0<br>1<br>4<br>9<br>7 | 0<br>1<br>4<br>9<br>8 | 0<br>1<br>4<br>9<br>9 | 0<br>1<br>4<br>9<br>0 |                      |
| Mammary Gland  | +                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Galactoceles   | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Hyperplasia  | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Duct, Dilation   | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Skin   | +                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Cyst Epithelial Inclusion                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Hyperkeratosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Subcutaneous Tissue, Inflammation, Chronic Active        | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| <b>MUSCULOSKELETAL SYSTEM</b>                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Bone   | +                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Fibrous Osteodystrophy                                   | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Skeletal Muscle  | +                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Degeneration   | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| <b>NERVOUS SYSTEM</b>                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Brain  | +                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Compression  | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Cyst   | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Edema  | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Hemorrhage   | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
| Choroid Plexus, Mineral Neuron, Necrosis                 | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                    |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------------------------------------|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 0737 | 0738 | 0674 | 0669 | 0743 | 0773 | 0764 | 0774 | 0674 | 0739 | 0770 | 0779 | 0661 | 0665 | 0741 | 0667 | 0664 | 0774 | 0774 | 0661 | 0773 | 0733 | 0738 | <b>females</b><br><b>(cont...)</b> |
|   | ANIMAL ID   | 0147 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0145 |                                    |
|   |             | 34   | 44   | 54   | 64   | 74   | 84   | 94   | 04   | 14   | 24   | 34   | 44   | 54   | 64   | 74   | 84   | 94   | 04   | 14   | 24   | 34   | 44   | 54   |                                    |

Pineal Gland, Infiltration Cellular, Mononuclear Cell

Nerve Trigeminal Degeneration

Peripheral Nerve, Sciatic Degeneration

Peripheral Nerve, Tibial Degeneration

Spinal Cord, Cervical Degeneration

Spinal Cord, Lumbar Degeneration Nerve, Degeneration

Spinal Cord, Thoracic Degeneration

Trigeminal Ganglion Degeneration

RESPIRATORY SYSTEM

Lung

Congestion

Foreign Body

Hemorrhage

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | females<br>(cont...)  |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>8      | 0<br>6<br>7<br>4      | 0<br>6<br>9<br>6      | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>8      | 0<br>6<br>4<br>9      | 0<br>7<br>4<br>1      | 0<br>3<br>4<br>9      | 0<br>7<br>3<br>0      | 0<br>7<br>4<br>9      | 0<br>6<br>1<br>4      | 0<br>6<br>5<br>7      | 0<br>7<br>4<br>4      | 0<br>6<br>0<br>5      | 0<br>6<br>4<br>7      | 0<br>7<br>2<br>4      | 0<br>7<br>4<br>0      | 0<br>6<br>1<br>2      | 0<br>7<br>3<br>7      | 0<br>7<br>1<br>8      | 0<br>7<br>3<br>8      |                       |                       |                       |                       |
|  | 0<br>1<br>4<br>7<br>3 | 0<br>1<br>4<br>7<br>4 | 0<br>1<br>4<br>7<br>5 | 0<br>1<br>4<br>7<br>6 | 0<br>1<br>4<br>7<br>7 | 0<br>1<br>4<br>7<br>8 | 0<br>1<br>4<br>7<br>9 | 0<br>1<br>4<br>7<br>0 | 0<br>1<br>4<br>7<br>1 | 0<br>1<br>4<br>7<br>2 | 0<br>1<br>4<br>7<br>3 | 0<br>1<br>4<br>7<br>4 | 0<br>1<br>4<br>7<br>5 | 0<br>1<br>4<br>7<br>6 | 0<br>1<br>4<br>7<br>7 | 0<br>1<br>4<br>7<br>8 | 0<br>1<br>4<br>7<br>9 | 0<br>1<br>4<br>7<br>0 | 0<br>1<br>4<br>7<br>1 | 0<br>1<br>4<br>7<br>2 | 0<br>1<br>4<br>7<br>3 | 0<br>1<br>4<br>7<br>4 | 0<br>1<br>4<br>7<br>5 | 0<br>1<br>4<br>7<br>6 | 0<br>1<br>4<br>7<br>7 | 0<br>1<br>4<br>7<br>8 | 0<br>1<br>4<br>7<br>9 |

|   |   |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |   |  |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|--|---|---|---|--|---|---|---|--|---|--|---|---|---|---|---|---|--|
| Inflammation, Granulomatous                 |   |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |   |  |   |   |   |   | 2 |   |  |
| Inflammation, Chronic Active                |   |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |   |  |   |   |   |   |   | 1 |  |
| Alveolar Epithelium, Hyperplasia            |   |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |   |  |   |   |   |   | 1 |   |  |
| Alveolar Epithelium, Metaplasia, Squamous   |   |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |   |  |   |   |   |   |   | 1 |  |
| Alveolus, Infiltration Cellular, Histiocyte | 2 | 1 | 1 | 3 | 2 | 3 | 1 | 2 | 1 |  | 1 | 1 | 1 |  | 2 | 2 | 1 |  | 2 |  | 2 | 1 | 2 | 1 | 1 |   |  |
| Bronchus, Hyperplasia                       |   |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |   |  |   |   |   |   |   | 3 |  |
| Epithelium Alveolus, Hyperplasia            |   |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |   |  |   |   |   |   | 1 |   |  |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Nose  | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Acute                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Nerve, Degeneration                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 3   | 4 | 4 | 1 | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 3 | 2 | 3 | 1 | 2 | 1 | 2 | 3 | 2 |   |  |
| Olfactory Epithelium, Metaplasia, Squamous            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |  |
| Respiratory Epithelium, Hyperplasia                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |  |

|                                  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|----------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Trachea                          | + + + + + + + A + + + + + + + + + + + + + + + + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Inflammation, Chronic Active     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Epithelium, Hyperplasia          |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| Epithelium, Metaplasia, Squamous |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| Glands, Cyst                     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |

SPECIAL SENSES SYSTEM

|     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Eye | + + + + + + + A + + + + + + + + + + + + + + + + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|                                      |  | 0                        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |   |
|--------------------------------------|--|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST                          |  | 7                        | 7 | 6 | 6 | 7 | 7 | 7 | 6 | 7 | 3 | 7 | 7 | 6 | 6 | 7 | 6 | 5 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 7 |
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE |  | 3                        | 3 | 7 | 9 | 4 | 3 | 3 | 4 | 4 | 3 | 4 | 3 | 1 | 5 | 4 | 1 | 7 | 4 | 0 | 4 | 2 | 4 | 1 | 3 | 3 |
| 1.5W/kg(CDMA)chr                     |  | 7                        | 8 | 4 | 6 | 1 | 8 | 8 | 9 | 1 | 9 | 0 | 9 | 4 | 7 | 1 | 4 | 0 | 4 | 5 | 7 | 4 | 0 | 2 | 7 | 8 |
| ANIMAL ID                            |  | 0                        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                      |  | 1                        | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                                      |  | 4                        | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
|                                      |  | 7                        | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
|                                      |  | 3                        | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 5 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 1 |
|                                      |  | <b>females (cont...)</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Anterior Chamber, Exudate 2

Anterior Chamber, Iris, Synechia

Cornea, Fibrosis

Cornea, Inflammation, Acute 1

Cornea, Inflammation, Chronic Active

Cornea, Neovascularization

Cornea, Epithelium, Hyperplasia

Lens, Cataract

Retina, Atrophy 1 1 1 1

Retina, Dysplasia

Harderian Gland +

Atrophy 1 1 2

Inflammation, Granulomatous 1

Inflammation, Chronic

Inflammation, Chronic Active 1 1

URINARY SYSTEM

Kidney +

Nephropathy, Chronic Progressive 1 1 1 1 1 1 1 1 1 1 1 2 2 4 3 1 1 2 1 1 1 1 1 2 1 1

Pelvis, Inflammation, Suppurative

Pelvis, Urothelium, Hyperplasia

Renal Tubule, Cyst

Renal Tubule, Necrosis 2

Urinary Bladder + + + + + + + + A +

Edema

Hemorrhage

Infiltration Cellular, Histiocyte

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:

X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate

I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <p style="text-align: right;">DAY ON TEST</p> <p><b>HARLAN SPRAGUE DAWLEY RATS</b></p> <p><b>FEMALE</b></p> <p><b>1.5W/kg(CDMA)chr</b></p> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |
|  | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 6 | 7 | 3 | 7 | 7 | 6 | 6 | 7 | 6 | 5 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 7   |
|  | 3 | 3 | 7 | 9 | 4 | 3 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 1 | 5 | 4 | 1 | 7 | 4 | 0 | 4 | 4 | 2 | 4 | 1   |
| 7  | 8 | 4 | 6 | 1 | 8 | 8 | 9 | 1 | 9 | 0 | 9 | 4 | 7 | 1 | 4 | 0 | 4 | 5 | 7 | 4 | 4 | 0 | 2 | 7 | 8   |
| <p style="text-align: right;">ANIMAL ID</p>  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |
| 1  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1   |
| 4  | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5   |
| 7  | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0   |
| 3  | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 5 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 1 |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <p><b>females</b></p> <p><b>(cont...)</b></p> |

Inflammation, Acute  
 Inflammation, Chronic Active  
 Artery, Inflammation, Chronic Active

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST      | HARLAN SPRAGUE DAWLEY RATS FEMALE |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID |      |      |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|------|------|
|                  | 0729                              | 0729 | 0729 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 |           |      | 0733 |
| 1.5W/kg(CDMA)chr | 0                                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0150 |      |

females (cont...)

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus<br>Dilation<br>Muscularis, Degeneration               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum<br>Artery, Inflammation, Chronic Active  | A | A | + | + | + | + | + | + | A | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon<br>Artery, Inflammation, Chronic Active  | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum<br>Artery, Inflammation, Chronic Active | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum                                       | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum  | A | A | + | + | + | + | + | A | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum  | A | + | + | + | + | + | + | A | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus  |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   | X |   | X |   |   |   |   |   |   |
| Clear Cell Focus  |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus  | X |   |   |   |   |   | X |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X |
| Extramedullary Hematopoiesis                                    |   |   | 1 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |
| Infiltration Cellular, Histocyte                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Mixed Cell                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Granulomatous                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 20105 - 56

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 01/02/2018

Test Type: CHRONIC

Cell Phone Radiation: CDMA

Time Report Requested: 13:31:21

Route: Whole Body Exposure

CAS Number: CELLPRADCDMA

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

Species/Strain: RATS/HSD

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr   | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | females<br>(cont...)  |                       |                       |                       |                       |                       |   |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
|  | 0<br>7<br>2<br>9      | 0<br>7<br>0<br>6      | 0<br>7<br>1<br>1      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>8      | 0<br>3<br>0<br>0      | 0<br>7<br>7<br>4      | 0<br>7<br>4<br>4      | 0<br>4<br>0<br>7      | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>9      | 0<br>6<br>3<br>5      | 0<br>6<br>6<br>0      | 0<br>5<br>2<br>0      | 0<br>6<br>4<br>3      | 0<br>7<br>4<br>1      | 0<br>7<br>4<br>4      | 0<br>4<br>6<br>4      | 0<br>7<br>3<br>9      |                       | 0<br>6<br>2<br>8      | 0<br>7<br>4<br>4      | 0<br>6<br>4<br>9      | 0<br>7<br>4<br>3      | 0<br>6<br>4<br>9      |   |
| ANIMAL ID  | 0<br>1<br>5<br>0<br>4 | 0<br>1<br>5<br>0<br>5 | 0<br>1<br>5<br>1<br>0 | 0<br>1<br>5<br>1<br>1 | 0<br>1<br>5<br>1<br>1 | 0<br>1<br>5<br>1<br>1 | 0<br>1<br>5<br>1<br>1 | 0<br>1<br>5<br>1<br>1 | 0<br>1<br>5<br>1<br>1 | 0<br>1<br>5<br>1<br>1 | 0<br>1<br>5<br>1<br>1 | 0<br>1<br>5<br>2<br>2 | 0<br>1<br>5<br>2<br>2 | 0<br>1<br>5<br>2<br>2 | 0<br>1<br>5<br>2<br>3 | 0<br>1<br>5<br>2<br>4 | 0<br>1<br>5<br>2<br>5 | 0<br>1<br>5<br>2<br>6 | 0<br>1<br>5<br>2<br>7 | 0<br>1<br>5<br>2<br>8 | 0<br>1<br>5<br>2<br>9 | 0<br>1<br>5<br>3<br>0 | 0<br>1<br>5<br>3<br>1 | 0<br>1<br>5<br>3<br>2 | 0<br>1<br>5<br>3<br>3 | 0<br>1<br>5<br>3<br>3 |   |
| Mixed Cell Focus<br>Pigment  |                       |                       | X                     |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       | X                     | X                     |                       |                       |                       |                       |                       |                       |                       |                       | X                     |   |
| Artery, Inflammation, Chronic Active   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Bile Duct, Cyst  |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       | X                     |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |   |
| Bile Duct, Fibrosis  |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Bile Duct, Hyperplasia   | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       | 1                     |   |
| Hepatocyte, Hypertrophy  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Hepatocyte, Necrosis   |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       | 1                     |                       | 2                     | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Hepatocyte, Vacuolation, Cytoplasmic<br>Periductal, Cholangiofibrosis  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Mesentery<br>Necrosis<br>Artery, Inflammation, Chronic Active  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Oral Mucosa<br>Inflammation, Chronic Active  | +                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pancreas<br>Acinus, Atrophy  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | + |
| Acinus, Hyperplasia  |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Artery, Inflammation, Chronic Active<br>Periductal, Cholangiofibrosis  |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Salivary Glands<br>Degeneration<br>Artery, Inflammation, Chronic Active<br>Duct, Parotid Gland, Dilation<br>Parotid Gland, Atrophy<br>Parotid Gland, Inflammation, Suppurative | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | + |
|  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
|  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
|  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
|  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
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 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
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1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked





Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST      |                  | ANIMAL ID        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | females<br>(cont...) |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|------------------|------------------|------------------|------------------|
|  | 0<br>7<br>2<br>9 | 0<br>7<br>0<br>6 | 0<br>7<br>1<br>1 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>8 | 0<br>3<br>0<br>0 | 0<br>7<br>7<br>4 | 0<br>7<br>4<br>7 | 0<br>4<br>0<br>7 | 0<br>7<br>4<br>1 | 0<br>7<br>3<br>8 | 0<br>7<br>3<br>9 | 0<br>6<br>3<br>5 | 0<br>6<br>6<br>0 | 0<br>5<br>5<br>0 | 0<br>6<br>2<br>3 | 0<br>7<br>4<br>1 | 0<br>7<br>4<br>4 | 0<br>4<br>6<br>4 | 0<br>7<br>4<br>4 | 0<br>3<br>1<br>9 | 0<br>6<br>2<br>8 |                      | 0<br>7<br>4<br>4 | 0<br>6<br>7<br>9 | 0<br>7<br>4<br>9 | 0<br>6<br>3<br>9 |
| Adrenal Cortex   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                    | +                | +                | +                | +                |
| Accessory Adrenal Cortical Nodule                        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                      |                  |                  |                  |                  |
| Degeneration, Cystic                                     |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3                |                  |                  |                      |                  |                  |                  |                  |
| Hyperplasia  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  | 1                | 1                |                  |                  |                  | 1                | 1                | 2                |                  |                  |                  |                      |                  |                  |                  |                  |
| Hypertrophy  |                  |                  | 2                |                  | 2                |                  | 1                | 1                |                  | 1                | 1                | 1                |                  |                  |                  | 1                |                  | 2                | 2                |                  |                  | 2                | 1                    |                  |                  | 2                |                  |
| Necrosis   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                      |                  |                  |                  |                  |
| Vacuolation, Cytoplasmic                                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                      |                  |                  |                  |                  |
| Adrenal Medulla  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                    | +                | +                | +                | +                |
| Hyperplasia  |                  |                  |                  |                  |                  |                  |                  |                  | 4                |                  |                  |                  |                  |                  |                  |                  |                  | 2                | 2                |                  |                  |                  |                      |                  |                  | 4                |                  |
| Islets, Pancreatic                                       | +                | A                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                    | +                | +                | +                | +                |
| Hyperplasia  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  | 1                |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                      |                  |                  |                  |                  |
| Parathyroid Gland  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | I                | +                    | +                | M                | +                |                  |
| Fibrosis   |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                      |                  |                  |                  |                  |
| Hyperplasia  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                      |                  |                  |                  |                  |
| Pituitary Gland  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | M                | +                | +                | +                    | +                | +                | +                |                  |
| Angiectasis  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                      |                  |                  |                  |                  |
| Pars Distalis, Cyst                                      |                  |                  |                  |                  |                  | X                | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                      |                  |                  |                  |                  |
| Pars Distalis, Hyperplasia                               |                  |                  |                  |                  |                  |                  |                  | 2                |                  | 4                | 2                | 1                |                  |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                      |                  | 3                |                  |                  |
| Pars Intermedia, Cyst                                    |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                      |                  |                  |                  |                  |
| Thyroid Gland  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                    | +                | +                | +                |                  |
| C-cell, Hyperplasia                                      |                  |                  |                  |                  | 1                |                  | 2                | 2                |                  |                  | 1                |                  |                  |                  |                  |                  | 2                |                  |                  |                  | 4                |                  |                      | 1                | 1                |                  |                  |
| Follicular Cell, Hyperplasia                             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                      |                  |                  |                  |                  |

GENERAL BODY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | females<br>(cont...)  |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>7<br>2<br>9      | 0<br>7<br>0<br>6      | 0<br>7<br>1<br>1      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>8      | 0<br>3<br>0<br>0      | 0<br>7<br>7<br>4      | 0<br>7<br>4<br>7      | 0<br>4<br>0<br>1      | 0<br>7<br>4<br>7      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>9      | 0<br>6<br>3<br>5      | 0<br>6<br>6<br>0      | 0<br>5<br>2<br>0      | 0<br>6<br>4<br>3      | 0<br>7<br>4<br>4      | 0<br>7<br>4<br>4      | 0<br>4<br>6<br>4      | 0<br>7<br>4<br>4      | 0<br>3<br>1<br>9      | 0<br>6<br>2<br>8      | 0<br>7<br>4<br>4      | 0<br>6<br>4<br>9      |                       |                       | 0<br>7<br>4<br>9      |
|  | 0<br>1<br>5<br>0<br>4 | 0<br>1<br>5<br>0<br>5 | 0<br>1<br>5<br>1<br>0 | 0<br>1<br>5<br>1<br>1 | 0<br>1<br>5<br>1<br>2 | 0<br>1<br>5<br>1<br>3 | 0<br>1<br>5<br>1<br>4 | 0<br>1<br>5<br>1<br>5 | 0<br>1<br>5<br>1<br>6 | 0<br>1<br>5<br>1<br>7 | 0<br>1<br>5<br>1<br>8 | 0<br>1<br>5<br>1<br>9 | 0<br>1<br>5<br>2<br>0 | 0<br>1<br>5<br>2<br>1 | 0<br>1<br>5<br>2<br>2 | 0<br>1<br>5<br>2<br>3 | 0<br>1<br>5<br>2<br>4 | 0<br>1<br>5<br>2<br>5 | 0<br>1<br>5<br>2<br>6 | 0<br>1<br>5<br>2<br>7 | 0<br>1<br>5<br>2<br>8 | 0<br>1<br>5<br>2<br>9 | 0<br>1<br>5<br>3<br>0 | 0<br>1<br>5<br>3<br>1 | 0<br>1<br>5<br>3<br>2 | 0<br>1<br>5<br>3<br>3 | 0<br>1<br>5<br>3<br>4 |

|                                    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Tissue NOS                         | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst                               | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Chronic Active       | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Abdominal, Fat, Necrosis           | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fat, Necrosis                      | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mediastinum, Hemorrhage            | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mediastinum, Inflammation, Chronic | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

GENITAL SYSTEM

|                              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Clitoral Gland               | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia                  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Suppurative    | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Acute          | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Chronic Active | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duct, Dilation               | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duct, Hyperplasia            | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ovary                        | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                      | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst                         | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibrosis                     | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Chronic        | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bursa, Dilation              | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rete Ovarii, Hyperplasia     | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Uterus                       | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adenomyosis                  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst                         | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dilation                     | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  | ANIMAL ID   | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 4 | 7 | 7 | 7 | 6 | 6 | 5 | 6 | 7 | 7 | 4 | 7 | 3 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 |
|  |             | 2 | 0 | 1 | 3 | 3 | 0 | 3 | 4 | 0 | 4 | 3 | 3 | 3 | 6 | 5 | 2 | 4 | 4 | 6 | 4 | 1 | 2 | 4 | 4 | 3 | 9 | 8 | 4 | 4 | 9 | 8 | 4 | 4 | 3 | 9 |
|  |             | 9 | 6 | 1 | 1 | 8 | 0 | 7 | 4 | 7 | 1 | 8 | 9 | 5 | 0 | 0 | 3 | 1 | 4 | 4 | 4 | 9 | 8 | 4 | 9 | 3 | 9 | 4 | 4 | 9 | 3 | 9 | 4 | 3 | 9 |   |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
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|  |             | 4 | 5 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |

females  
(cont...)

Infiltration Cellular, Plasma Cell  
 Inflammation, Suppurative  
 Inflammation, Acute  
 Thrombus  
 Cervix, Hyperplasia, Stromal  
 Cervix, Thrombus  
 Cervix, Epithelium, Hyperplasia  
 Endometrium, Hyperplasia, Cystic  
 Epithelium, Metaplasia, Squamous  
 Glands, Dilation

|  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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Vagina

HEMATOPOIETIC SYSTEM

Bone Marrow  
 Fibrosis  
 Hypercellularity

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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Lymph Node  
 Erythrophagocytosis  
 Iliac, Erythrophagocytosis  
 Iliac, Proliferation, Plasma Cell  
 Iliac, Lymphatic Sinus, Ectasia  
 Inguinal, Lymphatic Sinus, Ectasia  
 Lumbar, Erythrophagocytosis  
 Lymphatic Sinus, Renal, Ectasia  
 Mediastinal, Erythrophagocytosis  
 Renal, Erythrophagocytosis

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr                    | DAY ON TEST |      | ANIMAL ID |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |      |
|---|-------------|------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|
|   | 0729        | 0776 | 0771      | 0773 | 0773 | 0730 | 0773 | 0774 | 0740 | 0743 | 0733 | 0733 | 0765 | 0766 | 0755 | 0765 | 0723 | 0744 | 0744 | 0773 | 0766 | 0776 |                      | 0766 |
| Lymph Node, Mandibular Congestion   | +           | +    | +         | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    | +    |
| Erythrophagocytosis   |             |      |           |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |                      |      |
| Hyperplasia, Lymphocyte Proliferation, Plasma Cell Lymphatic Sinus, Ectasia | 34          |      | 12        | 11   |      |      | 21   |      | 11   |      |      |      |      |      | 11   |      | 11   | 11   | 12   |      |      | 32   | 11                   |      |
| Lymph Node, Mesenteric Erythrophagocytosis                                  | +           | +    | +         | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    | +    |
| Spleen Accessory Spleen   | +           | +    | +         | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | X    | +    | +    | +    | +    | +    | +    | +    | +    | +                    |      |
| Extramedullary Hematopoiesis  |             |      | 3         |      | 12   | 21   | 41   | 21   |      |      |      |      | 12   |      |      |      | 22   | 12   | 32   | 22   |      |      | 2                    |      |
| Fibrosis  |             |      |           |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |
| Hemorrhage  |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |                      |      |
| Hyperplasia, Lymphocyte Pigment   | 2           |      |           | 31   | 11   | 21   |      |      | 22   | 34   |      |      |      | 1    |      | 11   | 11   | 31   | 11   | 23   | 33   |      |                      |      |
| Red Pulp, Atrophy   |             |      |           | 2    |      |      |      |      |      |      | 24   |      |      |      |      |      |      |      |      |      |      |      | 2                    |      |
| White Pulp, Atrophy   |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |
| Thymus Atrophy  | +           | +    | +         | I    | +    | +    | +    | +    | +    | +    | I    | +    | +    | +    | +    | M    | +    | +    | +    | +    | +    | +    | +                    |      |
| Cyst  | X           |      | X         |      | X    |      | X    |      | X    |      | X    |      |      | X    |      |      | X    |      |      |      | X    | X    |                      |      |
| Ectopic Parathyroid Gland Hemorrhage  | 2           |      |           |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |                      |      |
| Hyperplasia, Epithelial Artery, Inflammation, Chronic Active                |             |      |           |      | 11   | 11   | 11   |      | 3    |      | 1    |      |      | 11   |      | 21   | 11   | 11   |      | 31   | 11   | 11   |                      |      |

INTEGUMENTARY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
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Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|
|  | 0729        | 0706 | 0701 | 0703 | 0703 | 0708 | 0700 | 0703 | 0704 | 0707 | 0701 | 0708 | 0709 | 0705 | 0706 | 0705 | 0706 | 0707 | 0704 | 0707 | 0703 | 0706 | 0707 | 0706 |           |                      |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         |                      |
|  | 1           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1         |                      |
|  | 5           | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5         |                      |
|  | 0           | 0    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 3    | 3    | 3         |                      |
|  | 4           | 5    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3         |                      |

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|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Galactoceles   |   |   | X |   | X |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia    | 2 |   |   | 2 |   |   |   | 2 |   |   | 4 | 3 |   |   | 4 | 2 |   | 4 | 2 | 3 | 3 | 2 | 1 |   |   |
| Duct, Dilation | 3 |   | 3 | 2 | 2 |   | 2 | 3 | 1 | 1 |   | 1 | 3 |   |   | 1 |   | 1 |   |   |   | 4 | 3 | 4 | 2 |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Skin  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst Epithelial Inclusion                         |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperkeratosis                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Subcutaneous Tissue, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

MUSCULOSKELETAL SYSTEM

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibrous Osteodystrophy |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Skeletal Muscle        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Degeneration           |   |   | 1 |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

NERVOUS SYSTEM

|                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Compression             | 2 |   |   | 2 |   |   | 1 |   |   |   |   |   | 2 | 1 |   |   |   |   |   | 1 |   |   | 3 | 1 |
| Cyst                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Edema                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineral                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Choroid Plexus, Mineral |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Neuron, Necrosis        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
|---|-------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 07<br>29       | 07<br>06       | 07<br>01       | 07<br>03       | 07<br>03       | 07<br>00       | 07<br>03       | 07<br>04       | 07<br>07       | 07<br>04       | 07<br>01       | 07<br>08       | 07<br>09       | 06<br>05       | 06<br>03       | 07<br>04       | 07<br>04       | 07<br>06       | 07<br>04       | 03<br>01       | 06<br>02       | 07<br>04       | 06<br>04       | 07<br>09       | 06<br>03       | 07<br>09       |                |
|   | ANIMAL ID   | 01<br>50<br>04 | 01<br>55<br>05 | 01<br>55<br>00 | 01<br>55<br>01 | 01<br>55<br>01 | 01<br>55<br>01 | 01<br>55<br>01 | 01<br>55<br>01 | 01<br>55<br>01 | 01<br>55<br>01 | 01<br>55<br>01 | 01<br>55<br>02 | 01<br>55<br>06 | 01<br>55<br>07 | 01<br>55<br>02 | 01<br>55<br>03 | 01<br>55<br>04 | 01<br>55<br>05 | 01<br>55<br>06 | 01<br>55<br>07 | 01<br>55<br>08 | 01<br>55<br>09 | 01<br>55<br>10 | 01<br>55<br>11 | 01<br>55<br>12 | 01<br>55<br>13 | 01<br>55<br>14 |
|   |             | 4              | 5              | 0              | 1              | 2              | 3              | 4              | 5              | 6              | 7              | 8              | 9              | 0              | 1              | 2              | 3              | 4              | 5              | 6              | 7              | 8              | 9              | 0              | 1              | 2              | 3              | 4              |

females (cont...)

Pineal Gland, Infiltration Cellular, Mononuclear Cell

1

Nerve Trigeminal Degeneration

+ | +  
1 2 2 1 1 3 2 2 2 2 1 1 3 2 3 2 3 2 3 1 3

Peripheral Nerve, Sciatic Degeneration

+  
2 2 2 2 2 1 1 2 2 2 2 1 2 1 2 2 1 2 1 1 1 1

Peripheral Nerve, Tibial Degeneration

+  
2 2 3 2 2 1 2 2 2 2 1 1 1 3 2 2 2 1 1 1 1

Spinal Cord, Cervical Degeneration

+  
1 1 1 1 2 1 3 2 2 2 2 2 2 2 2 2 2 1 1 1 2

Spinal Cord, Lumbar Degeneration Nerve, Degeneration

+  
3 2 3 2 2 2 2 2 3 1 2 2 2 2 2 2 2 2 1 1 1 1

Spinal Cord, Thoracic Degeneration

+  
1 1 1 1 2 1 3 2 2 2 2 2 2 2 3 2 2 1 1 2

Trigeminal Ganglion Degeneration

| + + + + + M + + + + + + + M + + M + + + + + + +  
2 1

RESPIRATORY SYSTEM

Lung

+ +

Congestion

2 2 2

Foreign Body

Hemorrhage

1 1 2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | females<br>(cont...) |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                      |
|  | 7           | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 4 | 7 | 7 | 7 | 6 | 6 | 5 | 6 | 7 | 7 | 4 | 7 | 3 | 6 | 7 | 6 |                      |
|  | 2           | 0 | 1 | 3 | 3 | 0 | 3 | 4 | 0 | 4 | 3 | 3 | 3 | 6 | 5 | 2 | 4 | 4 | 6 | 4 | 1 | 2 | 4 | 3 |                      |
|  | 9           | 6 | 1 | 1 | 8 | 0 | 7 | 4 | 7 | 1 | 8 | 9 | 5 | 0 | 0 | 3 | 1 | 4 | 4 | 4 | 9 | 8 | 4 | 9 |                      |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                      |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |                      |
|  | 5           | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |                      |
|  | 0           | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 |                      |
|  | 4           | 5 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |                      |

Inflammation, Granulomatous 1 1  
 Inflammation, Chronic Active 1 2  
 Alveolar Epithelium, Hyperplasia  
 Alveolar Epithelium, Metaplasia, Squamous  
 Alveolus, Infiltration Cellular, Histiocyte 2 1 2 3 2 2 2 1 2 3 2 2 1 2 2 1 2 2 1 1 2  
 Bronchus, Hyperplasia  
 Epithelium Alveolus, Hyperplasia

Nose + A + + + + + + + + X  
 Foreign Body 2 1  
 Inflammation, Suppurative 1  
 Inflammation, Acute  
 Inflammation, Chronic Active  
 Nerve, Degeneration  
 Olfactory Epithelium, Accumulation, Hyaline Droplet 3 3 3 3 3 2 2 3 2 1 3 1 2 1 2 3 2 3 2 3 2 3 2  
 Olfactory Epithelium, Metaplasia, Squamous  
 Respiratory Epithelium, Accumulation, Hyaline Droplet 1 1 1 2 1 1 1  
 Respiratory Epithelium, Hyperplasia

Trachea + A +  
 Inflammation, Chronic Active  
 Epithelium, Hyperplasia  
 Epithelium, Metaplasia, Squamous  
 Glands, Cyst

**SPECIAL SENSES SYSTEM**

Eye + A + + + + + + A + + + A + + + + + + + + + + + +

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation 1-4 .. Lesion qualified as:  
 I .. Insufficient tissue BLANK .. Not examined microscopically 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |                      |    |
|--|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------|----|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST | 07  | 07  | 07  | 07  | 07  | 03  | 07  | 07  | 04  | 07  | 07  | 06  | 06  | 05  | 06  | 07  | 07  | 04  | 07  | 03  | 06  | 07  | 06  | 07  | females<br>(cont...) |    |
|  |             | 29  | 01  | 13  | 33  | 08  | 00  | 03  | 04  | 07  | 04  | 03  | 03  | 06  | 05  | 02  | 04  | 04  | 06  | 04  | 01  | 02  | 04  | 04  | 03  |                      |    |
|  |             | 00  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  | 01  |                      | 01 |
|  | ANIMAL ID   | 504 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 515 |                      |    |

Anterior Chamber, Exudate  
Anterior Chamber, Iris, Synechia  
Cornea, Fibrosis  
Cornea, Inflammation, Acute  
Cornea, Inflammation, Chronic Active  
Cornea, Neovascularization  
Cornea, Epithelium, Hyperplasia  
Lens, Cataract  
Retina, Atrophy  
Retina, Dysplasia

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Harderian Gland Atrophy      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Granulomatous  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

### URINARY SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Nephropathy, Chronic Progressive  | 1 |   | 1 |   | 1 | 1 | 2 | 1 |   | 1 |   |   | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |   | 1 | 1 | 1 | 1 |
| Pelvis, Inflammation, Suppurative |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pelvis, Urothelium, Hyperplasia   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal Tubule, Cyst                |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal Tubule, Necrosis            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Urinary Bladder                   | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Edema                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Histiocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|   |             | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 4 | 7 | 7 | 7 | 6 | 6 | 5 | 6 | 7 | 7 | 4 | 7 | 3 | 6 | 7 | 6 | 7 |
|   |             | 2 | 0 | 1 | 3 | 3 | 0 | 3 | 4 | 0 | 4 | 3 | 3 | 3 | 6 | 5 | 2 | 4 | 4 | 6 | 4 | 1 | 2 | 4 | 4 | 3 |
|   | 9           | 6 | 1 | 1 | 8 | 0 | 7 | 4 | 7 | 1 | 8 | 9 | 5 | 0 | 0 | 3 | 1 | 4 | 4 | 4 | 9 | 8 | 4 | 9 | 9 |   |
|   | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|   |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |
|   |             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |   |
|   |             | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 |   |
|   |             | 4 | 5 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 |   |
| <b>females (cont...)</b>  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Inflammation, Acute  
 Inflammation, Chronic Active  
 Artery, Inflammation, Chronic Active

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| <b>HARLAN SPRAGUE DAWLEY RATS<br/>FEMALE</b><br><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|   | ANIMAL ID   | 7 | 6 | 5 | 7 | 6 | 7 | 7 | 3 | 7 | 7 | 6 | 6 | 6 | 6 | 7 |  |
|   |             | 4 | 7 | 3 | 4 | 9 | 2 | 4 | 0 | 4 | 1 | 9 | 9 | 5 | 9 | 3 |  |
|   |             | 0 | 6 | 2 | 0 | 9 | 9 | 1 | 0 | 0 | 1 | 5 | 9 | 6 | 9 | 7 |  |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|   |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |
|   |             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |  |
|   |             | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |  |
|   |             | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |  |
| <b>* TOTALS</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

**ALIMENTARY SYSTEM**

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |               |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---------------|
| Esophagus                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |               |
| Dilation                             |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |           | <b>2 2.5</b>  |
| Muscularis, Degeneration             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b>  |
| Intestine Large, Cecum               | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>82</b> |               |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |           | <b>2 2.5</b>  |
| Intestine Large, Colon               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>89</b> |               |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |           | <b>1 2.0</b>  |
| Intestine Large, Rectum              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>88</b> |               |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |           | <b>1 2.0</b>  |
| Intestine Small, Duodenum            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>86</b> |               |
| Intestine Small, Ileum               | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>83</b> |               |
| Intestine Small, Jejunum             | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | <b>81</b> |               |
| Liver                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |               |
| Angiectasis                          |   |   |   | 1 |   | 1 |   |   |   |   |   |   |   |   |   |           | <b>3 1.3</b>  |
| Basophilic Focus                     |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |           | <b>11</b>     |
| Clear Cell Focus                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>4</b>      |
| Eosinophilic Focus                   |   |   |   | X |   |   |   |   | X |   |   |   |   |   |   |           | <b>17</b>     |
| Extramedullary Hematopoiesis         |   |   | 1 |   | 1 |   |   |   |   |   |   | 1 |   |   |   |           | <b>11 1.0</b> |
| Infiltration Cellular, Histiocyte    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b>  |
| Infiltration Cellular, Mixed Cell    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2 1.0</b>  |
| Inflammation, Granulomatous          |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |           | <b>1 2.0</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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Experiment Number: 20105 - 56

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr              | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |       |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|-------|
|   | 0<br>7<br>4<br>0      | 0<br>6<br>7<br>6      | 0<br>5<br>3<br>2      | 0<br>7<br>4<br>0      | 0<br>6<br>9<br>9      | 0<br>7<br>2<br>9      | 0<br>7<br>4<br>1      | 0<br>3<br>0<br>0      | 0<br>7<br>4<br>0      | 0<br>7<br>1<br>1      | 0<br>6<br>9<br>5      | 0<br>6<br>9<br>9      | 0<br>6<br>5<br>6      | 0<br>7<br>3<br>7      |          |       |
| ANIMAL ID   | 0<br>1<br>5<br>3<br>4 | 0<br>1<br>5<br>3<br>5 | 0<br>1<br>5<br>3<br>6 | 0<br>1<br>5<br>3<br>7 | 0<br>1<br>5<br>4<br>0 | 0<br>1<br>5<br>4<br>1 | 0<br>1<br>5<br>4<br>2 | 0<br>1<br>5<br>4<br>3 | 0<br>1<br>5<br>4<br>4 | 0<br>1<br>5<br>4<br>5 | 0<br>1<br>5<br>4<br>6 | 0<br>1<br>5<br>4<br>7 | 0<br>1<br>5<br>4<br>8 | 0<br>1<br>5<br>4<br>9 |          |       |
| Mixed Cell Focus  |                       |                       |                       |                       |                       | X                     |                       |                       | X                     |                       |                       |                       |                       |                       | 17       |       |
| Pigment   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0    |       |
| Artery, Inflammation, Chronic Active                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       | 1 2.0    |       |
| Bile Duct, Cyst   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     | X                     |                       | 14       |       |
| Bile Duct, Fibrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |       |
| Bile Duct, Hyperplasia  |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       | 10 1.2   |       |
| Hepatocyte, Hypertrophy   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 1.5    |       |
| Hepatocyte, Necrosis  |                       |                       | 2                     |                       |                       |                       |                       |                       |                       | 3                     | 1                     |                       |                       |                       | 9 2.1    |       |
| Hepatocyte, Vacuolation, Cytoplasmic<br>Periductal, Cholangiofibrosis |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       | 5 2.2    |       |
| Mesentery   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     | +        | 3     |
| Necrosis  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          | 1 2.0 |
| Artery, Inflammation, Chronic Active                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     | 3        | 2 3.0 |
| Oral Mucosa   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          | 1     |
| Inflammation, Chronic Active  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          | 1 4.0 |
| Pancreas  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |          | 90    |
| Acinus, Atrophy   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          | 2 1.0 |
| Acinus, Hyperplasia   |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          | 4 1.5 |
| Artery, Inflammation, Chronic Active                                  |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       | 3                     | 3                     | 2        | 5 2.4 |
| Periductal, Cholangiofibrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          | 3 1.3 |
| Salivary Glands   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |          | 90    |
| Degeneration  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          | 1 1.0 |
| Artery, Inflammation, Chronic Active                                  |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       | 3                     | 2        | 3 2.7 |
| Duct, Parotid Gland, Dilation   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          | 1 2.0 |
| Parotid Gland, Atrophy  |                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       | 2                     |                       |                       |                       |          | 7 2.9 |
| Parotid Gland, Inflammation, Suppurative                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          | 1 1.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                          | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                      | 7         | 6 | 5 | 7 | 6 | 7 | 7 | 3 | 7 | 7 | 6 | 6 | 6 | 6 | 7 | 7 |
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE | 4         | 7 | 3 | 4 | 9 | 2 | 4 | 0 | 4 | 1 | 9 | 9 | 5 | 9 | 3 |   |
|                                      | 0         | 6 | 2 | 0 | 9 | 9 | 1 | 0 | 0 | 1 | 5 | 9 | 6 | 9 | 7 |   |
| 1.5W/kg(CDMA)chr                     | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                      |           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                                      | 5         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |   |
|                                      | 3         | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |   |
|                                      | 4         | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |   |

\* TOTALS

|                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |
|------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-----|
| Parotid Gland, Inflammation, Acute |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1.0 |
| Sublingual Gland, Atrophy          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 2.5 |
| Sublingual Gland, Metaplasia       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1.0 |

|                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Stomach, Forestomach                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
| Edema                               |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2.5 |
| Erosion                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2.0 |
| Fibrosis                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2.0 |
| Inflammation, Chronic Active        |   |   |   |   | 1 |   |   |   |   |   |   |   | 2 |   |   |   |    | 2.0 |
| Ulcer                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2.7 |
| Epithelium, Hyperplasia             |   | 3 |   |   | 2 | 1 |   |   |   |   |   |   | 3 | 1 |   |   | 11 | 2.1 |
| Epithelium, Hyperplasia, Basal Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1.0 |

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Stomach, Glandular                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
| Cyst                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |    | 2.0 |

CARDIOVASCULAR SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Aorta                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
| Heart                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
| Cardiomyopathy                         | 1 | 1 |   |   |   | 1 | 2 |   | 1 |   | 1 | 1 | 1 | 1 | 1 |   | 43 | 1.1 |
| Artery, Inflammation, Chronic          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2.0 |
| Artery, Mineral                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1.0 |
| Artery, Necrosis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1.0 |
| Endocardium, Hyperplasia, Schwann Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3.0 |
| Ventricle Right, Cardiomyopathy        |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 7  | 1.0 |

ENDOCRINE SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0740        | 0670  | 0536  | 0740  | 0699  | 0729  | 0771  | 0300  | 0740  | 0771  | 0665  | 0665  | 0665  | 0665  |          |
| ANIMAL ID  | 01534       | 01535 | 01536 | 01537 | 01538 | 01539 | 01540 | 01541 | 01542 | 01543 | 01544 | 01545 | 01546 | 01547 | 01548    |
| Adrenal Cortex   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 90       |
| Accessory Adrenal Cortical Nodule                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 7        |
| Degeneration, Cystic                                     | 3           |       |       |       |       |       |       |       |       |       | 1     |       | 2     | 1     | 19 2.1   |
| Hyperplasia  |             |       |       | 2     | 3     | 2     |       |       |       |       | 2     |       | 2     | 2     | 31 1.7   |
| Hypertrophy  | 2           | 2     |       | 1     | 2     |       | 2     |       |       | 2     | 4     | 2     | 2     | 1     | 55 1.6   |
| Necrosis   |             |       |       |       |       |       |       |       |       | 3     |       |       |       |       | 2 3.0    |
| Vacuolation, Cytoplasmic                                 | 1           |       |       |       |       |       |       |       |       | 1     |       | 1     |       | 2     | 17 1.1   |
| Adrenal Medulla  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 89       |
| Hyperplasia  |             |       |       | 1     |       |       | 1     |       |       |       |       |       |       | 1     | 20 1.7   |
| Islets, Pancreatic                                       | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 89       |
| Hyperplasia  |             |       |       |       |       | 2     | 1     |       |       | 2     |       |       |       |       | 12 1.3   |
| Parathyroid Gland  | +           | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 80       |
| Fibrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 11 1.2   |
| Hyperplasia  |             |       |       |       |       |       |       |       |       |       |       |       | 3     |       | 2 3.0    |
| Pituitary Gland  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 89       |
| Angiectasis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0    |
| Pars Distalis, Cyst                                      |             |       |       |       |       |       |       |       |       | X     |       |       |       |       | 5        |
| Pars Distalis, Hyperplasia                               | 1           |       | 2     | 2     | 2     |       |       |       | 2     | 1     |       |       |       |       | 22 2.2   |
| Pars Intermedia, Cyst                                    |             |       |       |       | X     |       |       |       |       |       |       |       |       |       | 3        |
| Thyroid Gland  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 90       |
| C-cell, Hyperplasia                                      | 1           |       |       |       |       |       | 3     |       | 2     | 2     | 1     |       |       |       | 30 1.9   |
| Follicular Cell, Hyperplasia                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0    |

GENERAL BODY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                              |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|--|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| <b>HARLAN SPRAGUE DAWLEY RATS FEMALE</b> |                         | 7 | 6 | 5 | 7 | 6 | 7 | 7 | 3 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 7 |   |  |
|  |                         | 4 | 7 | 3 | 4 | 9 | 2 | 4 | 0 | 4 | 1 | 9 | 9 | 5 | 9 | 3 |   |   |  |
|  |                         | 0 | 6 | 2 | 0 | 9 | 9 | 1 | 0 | 0 | 1 | 5 | 9 | 6 | 9 | 7 |   |   |  |
|  | <b>1.5W/kg(CDMA)chr</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| ANIMAL ID                                |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
|  |                         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |   |  |
|  |                         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |   |   |  |
|  |                         | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |   |   |  |
|  |                         | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |   |   |  |
| <b>* TOTALS</b>                          |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

|                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |              |
|------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------|
| Tissue NOS                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>11</b>    |
| Cyst                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1</b>     |
| Inflammation, Chronic Active       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1 4.0</b> |
| Abdominal, Fat, Necrosis           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>5 2.0</b> |
| Fat, Necrosis                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>4 2.3</b> |
| Mediastinum, Hemorrhage            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1 4.0</b> |
| Mediastinum, Inflammation, Chronic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1 4.0</b> |

**GENITAL SYSTEM**

|                              |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  |               |
|------------------------------|--|--|--|--|--|--|--|---|---|---|---|---|--|--|--|--|--|--|---------------|
| Clitoral Gland               |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>88</b>     |
| Hyperplasia                  |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>1 4.0</b>  |
| Inflammation, Suppurative    |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>1 2.0</b>  |
| Inflammation, Acute          |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>1 1.0</b>  |
| Inflammation, Chronic Active |  |  |  |  |  |  |  | 1 | 1 | 3 |   | 3 |  |  |  |  |  |  | <b>43 2.0</b> |
| Duct, Dilation               |  |  |  |  |  |  |  | 2 | 4 | 2 | 3 | 4 |  |  |  |  |  |  | <b>64 2.8</b> |
| Duct, Hyperplasia            |  |  |  |  |  |  |  |   |   |   |   | 2 |  |  |  |  |  |  | <b>3 2.3</b>  |
| Ovary                        |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>90</b>     |
| Atrophy                      |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>69 3.4</b> |
| Cyst                         |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>27</b>     |
| Fibrosis                     |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>1 1.0</b>  |
| Inflammation, Chronic        |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>1 1.0</b>  |
| Bursa, Dilation              |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>4 2.3</b>  |
| Rete Ovarii, Hyperplasia     |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>17 1.6</b> |
| Uterus                       |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>90</b>     |
| Adenomyosis                  |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>2 2.0</b>  |
| Cyst                         |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>6</b>      |
| Dilation                     |  |  |  |  |  |  |  |   |   |   |   |   |  |  |  |  |  |  | <b>10 3.2</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   | ANIMAL ID   | 7 | 6 | 5 | 7 | 6 | 7 | 7 | 3 | 7 | 7 | 6 | 6 | 6 | 6 | 7 |
|   |             | 4 | 7 | 3 | 4 | 9 | 2 | 4 | 0 | 4 | 1 | 9 | 9 | 5 | 9 | 3 |
|   |             | 0 | 6 | 2 | 0 | 9 | 9 | 1 | 0 | 0 | 1 | 5 | 9 | 6 | 9 | 7 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|   |             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|   |             | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
|   |             | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| <b>* TOTALS</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|   |   |   |   |  |  |  |  |   |   |  |  |   |   |   |   |   |    |     |
|---|---|---|---|--|--|--|--|---|---|--|--|---|---|---|---|---|----|-----|
| Infiltration Cellular, Plasma Cell                |   |   |   |  |  |  |  |   |   |  |  |   |   |   |   |   | 1  | 2.0 |
| Inflammation, Suppurative                         |   |   | 4 |  |  |  |  | 1 |   |  |  |   |   |   |   | 1 | 11 | 2.0 |
| Inflammation, Acute                               |   |   |   |  |  |  |  |   |   |  |  |   |   |   |   |   | 1  | 1.0 |
| Thrombus  |   |   | 1 |  |  |  |  |   |   |  |  |   |   |   |   |   | 1  | 1.0 |
| Cervix, Hyperplasia, Stromal                      |   |   |   |  |  |  |  |   |   |  |  |   |   |   |   |   | 1  | 3.0 |
| Cervix, Thrombus                                  |   |   |   |  |  |  |  |   |   |  |  |   |   |   |   |   | 1  | 3.0 |
| Cervix, Epithelium, Hyperplasia                   |   |   |   |  |  |  |  |   |   |  |  |   |   |   |   |   | 1  | 1.0 |
| Endometrium, Hyperplasia, Cystic                  | 2 | 3 |   |  |  |  |  |   | 1 |  |  | 1 |   |   |   |   | 43 | 1.7 |
| Epithelium, Metaplasia, Squamous Glands, Dilation | 3 |   |   |  |  |  |  | 4 | 1 |  |  |   | 1 | 1 | 4 |   | 39 | 2.1 |
|   |   |   |   |  |  |  |  |   |   |  |  |   |   |   |   |   | 1  | 3.0 |

Vagina 1

**HEMATOPOIETIC SYSTEM**

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |    |     |  |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|----|-----|--|
| Bone Marrow                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  | 90 |     |  |
| Fibrosis                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | 2  | 2.0 |  |
| Hypercellularity                   |   | 2 | 4 | 4 | 4 | 2 |   | 4 |   | 4 | 4 | 4 | 4 | 4 |   |  | 52 | 2.9 |  |
| Lymph Node                         |   |   |   | + |   |   |   | + |   |   |   |   |   |   |   |  | 8  |     |  |
| Erythrophagocytosis                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | 1  | 3.0 |  |
| Iliac, Erythrophagocytosis         |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |  | 3  | 2.7 |  |
| Iliac, Proliferation, Plasma Cell  |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |  | 1  | 1.0 |  |
| Iliac, Lymphatic Sinus, Ectasia    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | 1  | 3.0 |  |
| Inguinal, Lymphatic Sinus, Ectasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | 1  | 1.0 |  |
| Lumbar, Erythrophagocytosis        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | 2  | 2.5 |  |
| Lymphatic Sinus, Renal, Ectasia    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | 1  | 2.0 |  |
| Mediastinal, Erythrophagocytosis   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | 2  | 3.0 |  |
| Renal, Erythrophagocytosis         |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |  | 2  | 2.5 |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|  | 0<br>7<br>4<br>0      | 0<br>6<br>7<br>6      | 0<br>5<br>3<br>2      | 0<br>7<br>4<br>0      | 0<br>6<br>9<br>9      | 0<br>7<br>2<br>9      | 0<br>7<br>4<br>1      | 0<br>3<br>0<br>0      | 0<br>7<br>4<br>0      | 0<br>7<br>1<br>0      | 0<br>6<br>9<br>5      | 0<br>6<br>6<br>9      | 0<br>6<br>5<br>6      | 0<br>6<br>9<br>9      | 0<br>7<br>3<br>7      |          |
| ANIMAL ID  | 0<br>1<br>5<br>3<br>4 | 0<br>1<br>5<br>3<br>5 | 0<br>1<br>5<br>3<br>6 | 0<br>1<br>5<br>3<br>7 | 0<br>1<br>5<br>4<br>0 | 0<br>1<br>5<br>4<br>1 | 0<br>1<br>5<br>4<br>2 | 0<br>1<br>5<br>4<br>3 | 0<br>1<br>5<br>4<br>4 | 0<br>1<br>5<br>4<br>4 | 0<br>1<br>5<br>4<br>5 | 0<br>1<br>5<br>4<br>6 | 0<br>1<br>5<br>4<br>7 | 0<br>1<br>5<br>4<br>8 | 0<br>1<br>5<br>4<br>9 |          |
| Lymph Node, Mandibular Congestion                        | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90                    |          |
| Erythrophagocytosis                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 2.0                 |          |
| Hyperplasia, Lymphocyte Proliferation, Plasma Cell       |                       |                       |                       |                       | 3                     | 1                     |                       | 1                     | 1                     | 2                     |                       |                       |                       |                       | 49 1.6                |          |
| Lymphatic Sinus, Ectasia                                 |                       | 2                     | 1                     | 1                     | 4                     | 2                     |                       | 1                     | 1                     | 3                     | 2                     | 1                     |                       | 2                     | 68 1.8                |          |
| Lymph Node, Mesenteric Erythrophagocytosis               | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90                    |          |
| Spleen   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90                    |          |
| Accessory Spleen   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |          |
| Extramedullary Hematopoiesis                             | 1                     |                       | 4                     | 3                     | 4                     | 1                     | 2                     | 1                     | 2                     | 3                     | 4                     | 4                     | 3                     | 3                     | 74 2.1                |          |
| Fibrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |          |
| Hemorrhage   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |          |
| Hyperplasia, Lymphocyte Pigment                          | 2                     | 3                     |                       | 1                     | 2                     | 3                     | 1                     | 2                     | 1                     | 1                     | 1                     | 2                     | 1                     | 3                     | 79 2.0                |          |
| Red Pulp, Atrophy  |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 11 2.5                |          |
| White Pulp, Atrophy                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       | 3 2.0                 |          |
| Thymus   | +                     | +                     | +                     | +                     | M                     | +                     | +                     | +                     | +                     | +                     | +                     | M                     | +                     | +                     | 83                    |          |
| Atrophy  | 1                     | 2                     | 1                     | 2                     |                       | 1                     | 2                     |                       |                       | 2                     | 3                     |                       | 4                     | 2                     | 67 1.7                |          |
| Cyst   | X                     |                       | X                     | X                     |                       |                       | X                     |                       |                       |                       |                       |                       | X                     | X                     | 34                    |          |
| Ectopic Parathyroid Gland                                |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       | 2                     |          |
| Hemorrhage   |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 5 2.0                 |          |
| Hyperplasia, Epithelial                                  |                       | 2                     | 1                     | 1                     |                       | 2                     |                       |                       |                       | 1                     |                       | 2                     | 2                     | 1                     | 59 1.3                |          |
| Artery, Inflammation, Chronic Active                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     | 3                     | 2 2.0                 |          |

**INTEGUMENTARY SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1.5W/kg(CDMA)chr | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0740        | 0670  | 0532  | 0740  | 0699  | 0772  | 0779  | 0330  | 0770  | 0771  | 0666  | 0666  | 0666  | 0666  | 0773  |          |
| ANIMAL ID  | 01534       | 01535 | 01536 | 01537 | 01538 | 01539 | 01540 | 01541 | 01542 | 01543 | 01544 | 01545 | 01546 | 01547 | 01548 | 01549    |
| Mammary Gland  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 90       |
| Galactoceles   | X           | X     | X     |       |       |       | X     |       |       |       |       |       |       |       |       | 17       |
| Hyperplasia  | 1           |       | 3     | 2     | 2     | 2     |       |       |       | 1     | 4     |       |       |       |       | 50 2.1   |
| Duct, Dilation   | 1           | 2     | 2     |       | 2     | 4     | 4     |       | 2     |       |       | 1     | 4     | 2     | 2     | 61 2.1   |
| Skin   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 90       |
| Cyst Epithelial Inclusion                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Hyperkeratosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0    |
| Subcutaneous Tissue, Inflammation, Chronic Active        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 4.0    |
| <b>MUSCULOSKELETAL SYSTEM</b>                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Bone   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 90       |
| Fibrous Osteodystrophy                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0    |
| Skeletal Muscle  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 90       |
| Degeneration   |             |       |       |       |       |       |       |       |       | 1     |       |       | 3     |       |       | 7 1.3    |
| <b>NERVOUS SYSTEM</b>                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Brain  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 90       |
| Compression  |             |       | 3     |       |       | 2     | 1     |       |       |       |       | 1     |       |       | 2     | 31 1.8   |
| Cyst   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Edema  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0    |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0    |
| Mineral  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0    |
| Choroid Plexus, Mineral                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0    |
| Neuron, Necrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                   | 7 | 6 | 5 | 7 | 6 | 7 | 7 | 3 | 7 | 7 | 6 | 6 | 6 | 6 | 7 | 7 | 7 |
| <b>HARLAN SPRAGUE DAWLEY RATS</b> | 4 | 7 | 3 | 4 | 9 | 2 | 4 | 0 | 4 | 1 | 9 | 9 | 5 | 9 | 3 | 3 | 3 |
| <b>FEMALE</b>                     | 0 | 6 | 2 | 0 | 9 | 9 | 1 | 0 | 0 | 1 | 5 | 9 | 6 | 9 | 7 | 7 | 7 |
| <b>1.5W/kg(CDMA)chr</b>           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <b>ANIMAL ID</b>                  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                                   | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|                                   | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|                                   | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0 |
| <b>* TOTALS</b>                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Pineal Gland, Infiltration Cellular, Mononuclear Cell 1 1.0

Nerve Trigeminal Degeneration 84  
70 2.1

Peripheral Nerve, Sciatic Degeneration 90  
83 1.6

Peripheral Nerve, Tibial Degeneration 90  
77 1.7

Spinal Cord, Cervical Degeneration 90  
29 1.0

Spinal Cord, Lumbar Degeneration 90  
 Nerve, Degeneration 11 1.0  
77 2.0

Spinal Cord, Thoracic Degeneration 90  
64 1.7

Trigeminal Ganglion Degeneration 77  
21 1.0

**RESPIRATORY SYSTEM**

Lung 90  
 Congestion 12 1.8  
 Foreign Body 1  
 Hemorrhage 6 1.2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                   | 7 | 6 | 5 | 7 | 6 | 7 | 7 | 3 | 7 | 7 | 6 | 6 | 6 | 6 | 7 | 7 | 7 |
| <b>HARLAN SPRAGUE DAWLEY RATS</b> | 4 | 7 | 3 | 4 | 9 | 2 | 4 | 0 | 4 | 1 | 9 | 9 | 5 | 9 | 3 | 3 | 3 |
| <b>FEMALE</b>                     | 0 | 6 | 2 | 0 | 9 | 9 | 1 | 0 | 0 | 1 | 5 | 9 | 6 | 9 | 7 | 7 | 7 |
| <b>1.5W/kg(CDMA)chr</b>           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| ANIMAL ID                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                                   | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|                                   | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|                                   | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 |
| <b>* TOTALS</b>                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |    |     |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|----|-----|
| Inflammation, Granulomatous                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  | 5  | 1.2 |
| Inflammation, Chronic Active                |   |   | 1 |   | 1 |   |   |   |   |   |   |   |   |   |  |  |  | 6  | 1.2 |
| Alveolar Epithelium, Hyperplasia            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  | 1  | 1.0 |
| Alveolar Epithelium, Metaplasia, Squamous   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  | 1  | 1.0 |
| Alveolus, Infiltration Cellular, Histiocyte | 1 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 |  |  |  | 77 | 1.6 |
| Bronchus, Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  | 1  | 3.0 |
| Epithelium Alveolus, Hyperplasia            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  | 2  | 1.5 |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 89 |     |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   | 3  | 1.3 |
| Inflammation, Acute                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 1  | 1.0 |
| Nerve, Degeneration                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 3 | 2 | 3 | 1 | 3 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 |   |   | 89 | 2.3 |
| Olfactory Epithelium, Metaplasia, Squamous            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   | 1 |   |   |   |   | 1 |   | 1 |   | 19 | 1.1 |
| Respiratory Epithelium, Hyperplasia                   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   | 1  | 2.0 |
| Trachea   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 88 |     |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Epithelium, Hyperplasia                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Epithelium, Metaplasia, Squamous                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Glands, Cyst  |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | 1  |     |

SPECIAL SENSES SYSTEM

|     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 86 |  |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|   | ANIMAL ID   | 7 | 6 | 5 | 7 | 6 | 7 | 7 | 3 | 7 | 7 | 6 | 6 | 6 | 6 | 7 |  |
|   |             | 4 | 7 | 3 | 4 | 9 | 2 | 4 | 0 | 4 | 1 | 9 | 9 | 5 | 9 | 3 |  |
|   |             | 0 | 6 | 2 | 0 | 9 | 9 | 1 | 0 | 0 | 1 | 5 | 9 | 6 | 9 | 7 |  |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|   |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |
|   |             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |  |
|   |             | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |  |
|   |             | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |  |
| <b>* TOTALS</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

|                                      |  |  |  |  |  |  |  |  |   |  |  |  |   |   |   |   |               |
|--------------------------------------|--|--|--|--|--|--|--|--|---|--|--|--|---|---|---|---|---------------|
| Anterior Chamber, Exudate            |  |  |  |  |  |  |  |  |   |  |  |  |   |   |   |   | <b>1 2.0</b>  |
| Anterior Chamber, Iris, Synechia     |  |  |  |  |  |  |  |  |   |  |  |  | 4 |   |   |   | <b>1 4.0</b>  |
| Cornea, Fibrosis                     |  |  |  |  |  |  |  |  |   |  |  |  | 3 |   |   |   | <b>1 3.0</b>  |
| Cornea, Inflammation, Acute          |  |  |  |  |  |  |  |  |   |  |  |  |   |   |   |   | <b>2 1.0</b>  |
| Cornea, Inflammation, Chronic Active |  |  |  |  |  |  |  |  |   |  |  |  |   | 1 |   |   | <b>1 1.0</b>  |
| Cornea, Neovascularization           |  |  |  |  |  |  |  |  |   |  |  |  |   | 3 |   |   | <b>1 3.0</b>  |
| Cornea, Epithelium, Hyperplasia      |  |  |  |  |  |  |  |  |   |  |  |  |   |   | 1 |   | <b>2 1.0</b>  |
| Lens, Cataract                       |  |  |  |  |  |  |  |  |   |  |  |  |   | 1 |   |   | <b>3 2.0</b>  |
| Retina, Atrophy                      |  |  |  |  |  |  |  |  | 1 |  |  |  |   |   |   | 1 | <b>17 1.0</b> |
| Retina, Dysplasia                    |  |  |  |  |  |  |  |  |   |  |  |  |   | 2 |   |   | <b>1 2.0</b>  |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Harderian Gland              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |
| Atrophy                      | 1 |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1 |   | <b>15 1.1</b> |
| Inflammation, Granulomatous  |   |   |   |   | 1 |   |   |   |   |   |   | 1 |   |   |   |   | <b>6 1.0</b>  |
| Inflammation, Chronic        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>4 1.0</b>  |

**URINARY SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Kidney                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |
| Nephropathy, Chronic Progressive  | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 |   |   |   | 1 | 3 | 3 | 4 | <b>76 1.3</b> |
| Pelvis, Inflammation, Suppurative |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 1.0</b>  |
| Pelvis, Urothelium, Hyperplasia   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Renal Tubule, Cyst                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>      |
| Renal Tubule, Necrosis            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |              |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Urinary Bladder                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>88</b>    |
| Edema                             |   |   |   |   | 2 |   |   | 2 |   |   |   |   |   |   |   |   | <b>3 2.3</b> |
| Hemorrhage                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b> |
| Infiltration Cellular, Histiocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>1.5W/kg(CDMA)chr</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   | ANIMAL ID   | 7 | 6 | 5 | 7 | 6 | 7 | 7 | 3 | 7 | 7 | 6 | 6 | 6 | 6 | 7 |
|   |             | 4 | 7 | 3 | 4 | 9 | 2 | 4 | 0 | 4 | 1 | 9 | 9 | 5 | 9 | 3 |
|   |             | 0 | 6 | 2 | 0 | 9 | 9 | 1 | 0 | 0 | 1 | 5 | 9 | 6 | 9 | 7 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|   |             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|   |             | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
|   |             | 4 | 5 | 6 | 7 | 0 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 9 |
| <b>* TOTALS</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                                      |   |   |       |
|--------------------------------------|---|---|-------|
| Inflammation, Acute                  | 1 | 2 | 1.0   |
| Inflammation, Chronic Active         | 1 | 1 | 1.0   |
| Artery, Inflammation, Chronic Active |   | 3 | 1 3.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
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Experiment Number: 20105 - 56  
 Test Type: CHRONIC  
 Route: Whole Body Exposure  
 Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA  
 CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018  
 Time Report Requested: 13:31:21  
 First Dose M/F: 09/16/12 / 09/16/12  
 Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | females<br>(cont...) |   |   |   |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|---|---|---|
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                      | 0 |   |   |   |
|  | 5           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 6 | 6 | 7 | 6 | 5 | 7 | 7 | 7 | 7 | 7 |                      | 6 | 7 | 7 | 7 |
|  | 4           | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 3 | 6 | 3 | 3 | 9 | 0 | 3 | 4 | 3 | 3 | 4 | 4 | 7                    | 3 | 4 | 3 | 3 |
|  | 5           | 7 | 8 | 8 | 5 | 4 | 4 | 9 | 1 | 9 | 1 | 9 | 9 | 3 | 8 | 1 | 9 | 9 | 9 | 8 | 4                    | 7 | 1 | 8 | 8 |
| ANIMAL ID  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                    | 0 | 0 | 0 | 0 |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1                    | 1 | 1 | 1 | 1 |
|  | 6           | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6                    | 6 | 6 | 6 | 6 |
|  | 5           | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7                    | 7 | 7 | 7 | 7 |
|  | 6           | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 5 | 7 | 8 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9                    | 1 | 2 | 3 | 4 |

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum<br>Ulcer                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon<br>Diverticulum             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum<br>Hyperplasia, Lymphocyte | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + | + |
| Intestine Small, Duodenum                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum                           | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |
| Basophilic Focus                                   |   |   |   |   |   |   | X |   |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |
| Clear Cell Focus                                   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Eosinophilic Focus                                 |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Extramedullary Hematopoiesis                       |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 2 |   |   |   |   |   |   |
| Infiltration Cellular, Mixed Cell                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus                                   |   | X | X |   |   |   | X |   |   | X |   | X | X |   | X | X | X |   |   |   | X |   |   |   |
| Bile Duct, Cyst                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Bile Duct, Fibrosis                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Bile Duct, Hyperplasia                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |

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 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | females<br>(cont...)  |                       |                       |                       |                       |   |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
|  | 0<br>5<br>4<br>5      | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>8      | 0<br>7<br>4<br>5      | 0<br>7<br>4<br>4      | 0<br>7<br>4<br>4      | 0<br>5<br>5<br>9      | 0<br>5<br>3<br>1      | 0<br>6<br>6<br>9      | 0<br>6<br>3<br>1      | 0<br>7<br>3<br>9      | 0<br>6<br>9<br>9      | 0<br>5<br>3<br>8      | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>9      | 0<br>7<br>3<br>9      | 0<br>7<br>4<br>8      | 0<br>6<br>7<br>4      | 0<br>7<br>3<br>7      |                       |                       | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>8      |                       |   |
|  | 0<br>1<br>6<br>5<br>6 | 0<br>1<br>6<br>5<br>7 | 0<br>1<br>6<br>5<br>8 | 0<br>1<br>6<br>5<br>9 | 0<br>1<br>6<br>6<br>0 | 0<br>1<br>6<br>6<br>1 | 0<br>1<br>6<br>6<br>2 | 0<br>1<br>6<br>6<br>3 | 0<br>1<br>6<br>6<br>5 | 0<br>1<br>6<br>6<br>7 | 0<br>1<br>6<br>6<br>8 | 0<br>1<br>6<br>7<br>0 | 0<br>1<br>6<br>7<br>1 | 0<br>1<br>6<br>7<br>2 | 0<br>1<br>6<br>7<br>3 | 0<br>1<br>6<br>7<br>4 | 0<br>1<br>6<br>7<br>5 | 0<br>1<br>6<br>7<br>6 | 0<br>1<br>6<br>7<br>7 | 0<br>1<br>6<br>7<br>8 | 0<br>1<br>6<br>7<br>9 | 0<br>1<br>6<br>8<br>0 | 0<br>1<br>6<br>8<br>1 | 0<br>1<br>6<br>8<br>2 | 0<br>1<br>6<br>8<br>3 | 0<br>1<br>6<br>8<br>4 |   |
| Hepatocyte, Hypertrophy                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Hepatocyte, Necrosis                                     | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     | 1                     | 3                     |                       |                       |                       |                       |   |
| Hepatocyte, Vacuolation, Cytoplasmic                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       | 3                     |                       |                       |                       |   |
| Kupffer Cell, Pigment                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Periductal, Cholangiofibrosis                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Mesentery  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     |                       |                       |                       |                       |                       |                       | +                     |                       |                       | +                     | +                     |                       |                       |                       |                       |   |
| Hemorrhage   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |   |
| Artery, Inflammation, Chronic Active                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Vein, Degeneration                                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Vein, Inflammation, Chronic Active                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pancreas   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |   |
| Ectopic Liver  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |   |
| Acinus, Atrophy  |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |   |
| Acinus, Hyperplasia                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |   |
| Periductal, Cholangiofibrosis                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Salivary Glands  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |   |
| Duct, Parotid Gland, Dilation                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Duct, Parotid Gland, Fibrosis                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Parotid Gland, Atrophy                                   |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4 |
| Parotid Gland, Fibrosis                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Parotid Gland, Inflammation, Acute                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Parotid Gland, Vacuolation, Cytoplasmic                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Sublingual Gland, Atrophy                                |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Sublingual Gland, Fibrosis                               |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Submandibular Gland, Atrophy                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST      | HARLAN SPRAGUE DAWLEY RATS FEMALE |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | ANIMAL ID | females (cont...) |
|------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------------------|
|                  | 0545                              | 0738  | 0738  | 0738  | 0745  | 0744  | 0744  | 0599  | 0531  | 0669  | 0661  | 0769  | 0653  | 0778  | 0771  | 0779  | 0773  | 0774  | 0674  | 0773  | 0741  | 0778  | 0778  |       |           |                   |
| 3.0W/kg(CDMA)chr | 01656                             | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656 | 01656     |                   |

|                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stomach, Forestomach                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Edema                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibrosis                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active        | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                               |   |   |   |   |   |   |   | 1 |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia             | 2 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia, Basal Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Stomach, Glandular                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Erosion                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

CARDIOVASCULAR SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aorta  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy                                 |   |   |   | 1 | 2 |   |   |   |   |   |   | 1 |   |   |   |   | 1 | 1 |   |   | 3 |   | 1 |
| Atrium, Endocardium, Hyperplasia, Schwann Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epicardium, Inflammation, Acute                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Ventricle Right, Cardiomyopathy                |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accessory Adrenal Cortical Nodule |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic              |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 3 | 3 |   |   |   |   |   |   |
| Extramedullary Hematopoiesis      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia                       |   |   |   | 2 |   |   | 2 |   |   | 1 |   |   | 1 | 2 |   |   | 3 |   |   |   |   | 2 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked



| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | females<br>(cont...)  |   |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
|  | 0<br>5<br>4<br>5      | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>8      | 0<br>7<br>4<br>5      | 0<br>7<br>4<br>4      | 0<br>7<br>4<br>4      | 0<br>5<br>5<br>9      | 0<br>5<br>3<br>1      | 0<br>6<br>6<br>9      | 0<br>6<br>3<br>1      | 0<br>7<br>3<br>9      | 0<br>6<br>6<br>9      | 0<br>5<br>3<br>3      | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>9      | 0<br>7<br>3<br>9      | 0<br>6<br>4<br>8      | 0<br>7<br>7<br>4      | 0<br>6<br>7<br>4      | 0<br>7<br>3<br>7      | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>8      | 0<br>7<br>7<br>8      |                       |                       |   |
|  | 0<br>1<br>6<br>5<br>6 | 0<br>1<br>6<br>5<br>7 | 0<br>1<br>6<br>5<br>8 | 0<br>1<br>6<br>5<br>9 | 0<br>1<br>6<br>6<br>0 | 0<br>1<br>6<br>6<br>1 | 0<br>1<br>6<br>6<br>2 | 0<br>1<br>6<br>6<br>3 | 0<br>1<br>6<br>6<br>5 | 0<br>1<br>6<br>6<br>7 | 0<br>1<br>6<br>6<br>8 | 0<br>1<br>6<br>7<br>0 | 0<br>1<br>6<br>7<br>1 | 0<br>1<br>6<br>7<br>2 | 0<br>1<br>6<br>7<br>3 | 0<br>1<br>6<br>7<br>4 | 0<br>1<br>6<br>7<br>5 | 0<br>1<br>6<br>7<br>6 | 0<br>1<br>6<br>7<br>7 | 0<br>1<br>6<br>7<br>8 | 0<br>1<br>6<br>7<br>9 | 0<br>1<br>6<br>8<br>0 | 0<br>1<br>6<br>8<br>1 | 0<br>1<br>6<br>8<br>2 | 0<br>1<br>6<br>8<br>3 | 0<br>1<br>6<br>8<br>4 |   |
| Hypertrophy  | 1                     | 1                     | 2                     | 1                     |                       | 1                     | 1                     |                       |                       |                       |                       | 2                     |                       |                       | 2                     | 2                     | 1                     | 1                     |                       | 1                     |                       |                       | 2                     | 1                     | 2                     |                       |   |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pigment  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Vacuolation, Cytoplasmic                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     | 2                     |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |   |
| Adrenal Medulla  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | + |
| Hyperplasia  |                       |                       |                       | 1                     |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       | 1                     | 1                     | 2                     |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |   |
| Islets, Pancreatic                                       | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | + |
| Hyperplasia  |                       | 1                     | 1                     |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |   |
| Parathyroid Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | M                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | M                     | +                     | + |
| Cyst   |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Fibrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Hyperplasia, Focal                                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |   |
| Pituitary Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | + |
| Atrophy  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Cyst   |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Fibrosis   |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pigment  |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pars Distalis, Cyst                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |   |
| Pars Distalis, Hyperplasia                               |                       |                       |                       |                       | 2                     |                       |                       | 2                     |                       |                       |                       | 2                     |                       | 2                     |                       |                       |                       |                       |                       |                       | 2                     | 1                     |                       | 3                     | 3                     |                       |   |
| Pars Distalis, Vacuolation, Cytoplasmic                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pars Intermedia, Cyst                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Pars Intermedia, Hyperplasia                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Thyroid Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | + |
| C-cell, Hyperplasia                                      |                       | 3                     |                       | 2                     |                       | 2                     |                       |                       |                       |                       | 3                     |                       | 2                     |                       | 2                     |                       | 2                     |                       |                       |                       | 1                     | 4                     | 1                     |                       |                       |                       |   |
| Follicle, Cyst   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked





Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST      | HARLAN SPRAGUE DAWLEY RATS FEMALE |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | ANIMAL ID | females (cont...) |       |       |       |
|------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------------------|-------|-------|-------|
|                  | 0545                              | 0737  | 0738  | 0738  | 0745  | 0744  | 0744  | 0559  | 0551  | 0669  | 0661  | 0679  | 0669  | 0553  | 0778  | 0771  | 0779  | 0773  | 0664  | 0677  |           |                   | 0774  | 0773  | 0778  |
| 3.0W/kg(CDMA)chr | 01656                             | 01657 | 01658 | 01659 | 01660 | 01661 | 01662 | 01663 | 01664 | 01665 | 01666 | 01667 | 01668 | 01669 | 01670 | 01671 | 01672 | 01673 | 01674 | 01675 | 01676     | 01677             | 01678 | 01679 | 01680 |

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymphatic Sinus, Ectasia             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mesenteric               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Erythrophagocytosis                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lymphocyte              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphatic Sinus, Ectasia             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spleen                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Extramedullary Hematopoiesis         | 4 | 2 | 2 | 4 | 3 | 3 | 2 |   | 2 | 3 | 1 | 1 | 3 |   | 2 | 2 | 2 | 2 | 2 | 3 |   | 1 | 2 | 2 | 2 |
| Hyperplasia, Stromal                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigment                              |   | 2 | 2 | 1 | 2 | 2 | 2 |   | 1 | 1 |   | 2 | 1 | 2 | 1 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 3 | 3 |
| Red Pulp, Atrophy                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| White Pulp, Atrophy                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thymus                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy                              |   | 2 | 2 | 2 | 2 | 1 | 1 |   | 2 | 2 | 4 | 1 | 3 |   | 2 | 1 | 3 | 2 | 1 |   | 4 | 2 |   | 2 | 1 |
| Cyst                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ectopic Parathyroid Gland            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                           | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Epithelial              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lymphocyte              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**INTEGUMENTARY SYSTEM**

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |  |  |   |   |  |  |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|---|--|--|---|---|--|--|---|---|---|
| Mammary Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  |   |  |  |   |   |  |  |   |   |   |
| Galactocele                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |  |  |   |   |  |  |   |   |   |
| Hyperplasia                  | 1 | 4 | 3 | 1 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |  |  | 2 |  |  | 1 | 2 |  |  | 1 | 2 | 3 |
| Inflammation, Granulomatous  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |  |  |   |   |  |  |   |   |   |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |  |  |   |   |  |  |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 20105 - 56  
 Test Type: CHRONIC  
 Route: Whole Body Exposure  
 Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA  
 CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018  
 Time Report Requested: 13:31:21  
 First Dose M/F: 09/16/12 / 09/16/12  
 Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | females<br>(cont...) |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|
|  | 5           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 6 | 6 | 7 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 6 | 7 | 7 | 7 |           |                      |
|  | 4           | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 3 | 6 | 3 | 3 | 9 | 0 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 7 | 3 | 4 | 3 | 3         |                      |
|  | 5           | 7 | 8 | 8 | 5 | 4 | 4 | 9 | 1 | 9 | 1 | 9 | 9 | 3 | 8 | 1 | 9 | 9 | 9 | 8 | 4 | 4 | 4 | 7 | 1 | 8 | 8         |                      |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |                      |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1         |                      |
|  | 6           | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6         |                      |
|  | 5           | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8         |                      |
|  | 6           | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 5 | 7 | 8 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 4         |                      |

Duct, Dilation

2 2 2 2 2 2 2 1 2 2 1 2 2 1 2 1 3 1

Skin

+ +

Cyst Epithelial Inclusion

Ulcer

2

**MUSCULOSKELETAL SYSTEM**

Bone

+ +

Skeletal Muscle

Degeneration

+  
 1 2 1 3

**NERVOUS SYSTEM**

Brain

Compression

Mineral

Pigment

Cerebrum, Degeneration

Glial Cell, Hyperplasia

Meninges, Hyperplasia

Meninges, Mineral

Pineal Gland, Vacuolation, Cytoplasmic

+  
 2 1 1 1

Nerve Trigeminal

Degeneration

Gliosis

+  
 3 2 2 1 2 1 1 2 2 2 3 2 3 3 2 2 2 2 2 2 3 3

Peripheral Nerve, Sciatic

+ +

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr   | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | females<br>(cont...) |                  |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------------------|------------------|------------------|------------------|------------------|------------------|
|  | 0<br>5<br>4<br>5 | 0<br>7<br>3<br>7 | 0<br>7<br>3<br>8 | 0<br>7<br>3<br>8 | 0<br>7<br>4<br>5 | 0<br>7<br>4<br>4 | 0<br>7<br>4<br>4 | 0<br>7<br>4<br>4 | 0<br>5<br>5<br>9 | 0<br>5<br>3<br>1 | 0<br>6<br>6<br>9 | 0<br>6<br>3<br>1 | 0<br>7<br>3<br>9 | 0<br>6<br>6<br>9 | 0<br>5<br>3<br>3 | 0<br>7<br>4<br>1 | 0<br>7<br>3<br>9 | 0<br>7<br>3<br>9 | 0<br>6<br>4<br>8 | 0<br>7<br>7<br>4 |           |                      | 0<br>6<br>7<br>4 | 0<br>7<br>3<br>7 | 0<br>7<br>4<br>1 | 0<br>7<br>3<br>8 | 0<br>7<br>4<br>8 |
| Degeneration   | 1                | 3                | 2                | 2                | 2                | 1                | 2                | 1                | 1                | 2                | 1                | 3                | 1                | 1                | 1                | 2                | 2                | 3                | 2                | 2                | 1         | 2                    | 2                | 2                | 2                | 2                |                  |
| Peripheral Nerve, Tibial<br>Degeneration                   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | +                | +                | +                |                  |
| Spinal Cord, Cervical<br>Degeneration                      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |                  |                  |                  |
| Spinal Cord, Lumbar<br>Degeneration<br>Nerve, Degeneration | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | +                | +                | +                |                  |
| Spinal Cord, Thoracic<br>Degeneration                      | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | +                | +                | +                |                  |
| Trigeminal Ganglion<br>Degeneration                        | +                | +                | +                | +                | +                | +                | +                | M                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | +                | +                | +                |                  |

**RESPIRATORY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Lung<br>Congestion  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Inflammation, Granulomatous<br>Inflammation, Chronic Active<br>Alveolus, Infiltration Cellular, Histiocyte<br>Epithelium Alveolus, Hyperplasia<br>Pleura, Inflammation, Acute | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Nose<br>Foreign Body  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | females<br>(cont...)  |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>5<br>4<br>5      | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>8      | 0<br>7<br>4<br>5      | 0<br>7<br>4<br>4      | 0<br>7<br>4<br>4      | 0<br>7<br>4<br>4      | 0<br>5<br>5<br>9      | 0<br>5<br>3<br>1      | 0<br>6<br>6<br>9      | 0<br>6<br>3<br>1      | 0<br>7<br>3<br>9      | 0<br>6<br>9<br>9      | 0<br>5<br>3<br>8      | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>9      | 0<br>7<br>3<br>9      | 0<br>6<br>4<br>8      | 0<br>7<br>7<br>4      | 0<br>6<br>3<br>7      | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>8      |                       |                       |                       |
|  | 0<br>1<br>6<br>5<br>6 | 0<br>1<br>6<br>5<br>7 | 0<br>1<br>6<br>5<br>8 | 0<br>1<br>6<br>5<br>9 | 0<br>1<br>6<br>6<br>0 | 0<br>1<br>6<br>6<br>1 | 0<br>1<br>6<br>6<br>2 | 0<br>1<br>6<br>6<br>3 | 0<br>1<br>6<br>6<br>5 | 0<br>1<br>6<br>6<br>7 | 0<br>1<br>6<br>6<br>8 | 0<br>1<br>6<br>6<br>0 | 0<br>1<br>6<br>7<br>1 | 0<br>1<br>6<br>7<br>2 | 0<br>1<br>6<br>7<br>3 | 0<br>1<br>6<br>7<br>4 | 0<br>1<br>6<br>7<br>5 | 0<br>1<br>6<br>7<br>6 | 0<br>1<br>6<br>7<br>7 | 0<br>1<br>6<br>7<br>8 | 0<br>1<br>6<br>7<br>9 | 0<br>1<br>6<br>8<br>0 | 0<br>1<br>6<br>8<br>1 | 0<br>1<br>6<br>8<br>2 | 0<br>1<br>6<br>8<br>3 | 0<br>1<br>6<br>8<br>4 |

Inflammation, Suppurative

Olfactory Epithelium, Accumulation, Hyaline Droplet

Olfactory Epithelium, Hyperplasia

Respiratory Epithelium, Accumulation, Hyaline Droplet

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 3 | 3 | 1 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | 2 | 2 | 1 | 1 | 3 | 1 | 2 | 3 | 3 | 3 | 2 |
| 1 |   | 1 |   |   |   |   | 1 |   |   | 1 | 1 | 1 |   | 1 | 1 |   |   |   | 1 |   |   |   |   |   |

Trachea

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

SPECIAL SENSES SYSTEM

Ear

+

Eye

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + |
|   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 1 | 1 |   |   |

Harderian Gland

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   | 1 | 1 | 1 |   |   |
|   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |

URINARY SYSTEM

Kidney

Nephropathy, Chronic Progressive

Pelvis, Dilation

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| 1 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>3.0W/kg(CDMA)chr</b> | DAY ON TEST | 0545 | 0737 | 0738 | 0738 | 0744 | 0744 | 0599 | 0551 | 0669 | 0661 | 0739 | 0653 | 0778 | 0771 | 0779 | 0773 | 0674 | 0674 | 0773 | 0771 | 0773 | 0778 |
|   | ANIMAL ID   | 0165 | 0167 | 0168 | 0168 | 0164 | 0164 | 0169 | 0151 | 0169 | 0161 | 0161 | 0161 | 0161 | 0161 | 0161 | 0161 | 0161 | 0161 | 0161 | 0161 | 0161 | 0161 |

females  
(cont...)

Renal Tubule, Hyperplasia

Urinary Bladder

Fibrosis

Hemorrhage

Infiltration Cellular, Histiocyte

+ +

2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST | 0741  | 0739  | 0728  | 0770  | 0775  | 0768  | 0777  | 0777  | 0777  | 0777  | 0744  | 0777  | 0777  | 0766  | 0777  | 0755  | 0766  | 0777  | 0777  | 0777  | 0777  | 0777  | 0744  | 0777  | 0766  | 0777  |
|  | ANIMAL ID   | 01685 | 01166 | 01117 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 |
|  |             | 0685  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  | 0666  |

females  
(cont...)

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum<br>Ulcer                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A |
| Intestine Large, Colon<br>Diverticulum             | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + |   |
| Intestine Large, Rectum<br>Hyperplasia, Lymphocyte | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A |
| Intestine Small, Duodenum                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A |
| Intestine Small, Ileum                             | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A |
| Intestine Small, Jejunum                           | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis  | 2 |   |   |   |   |   | 1 |   |   |   | 3 |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                                   |   | X |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clear Cell Focus                                   |   |   |   |   |   |   |   | X |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | X |   |   |   |   |   |
| Extramedullary Hematopoiesis                       |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |
| Infiltration Cellular, Mixed Cell                  |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Mixed Cell Focus                                   | X | X |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   | X |   |   |   |   |
| Bile Duct, Cyst                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |
| Bile Duct, Fibrosis                                |   |   |   |   |   | 1 |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bile Duct, Hyperplasia                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  |                  |                  | ANIMAL ID        | females<br>(cont...) |                  |                  |                  |                  |                  |  |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|------------------|------------------|------------------|------------------|------------------|--|
|  | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>9      | 0<br>2<br>6<br>8      | 0<br>7<br>0<br>7      | 0<br>7<br>4<br>5      | 0<br>6<br>7<br>8      | 0<br>7<br>4<br>1      | 0<br>7<br>4<br>0      | 0<br>7<br>4<br>0      | 0<br>7<br>4<br>0      | 0<br>7<br>3<br>9      | 0<br>7<br>4<br>6      | 0<br>7<br>0<br>4      | 0<br>7<br>6<br>3      | 0<br>7<br>4<br>0 | 0<br>5<br>4<br>5 | 0<br>6<br>4<br>3 | 0<br>7<br>3<br>7 | 0<br>7<br>2<br>7 | 0<br>7<br>3<br>8 |                  |                      | 0<br>7<br>4<br>1 | 0<br>7<br>1<br>7 | 0<br>6<br>2<br>4 | 0<br>7<br>5<br>2 |                  |  |
|  | 0<br>1<br>6<br>8<br>5 | 0<br>1<br>6<br>8<br>6 | 0<br>1<br>6<br>8<br>7 | 0<br>1<br>6<br>8<br>9 | 0<br>1<br>6<br>8<br>0 | 0<br>1<br>6<br>9<br>1 | 0<br>1<br>6<br>9<br>2 | 0<br>1<br>6<br>9<br>3 | 0<br>1<br>6<br>9<br>4 | 0<br>1<br>6<br>9<br>5 | 0<br>1<br>6<br>9<br>6 | 0<br>1<br>6<br>9<br>7 | 0<br>1<br>6<br>9<br>8 | 0<br>1<br>6<br>9<br>9 | 0<br>1<br>7<br>0 | 0<br>1<br>7<br>1 | 0<br>1<br>7<br>2 | 0<br>1<br>7<br>3 | 0<br>1<br>7<br>4 | 0<br>1<br>7<br>5 | 0<br>1<br>7<br>6 | 0<br>1<br>7<br>7     | 0<br>1<br>7<br>8 | 0<br>1<br>7<br>9 | 0<br>1<br>7<br>0 | 0<br>1<br>7<br>1 | 0<br>1<br>7<br>2 |  |

Hepatocyte, Hypertrophy  
Hepatocyte, Necrosis  
Hepatocyte, Vacuolation, Cytoplasmic  
Kupffer Cell, Pigment  
Periductal, Cholangiofibrosis

3  
1 2  
4 2 3  
1

Mesentery  
Hemorrhage  
Necrosis  
Artery, Inflammation, Chronic Active  
Vein, Degeneration  
Vein, Inflammation, Chronic Active

+ + + + +  
+ + + + +  
1 2 2  
2  
1

Pancreas  
Ectopic Liver  
Acinus, Atrophy  
Acinus, Hyperplasia  
Periductal, Cholangiofibrosis

+  
1 1  
2 1

Salivary Glands  
Duct, Parotid Gland, Dilation  
Duct, Parotid Gland, Fibrosis  
Parotid Gland, Atrophy  
Parotid Gland, Fibrosis  
Parotid Gland, Inflammation, Acute  
Parotid Gland, Vacuolation, Cytoplasmic  
Sublingual Gland, Atrophy  
Sublingual Gland, Fibrosis  
Submandibular Gland, Atrophy

+  
2 2  
1 3 4  
2  
2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID        | females<br>(cont...) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|
|  | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>9      | 0<br>2<br>6<br>8      | 0<br>7<br>0<br>7      | 0<br>7<br>4<br>5      | 0<br>6<br>7<br>8      | 0<br>7<br>4<br>1      | 0<br>7<br>4<br>0      | 0<br>7<br>4<br>0      | 0<br>7<br>4<br>0      | 0<br>7<br>3<br>9      | 0<br>7<br>4<br>6      | 0<br>7<br>1<br>0      | 0<br>7<br>4<br>3 | 0<br>7<br>0<br>0 | 0<br>7<br>4<br>4 | 0<br>6<br>4<br>3 | 0<br>7<br>5<br>0 | 0<br>6<br>4<br>3 | 0<br>7<br>7<br>2 | 0<br>7<br>7<br>7 | 0<br>7<br>4<br>8 | 0<br>7<br>1<br>7 | 0<br>7<br>4<br>4 |                  |                      |
|  | 0<br>1<br>6<br>8<br>5 | 0<br>1<br>6<br>8<br>6 | 0<br>1<br>6<br>8<br>7 | 0<br>1<br>6<br>9<br>9 | 0<br>1<br>6<br>9<br>0 | 0<br>1<br>6<br>9<br>2 | 0<br>1<br>6<br>9<br>3 | 0<br>1<br>6<br>9<br>3 | 0<br>1<br>6<br>9<br>5 | 0<br>1<br>6<br>9<br>6 | 0<br>1<br>6<br>9<br>7 | 0<br>1<br>6<br>9<br>8 | 0<br>1<br>6<br>9<br>9 | 0<br>1<br>7<br>0 | 0<br>1<br>7<br>1 | 0<br>1<br>7<br>2 | 0<br>1<br>7<br>3 | 0<br>1<br>7<br>4 | 0<br>1<br>7<br>5 | 0<br>1<br>7<br>6 | 0<br>1<br>7<br>7 | 0<br>1<br>7<br>8 | 0<br>1<br>7<br>9 | 0<br>1<br>7<br>0 | 0<br>1<br>7<br>1 | 0<br>1<br>7<br>2     |

|                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stomach, Forestomach                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Edema                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Fibrosis                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Epithelium, Hyperplasia             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Epithelium, Hyperplasia, Basal Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Erosion            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |

CARDIOVASCULAR SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aorta  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy                                 | 1 | 1 |   |   |   | 1 |   | 1 |   |   |   |   | 1 |   | 1 |   |   | 1 |   | 1 | 1 |   | 1 | 2 |   |   |
| Atrium, Endocardium, Hyperplasia, Schwann Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epicardium, Inflammation, Acute                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ventricle Right, Cardiomyopathy                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Extramedullary Hematopoiesis      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | females<br>(cont...) |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------------------|------------------|------------------|
|  | 0<br>7<br>4<br>1 | 0<br>7<br>3<br>9 | 0<br>2<br>6<br>8 | 0<br>7<br>0<br>7 | 0<br>7<br>4<br>5 | 0<br>6<br>7<br>8 | 0<br>7<br>4<br>1 | 0<br>7<br>4<br>0 | 0<br>7<br>4<br>0 | 0<br>7<br>3<br>9 | 0<br>7<br>4<br>6 | 0<br>7<br>1<br>0 | 0<br>7<br>4<br>4 | 0<br>7<br>0<br>3 | 0<br>6<br>4<br>0 | 0<br>5<br>4<br>5 | 0<br>6<br>4<br>3 | 0<br>7<br>3<br>7 | 0<br>7<br>2<br>8 | 0<br>7<br>4<br>1 |           |                      | 0<br>7<br>4<br>7 | 0<br>4<br>1<br>2 |
| Hypertrophy  | 1                | 3                |                  | 1                |                  | 2                | 1                | 2                |                  | 2                |                  | 1                |                  |                  | 4                | 2                | 2                | 2                | 3                | 1                | 2         | 1                    |                  |                  |
| Necrosis   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |           | 3                    |                  |                  |
| Pigment  |                  |                  |                  |                  | 3                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |
| Vacuolation, Cytoplasmic                                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  | 1                |                  |                  |           |                      | 1                |                  |
| Adrenal Medulla  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | I                | +         | +                    | +                | +                |
| Hyperplasia  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  | 1                |                  |                  |                  | 1         |                      | 1                |                  |
| Islets, Pancreatic                                       | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | +                |
| Hyperplasia  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1         | 1                    |                  |                  |
| Parathyroid Gland  | M                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | M                | +                | +                | +                | M                | +                | +                | +         | +                    | +                | +                |
| Cyst   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |
| Fibrosis   |                  | 1                |                  | 1                |                  | 1                |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |
| Hyperplasia, Focal                                       |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |
| Pituitary Gland  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | +                |
| Atrophy  |                  |                  |                  |                  | 3                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |
| Cyst   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |
| Fibrosis   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |
| Pigment  |                  |                  |                  |                  | 3                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |
| Pars Distalis, Cyst                                      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |
| Pars Distalis, Hyperplasia                               | 4                | 3                |                  |                  |                  |                  | 1                | 2                | 1                | 3                |                  |                  |                  |                  |                  |                  | 1                |                  |                  | 3                |           | 1                    |                  |                  |
| Pars Distalis, Vacuolation, Cytoplasmic                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |
| Pars Intermedia, Cyst                                    |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |
| Pars Intermedia, Hyperplasia                             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |
| Thyroid Gland  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | +                |
| C-cell, Hyperplasia                                      | 2                | 3                |                  |                  |                  |                  |                  |                  | 3                |                  | 1                |                  |                  |                  | 1                |                  | 2                |                  |                  | 1                | 2         |                      |                  | 2                |
| Follicle, Cyst   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |                  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
|--|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>9      | 0<br>2<br>6<br>8      | 0<br>7<br>4<br>7      | 0<br>7<br>4<br>5      | 0<br>6<br>7<br>8      | 0<br>7<br>4<br>1      | 0<br>7<br>4<br>0      | 0<br>7<br>4<br>0      | 0<br>7<br>3<br>9      | 0<br>7<br>4<br>6      | 0<br>7<br>4<br>3      | 0<br>6<br>4<br>0      | 0<br>7<br>4<br>5      | 0<br>6<br>4<br>3      | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>2      | 0<br>7<br>2<br>8      | 0<br>7<br>4<br>1      | 0<br>7<br>4<br>7      | 0<br>6<br>2<br>4      | 0<br>7<br>5<br>2      | females<br>(cont...) |
|  | ANIMAL ID   | 0<br>1<br>6<br>8<br>5 | 0<br>1<br>6<br>8<br>6 | 0<br>1<br>6<br>8<br>7 | 0<br>1<br>6<br>8<br>9 | 0<br>1<br>6<br>8<br>0 | 0<br>1<br>6<br>9<br>2 | 0<br>1<br>6<br>9<br>3 | 0<br>1<br>6<br>9<br>5 | 0<br>1<br>6<br>9<br>9 | 0<br>1<br>6<br>9<br>7 | 0<br>1<br>6<br>7<br>9 | 0<br>1<br>6<br>6<br>9 | 0<br>1<br>6<br>7<br>9 | 0<br>1<br>7<br>7<br>0 | 0<br>1<br>7<br>7<br>2 | 0<br>1<br>7<br>7<br>3 | 0<br>1<br>7<br>7<br>4 | 0<br>1<br>7<br>7<br>6 | 0<br>1<br>7<br>7<br>7 | 0<br>1<br>7<br>7<br>8 | 0<br>1<br>7<br>7<br>9 | 0<br>1<br>7<br>7<br>0 |                      |

|                                  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |   |  |
|----------------------------------|--|--|--|--|--|--|--|--|--|--|---|---|---|--|--|--|--|--|--|--|--|--|--|--|---|--|
| Hemorrhage                       |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  | 4 |  |
| Inflammation, Suppurative        |  |  |  |  |  |  |  |  |  |  | 1 |   |   |  |  |  |  |  |  |  |  |  |  |  |   |  |
| Inflammation, Acute              |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |   |  |
| Inflammation, Chronic Active     |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  | 2 |  |
| Cervix, Hyperplasia, Stromal     |  |  |  |  |  |  |  |  |  |  | 4 |   |   |  |  |  |  |  |  |  |  |  |  |  |   |  |
| Endometrium, Hyperplasia, Cystic |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  | 2 |  |
| Epithelium, Metaplasia, Squamous |  |  |  |  |  |  |  |  |  |  | 1 |   |   |  |  |  |  |  |  |  |  |  |  |  |   |  |

HEMATOPOIETIC SYSTEM

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hypercellularity                      | 1 |   | 3 |   |   |   |   |   |   |   | 3 | 4 |   | 4 |   | 3 | 4 | 4 |   |   |   |   |   |   | 4 |
| Lymph Node                            | + |   | + |   |   |   |   | + |   |   | + |   |   |   | + |   |   |   |   |   |   |   |   |   |   |
| Bronchial, Erythrophagocytosis        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bronchial, Proliferation, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Iliac, Erythrophagocytosis            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Iliac, Hyperplasia, Lymphocyte        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Iliac, Proliferation, Plasma Cell     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Iliac, Lymphatic Sinus, Ectasia       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inguinal, Hyperplasia, Lymphocyte     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Inguinal, Pigment                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Inguinal, Lymphatic Sinus, Ectasia    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Mediastinal, Erythrophagocytosis      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreatic, Erythrophagocytosis       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mandibular                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Erythrophagocytosis                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Hyperplasia, Lymphocyte               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Proliferation, Plasma Cell            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST | 0741  | 0739  | 0728  | 0777  | 0775  | 0768  | 0777  | 0777  | 0777  | 0777  | 0744  | 0777  | 0777  | 0766  | 0777  | 0755  | 0766  | 0777  | 0777  | 0777  | 0777  | 0744  | 0777  | 0766  | 0777  |
|  | ANIMAL ID   | 01685 | 01166 | 01117 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 |

females (cont...)

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymphatic Sinus, Ectasia             | 1 |   |   |   |   |   |   |   |   |   |   | 2   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mesenteric               | + | + | + | + | + | + | + | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Erythrophagocytosis                  | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lymphocyte              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphatic Sinus, Ectasia             | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spleen                               | + | + | + | + | + | + | + | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Extramedullary Hematopoiesis         | 2 | 2 | 2 | 1 |   |   | 1 | 2 | 2 | 2 | 3 | 2   |   | 3 | 2 | 2 | 4 | 3 | 1 | 2 | 1 | 3 |   |   |   | 2 |
| Hyperplasia, Stromal                 |   |   |   |   |   |   |   |   |   |   |   | 2   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigment                              | 1 | 2 | 1 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2   |   | 2 | 1 |   |   | 1 | 3 | 2 | 2 | 2 | 2 |   |   | 1 |
| Red Pulp, Atrophy                    |   |   |   |   |   |   |   |   |   |   |   | 2   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| White Pulp, Atrophy                  |   |   |   |   |   |   |   |   |   |   |   | 2   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thymus                               | + | + | + | + | + | + | + | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy                              |   | 1 | 1 | 3 |   | 3 | 1 | 1 | 2 | 1 | 3 |   |   | 4 | 1 |   | 4 | 2 | 2 | 1 | 1 | 2 | 2 | 1 |   |   |
| Cyst                                 | X | X | X | X |   | X |   |   |   | X |   |   |   | X |   |   | X | X | X | X |   |   |   |   | X |   |
| Ectopic Parathyroid Gland            |   |   |   |   |   |   |   |   |   |   |   | X   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                           |   |   |   |   |   |   |   |   |   |   |   | X   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Epithelial              | 1 |   |   |   |   |   |   |   |   |   |   | 1 1 1 2 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lymphocyte              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   | 3 2   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

INTEGUMENTARY SYSTEM

|                              |   |   |   |   |   |   |   |   |   |   |   |                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland                | + | + | + | + | + | + | + | + | + | + | + | +                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Galactocele                  |   | X |   | X |   | X |   |   |   |   |   |                   |   |   | X | X |   |   |   |   | X |   |   |   |   | X |
| Hyperplasia                  | 1 |   |   |   |   |   |   |   |   |   |   | 2 2 3 4 1 2 2 4 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Granulomatous  |   |   |   |   |   |   |   |   |   |   |   |                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active | 2 |   |   |   |   |   |   |   |   |   |   |                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
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1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
|  | 0741        | 0743  | 0746  | 0748  | 0750  | 0752  | 0754  | 0756  | 0758  | 0760  | 0762  | 0764  | 0766  | 0768  | 0770  | 0772  | 0774  | 0776  | 0778  | 0780  | 0782  | 0784  | 0786  | 0788  |                      |
| ANIMAL ID  | 01685       | 01166 | 01117 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111 | 01111                |

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Duct, Dilation            |   | 1 |   | 3 |   | 3 |   | 2 | 2 | 2 |   | 1 |   | 2 |   | 2 |   | 1 | 1 | 4 |   | 1 | 2 | 3 |
| Skin                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst Epithelial Inclusion |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

MUSCULOSKELETAL SYSTEM

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Degeneration    |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   | 2 |   | 1 |   |   |   |   |   |

NERVOUS SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Compression                            |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 1 |   |   | 2 | 2 |   | 3 |   |   | 2 |   |   |
| Mineral                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |
| Pigment                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Cerebrum, Degeneration                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Glial Cell, Hyperplasia                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Meninges, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Meninges, Mineral                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pineal Gland, Vacuolation, Cytoplasmic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nerve Trigeminal                       | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | + | M | + | + | I | I | + | + | + |   |
| Degeneration                           | 2 | 1 |   | 2 | 2 | 1 |   | 2 |   | 1 |   |   | 2 | 2 | 1 | 3 | 2 |   | 2 | 3 |   |   |   | 2 | 2 |
| Gliosis                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Peripheral Nerve, Sciatic              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
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1-4 .. Lesion qualified as:  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|
|  | 0741        | 0743 | 0746 | 0740 | 0744 | 0747 | 0746 | 0747 | 0747 | 0747 | 0744 | 0747 | 0747 | 0746 | 0747 | 0745 | 0746 | 0747 | 0747 | 0747 | 0747 | 0744 | 0747 | 0746 |           |                      |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1166885   |                      |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|
| Degeneration   | 3 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 |   | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |
| Peripheral Nerve, Tibial<br>Degeneration                   | + | + | I | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 3 | 1 |  | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 |   |   |   |   |  |   |   |
| Spinal Cord, Cervical<br>Degeneration                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 1 |   |  | 1 | 1 |   | 1 |   | 1 |   | 1 |   | 1 |   | 1 |   | 1 |   |   |   |   |   |  |   |   |
| Spinal Cord, Lumbar<br>Degeneration<br>Nerve, Degeneration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 2 | 2 |  | 2 | 2 | 3 | 2 | 1 | 2 | 1 |   | 3 | 1 | 3 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 1 |  | 2 | 2 |
| Spinal Cord, Thoracic<br>Degeneration                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 1 | 2 |  | 1 | 1 |   | 2 | 2 | 2 | 2 |   | 2 | 1 | 1 | 2 |   | 1 | 1 | 1 | 2 |   | 3 |  | 1 |   |
| Trigeminal Ganglion<br>Degeneration                        | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | 1 |   |  | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |

RESPIRATORY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Lung<br>Congestion                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Granulomatous                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Chronic Active                | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alveolus, Infiltration Cellular, Histiocyte | 2 | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Epithelium Alveolus, Hyperplasia            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pleura, Inflammation, Acute                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nose<br>Foreign Body                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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|   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>3.0W/kg(CDMA)chr</b> | DAY ON TEST | 07 | 07 | 02 | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 07 | 04 | 07 | 07 | 06 | 07 | 05 | 06 | 07 | 07 | 07 | 07 | 04 | 07 | 04 | 07 | 04 | 07 | 04 | 07 | 06 |
|   | ANIMAL ID   | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
|   |             | 68 | 68 | 68 | 68 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 |

females (cont...)

Renal Tubule, Hyperplasia

3

Urinary Bladder

+ +

Fibrosis

Hemorrhage

2

Infiltration Cellular, Histiocyte

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | females<br>(cont...) |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|
|  | 5           | 5 | 0 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 5 | 7 | 7 | 6 | 7 | 6 | 7 | 5 | 4 | 7 | 7 | 7 | 7 | 7 | 7 | 6 |           |                      |
|  | 4           | 1 | 1 | 3 | 5 | 4 | 3 | 4 | 1 | 8 | 5 | 4 | 3 | 4 | 4 | 2 | 4 | 9 | 9 | 4 | 4 | 1 | 4 | 3 | 6 |   |           |                      |
|  | 5           | 6 | 6 | 8 | 6 | 4 | 7 | 0 | 1 | 3 | 0 | 4 | 7 | 8 | 0 | 7 | 5 | 8 | 3 | 0 | 4 | 1 | 4 | 9 | 2 |   |           |                      |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |           |                      |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |           |                      |
|  | 7           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |           |                      |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |   |           |                      |
|  | 4           | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |   |   |           |                      |

**ALIMENTARY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum<br>Ulcer                    | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon<br>Diverticulum             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum<br>Hyperplasia, Lymphocyte | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum                          | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum                             | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum                           | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis  |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                                   |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |
| Clear Cell Focus                                   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |
| Eosinophilic Focus                                 |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Extramedullary Hematopoiesis                       |   |   |   |   |   | 1 |   |   |   | 1 |   |   |   |   |   | 1 |   |   |   |   | 1 |   |   |   | 1 |
| Infiltration Cellular, Mixed Cell                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus                                   |   |   |   |   |   |   |   | X | X |   |   |   | X |   |   |   |   |   |   | X | X | X |   |   |   |
| Bile Duct, Cyst                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Bile Duct, Fibrosis                                |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bile Duct, Hyperplasia                             |   |   |   |   |   |   | 1 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | ANIMAL ID | females<br>(cont...) |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |                      |
|  | 5           | 5 | 0 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 5 | 7 | 7 | 6 | 7 | 6 | 7 | 5 | 4 | 7 | 7 | 7 | 7         | 6                    |
|  | 4           | 1 | 1 | 3 | 5 | 4 | 3 | 4 | 1 | 8 | 5 | 4 | 3 | 4 | 4 | 2 | 4 | 9 | 9 | 4 | 4 | 1 | 4         | 3                    |
|  | 5           | 6 | 6 | 8 | 6 | 4 | 7 | 0 | 1 | 3 | 0 | 4 | 7 | 8 | 0 | 7 | 5 | 8 | 3 | 0 | 4 | 1 | 4         | 9                    |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         | 0                    |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1         | 1                    |
|  | 7           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7         | 7                    |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4         |                      |
|  | 4           | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 2 | 3 | 4 | 5 | 7 | 9 |   |   |   |   |   |   |   |           | 2                    |

Hepatocyte, Hypertrophy 2  
 Hepatocyte, Necrosis  
 Hepatocyte, Vacuolation, Cytoplasmic  
 Kupffer Cell, Pigment  
 Periductal, Cholangiofibrosis 1

Mesentery +  
 Hemorrhage +  
 Necrosis 2  
 Artery, Inflammation, Chronic Active 2  
 Vein, Degeneration  
 Vein, Inflammation, Chronic Active

Pancreas +  
 Ectopic Liver  
 Acinus, Atrophy  
 Acinus, Hyperplasia 2  
 Periductal, Cholangiofibrosis

Salivary Glands +  
 Duct, Parotid Gland, Dilation  
 Duct, Parotid Gland, Fibrosis  
 Parotid Gland, Atrophy 1 2 3  
 Parotid Gland, Fibrosis  
 Parotid Gland, Inflammation, Acute  
 Parotid Gland, Vacuolation, Cytoplasmic  
 Sublingual Gland, Atrophy  
 Sublingual Gland, Fibrosis  
 Submandibular Gland, Atrophy

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST      | HARLAN SPRAGUE DAWLEY RATS FEMALE |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females (cont...) |
|------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-------------------|
|                  | 0545                              | 0546 | 0547 | 0548 | 0549 | 0550 | 0551 | 0552 | 0553 | 0554 | 0555 | 0556 | 0557 | 0558 | 0559 | 0560 | 0561 | 0562 | 0563 | 0564 | 0565 | 0566 | 0567 | 0568 |           |                   |
| 3.0W/kg(CDMA)chr | 0                                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                 |
|                  | 1                                 | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1         | 1                 |
|                  | 7                                 | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7         | 7                 |
|                  | 1                                 | 1    | 1    | 1    | 1    | 1    | 1    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 4    | 4    | 4    | 4         | 4                 |
|                  | 4                                 | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7         | 8                 |

|                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stomach, Forestomach                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Edema                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibrosis                            |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active        |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia             |   | 2 |   | 3 |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia, Basal Cell |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Stomach, Glandular                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Erosion                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

CARDIOVASCULAR SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aorta  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy                                 |   |   |   | 1 |   |   |   | 1 |   |   | 1 |   |   | 1 | 1 | 1 |   | 1 |   | 1 |   |   |   |   |   |
| Atrium, Endocardium, Hyperplasia, Schwann Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epicardium, Inflammation, Acute                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ventricle Right, Cardiomyopathy                |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 1 |   |   | 1 |   |   |   | 1 |   |   |   |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic              |   |   |   | 3 | 4 |   |   | 2 | 2 |   | 2 | 1 |   | 2 |   |   |   |   |   |   | 1 |   |   |   |   |
| Extramedullary Hematopoiesis      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia                       |   |   |   |   |   |   |   | 2 |   |   |   | 1 | 1 |   | 2 |   | 1 |   |   | 2 |   | 1 |   | 2 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

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Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | ANIMAL ID | females<br>(cont...) |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|-----------|----------------------|
|  | 0<br>5<br>4<br>5 | 0<br>5<br>1<br>6 | 0<br>0<br>1<br>6 | 0<br>7<br>3<br>8 | 0<br>6<br>5<br>6 | 0<br>7<br>4<br>7 | 0<br>7<br>3<br>7 | 0<br>7<br>4<br>0 | 0<br>7<br>1<br>1 | 0<br>7<br>4<br>3 | 0<br>4<br>8<br>0 | 0<br>5<br>4<br>4 | 0<br>7<br>3<br>7 | 0<br>6<br>4<br>8 | 0<br>7<br>2<br>7 | 0<br>5<br>9<br>5 | 0<br>4<br>9<br>3 | 0<br>7<br>4<br>0 | 0<br>7<br>4<br>1 | 0<br>7<br>1<br>4 | 0<br>7<br>4<br>1 | 0<br>7<br>3<br>4 | 0<br>7<br>9<br>0 |   |           |                      |
| Hypertrophy  | 2                |                  |                  | 2                |                  | 1                | 2                | 2                | 2                |                  | 2                | 2                | 2                | 2                | 1                |                  | 3                | 2                | 2                | 3                | 1                |                  | 2                | 1 |           |                      |
| Necrosis   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |
| Pigment  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |
| Vacuolation, Cytoplasmic                                 |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  | 1                | 2                |   |           |                      |
| Adrenal Medulla  | +                | +                | +                | +                | +                | +                | +                | I                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | M                | +                | +                | + |           |                      |
| Hyperplasia  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  | 1                |                  |                  | 1                | 2 | 1         |                      |
| Islets, Pancreatic                                       | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | + |           |                      |
| Hyperplasia  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  | 1                | 1                | 1 | 1         |                      |
| Parathyroid Gland  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | + |           |                      |
| Cyst   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |   |           |                      |
| Fibrosis   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  | 1 |           |                      |
| Hyperplasia, Focal                                       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |
| Pituitary Gland  | +                | +                | M                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | + |           |                      |
| Atrophy  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |
| Cyst   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |
| Fibrosis   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |
| Pigment  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |
| Pars Distalis, Cyst                                      | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |
| Pars Distalis, Hyperplasia                               |                  |                  |                  |                  |                  |                  | 1                |                  | 1                | 1                |                  |                  |                  | 1                | 2                |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |
| Pars Distalis, Vacuolation, Cytoplasmic                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |
| Pars Intermedia, Cyst                                    |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |
| Pars Intermedia, Hyperplasia                             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |
| Thyroid Gland  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | + |           |                      |
| C-cell, Hyperplasia                                      | 2                | 2                |                  |                  |                  | 3                |                  | 1                |                  |                  |                  |                  |                  |                  | 2                | 3                |                  |                  | 1                |                  | 1                |                  |                  |   |           |                      |
| Follicle, Cyst   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   |           |                      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked







Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST |   | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | females<br>(cont...) |   |   |
|--|-------------|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|---|
|  | 0           | 0 | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                      | 0 | 0 |
|  | 5           | 5 | 0         | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 5 | 7 | 7 | 6 | 7 | 6 | 7 | 5 | 4 | 7 | 7 | 7 |                      | 7 | 6 |
|  | 4           | 1 | 1         | 3 | 5 | 4 | 3 | 4 | 1 | 8 | 5 | 4 | 3 | 4 | 4 | 2 | 4 | 9 | 9 | 4 | 4 | 1 | 4                    | 3 | 6 |
|  | 5           | 6 | 6         | 8 | 6 | 4 | 7 | 0 | 1 | 3 | 0 | 4 | 7 | 8 | 0 | 7 | 5 | 8 | 3 | 0 | 4 | 1 | 4                    | 9 | 2 |
|  | 0           | 0 | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                    | 0 | 0 |
|  | 1           | 1 | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1                    | 1 | 1 |
|  | 7           | 7 | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7                    | 7 | 7 |
|  | 1           | 1 | 1         | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4                    | 4 | 4 |
|  | 4           | 5 | 6         | 7 | 8 | 9 | 0 | 1 | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5                    | 6 |   |

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymphatic Sinus, Ectasia             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mesenteric               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Erythrophagocytosis                  |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lymphocyte              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphatic Sinus, Ectasia             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spleen                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Extramedullary Hematopoiesis         | 2 | 2 | 1 | 4 | 3 | 1 | 2 | 2 | 3 |   |   | 1 | 2 | 2 | 2 | 4 | 2 |   | 2 | 1 | 1 | 2 | 1 | 2 | 4 |
| Hyperplasia, Stromal                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigment                              | 2 | 3 |   | 1 | 1 | 2 | 2 | 3 | 2 |   | 2 | 2 | 2 | 3 | 3 |   | 2 | 3 | 2 |   | 1 |   |   | 1 | 1 |
| Red Pulp, Atrophy                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |
| White Pulp, Atrophy                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thymus                               | + | + | + | + | M | + | + | + | + | M | + | + | + | + | + | I | + | + | + | + | + | + | + | + | + |
| Atrophy                              | 3 | 3 |   | 3 |   | 2 | 1 | 1 | 1 |   | 1 | 2 | 1 |   | 1 |   | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 |
| Cyst                                 |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   |   |   | X |   | X | X |   | X | X | X |
| Ectopic Parathyroid Gland            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                           |   |   | 1 |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Epithelial              |   | 1 |   | 1 |   |   |   |   | 1 |   | 2 | 1 |   |   | 1 |   | 1 | 1 |   | 1 |   | 1 | 1 | 1 | 3 |
| Hyperplasia, Lymphocyte              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

INTEGUMENTARY SYSTEM

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Galactocele                  |   | X |   | X | X |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia                  | 3 | 3 |   | 2 |   | 1 | 2 |   |   |   |   | 2 |   |   | 2 | 3 |   | 1 |   |   | 2 | 2 |   |   |   |
| Inflammation, Granulomatous  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | females<br>(cont...)  |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>5<br>4<br>5      | 0<br>5<br>4<br>5      | 0<br>0<br>1<br>6      | 0<br>7<br>3<br>8      | 0<br>6<br>5<br>6      | 0<br>7<br>4<br>4      | 0<br>7<br>3<br>7      | 0<br>7<br>4<br>0      | 0<br>7<br>1<br>1      | 0<br>7<br>8<br>3      | 0<br>4<br>5<br>0      | 0<br>7<br>4<br>4      | 0<br>7<br>3<br>7      | 0<br>6<br>4<br>8      | 0<br>7<br>2<br>7      | 0<br>5<br>4<br>5      | 0<br>4<br>9<br>8      | 0<br>4<br>9<br>3      | 0<br>7<br>4<br>0      | 0<br>7<br>4<br>4      | 0<br>7<br>1<br>1      | 0<br>7<br>4<br>4      | 0<br>7<br>3<br>9      | 0<br>7<br>7<br>2      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|  | 0<br>1<br>7<br>1<br>4 | 0<br>1<br>7<br>1<br>5 | 0<br>1<br>7<br>1<br>6 | 0<br>1<br>7<br>1<br>7 | 0<br>1<br>7<br>1<br>8 | 0<br>1<br>7<br>1<br>9 | 0<br>1<br>7<br>2<br>0 | 0<br>1<br>7<br>2<br>1 | 0<br>1<br>7<br>2<br>2 | 0<br>1<br>7<br>2<br>3 | 0<br>1<br>7<br>2<br>4 | 0<br>1<br>7<br>2<br>5 | 0<br>1<br>7<br>2<br>6 | 0<br>1<br>7<br>2<br>7 | 0<br>1<br>7<br>2<br>8 | 0<br>1<br>7<br>3<br>9 | 0<br>1<br>7<br>3<br>0 | 0<br>1<br>7<br>3<br>1 | 0<br>1<br>7<br>3<br>2 | 0<br>1<br>7<br>3<br>3 | 0<br>1<br>7<br>3<br>4 | 0<br>1<br>7<br>3<br>5 | 0<br>1<br>7<br>3<br>6 | 0<br>1<br>7<br>3<br>7 | 0<br>1<br>7<br>3<br>8 | 0<br>1<br>7<br>3<br>9 | 0<br>1<br>7<br>4<br>0 | 0<br>1<br>7<br>4<br>1 | 0<br>1<br>7<br>4<br>2 | 0<br>1<br>7<br>4<br>3 | 0<br>1<br>7<br>4<br>4 | 0<br>1<br>7<br>4<br>5 | 0<br>1<br>7<br>4<br>6 | 0<br>1<br>7<br>4<br>7 | 0<br>1<br>7<br>4<br>8 | 0<br>1<br>7<br>4<br>9 |

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Degeneration                          | 1 | 1 |   | 1 | 1 | 2 | 2 | 2 | 1 |   | 1 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 1 |   | 2 | 2 | 2 | 1 | 1 |
| Peripheral Nerve, Tibial Degeneration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|                                       | 1 | 1 |   | 1 | 1 | 2 | 2 | 2 | 1 |   | 1 | 3 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 3 | 3 | 2 | 1 | 1 |
| Spinal Cord, Cervical Degeneration    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
|                                       |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 1 | 1 |   | 1 |   |   |   |   |   |   |   |
| Spinal Cord, Lumbar Degeneration      | + | + | I | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Nerve, Degeneration                   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |
|                                       |   | 1 |   | 2 | 2 | 2 | 2 | 1 | 2 |   | 1 | 2 | 1 | 3 | 2 | 1 | 2 |   | 1 | 1 | 3 | 1 | 2 | 2 |   |
| Spinal Cord, Thoracic Degeneration    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
|                                       |   |   |   | 2 | 1 | 1 | 1 | 1 |   |   |   |   | 3 | 2 | 1 | 1 | 1 | 2 |   |   |   | 2 |   |   |   |
| Trigeminal Ganglion Degeneration      | + | + | + | M | + | M | + | + | + | + | + | + | M | M | + | + | + | + | + | + | + | + | + | + |   |
|                                       |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 1 | 1 | 1 |   |   |

**RESPIRATORY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung Congestion  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Inflammation, Granulomatous  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 1 |   |   |
| Inflammation, Chronic Active Alveolus, Infiltration Cellular, Histocyte Epithelium Alveolus, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |
| Pleura, Inflammation, Acute  | 2 | 1 |   | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |   | 1 |   | 3 | 3 | 1 | 2 | 1 | 1 |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |
| Nose Foreign Body  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>3.0W/kg(CDMA)chr</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|   |             | 5 | 5 | 0 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 5 | 7 | 7 | 6 | 7 | 6 | 7 | 5 | 4 | 7 | 7 | 7 | 7 | 6 |
|   |             | 4 | 1 | 1 | 3 | 5 | 4 | 3 | 4 | 1 | 8 | 5 | 4 | 3 | 4 | 4 | 2 | 4 | 9 | 9 | 4 | 4 | 1 | 4 | 3 |
|   |             | 5 | 6 | 6 | 8 | 6 | 4 | 7 | 0 | 1 | 3 | 0 | 4 | 7 | 8 | 0 | 7 | 5 | 8 | 3 | 0 | 4 | 4 | 1 | 9 |
| ANIMAL ID   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|   | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |
|   | 7           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |
|   | 1           | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 |   |   |
|   | 4           | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 7 | 9 | 0 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |   |   |

females  
(cont...)

Renal Tubule, Hyperplasia

Urinary Bladder

Fibrosis

Hemorrhage

Infiltration Cellular, Histiocyte

+ +

3

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|  | 0<br>7<br>4<br>5      | 0<br>7<br>3<br>9      | 0<br>5<br>3<br>1      | 0<br>4<br>9<br>6<br>4 | 0<br>4<br>7<br>6<br>4 | 0<br>7<br>4<br>1<br>0 | 0<br>7<br>7<br>1<br>4 | 0<br>7<br>7<br>4<br>1 | 0<br>7<br>7<br>4<br>1 | 0<br>7<br>7<br>3<br>8 | 0<br>7<br>7<br>3<br>9 | 0<br>4<br>9<br>4<br>3 | 0<br>7<br>4<br>5<br>1 | 0<br>4<br>5<br>0<br>1 | 0<br>7<br>4<br>1      |          |
| ANIMAL ID  | 0<br>1<br>7<br>4<br>3 | 0<br>1<br>7<br>4<br>4 | 0<br>1<br>7<br>4<br>5 | 0<br>1<br>7<br>4<br>6 | 0<br>1<br>7<br>4<br>7 | 0<br>1<br>7<br>4<br>9 | 0<br>1<br>7<br>5<br>1 | 0<br>1<br>7<br>5<br>2 | 0<br>1<br>7<br>5<br>4 | 0<br>1<br>7<br>5<br>5 | 0<br>1<br>7<br>5<br>6 | 0<br>1<br>7<br>5<br>7 | 0<br>1<br>7<br>5<br>8 | 0<br>1<br>7<br>5<br>9 | 0<br>1<br>7<br>6<br>0 |          |

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Esophagus  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |       |
| Intestine Large, Cecum<br>Ulcer                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 86 | 1 3.0 |
| Intestine Large, Colon<br>Diverticulum             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 88 | 1 2.0 |
| Intestine Large, Rectum<br>Hyperplasia, Lymphocyte | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 87 | 3 1.7 |
| Intestine Small, Duodenum                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 87 |       |
| Intestine Small, Ileum                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 84 |       |
| Intestine Small, Jejunum                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 84 |       |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |       |
| Angiectasis  |   |   |   |   |   |   |   |   | 1 |   |   | 1 |   |   |   | 9  | 1.7   |
| Basophilic Focus                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 7  |       |
| Clear Cell Focus                                   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | 7  |       |
| Eosinophilic Focus                                 |   |   | X | X |   |   |   |   |   |   | X |   |   | X |   | 10 |       |
| Extramedullary Hematopoiesis                       |   |   |   |   | 1 | 1 |   |   |   |   |   |   |   |   |   | 13 | 1.1   |
| Infiltration Cellular, Mixed Cell                  |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | 4  | 1.3   |
| Mixed Cell Focus                                   | X | X | X | X |   |   |   |   |   | X | X | X |   |   |   | 29 |       |
| Bile Duct, Cyst                                    |   |   |   |   |   |   |   | X | X |   |   |   | X |   |   | 6  |       |
| Bile Duct, Fibrosis                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 1.8   |
| Bile Duct, Hyperplasia                             |   |   | 1 |   |   | 1 | 1 |   |   |   |   | 1 |   |   |   | 12 | 1.0   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                              |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>HARLAN SPRAGUE DAWLEY RATS FEMALE</b> |                         | 7 | 7 | 5 | 4 | 4 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 7 | 4 | 7 | 4 | 7 |
|  |                         | 4 | 3 | 3 | 9 | 6 | 4 | 1 | 4 | 4 | 3 | 3 | 9 | 4 | 5 | 4 | 4 | 4 |
|  |                         | 5 | 9 | 1 | 3 | 4 | 0 | 1 | 4 | 1 | 8 | 9 | 3 | 1 | 0 | 1 | 0 | 1 |
|  | <b>3.0W/kg(CDMA)chr</b> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | <b>ANIMAL ID</b>        | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  | 7                       | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |
|  | 4                       | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |   |
|  | 3                       | 4 | 5 | 6 | 7 | 9 | 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0 |   |
| <b>* TOTALS</b>                          |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                                      |   |     |
|--------------------------------------|---|-----|
| Hepatocyte, Hypertrophy              | 1 | 2.0 |
| Hepatocyte, Necrosis                 | 7 | 1.7 |
| Hepatocyte, Vacuolation, Cytoplasmic | 5 | 3.0 |
| Kupffer Cell, Pigment                | 1 | 2.0 |
| Periductal, Cholangiofibrosis        | 1 | 1.0 |

|                                      |    |     |
|--------------------------------------|----|-----|
| Mesentery                            | 11 |     |
| Hemorrhage                           | 1  | 2.0 |
| Necrosis                             | 5  | 2.0 |
| Artery, Inflammation, Chronic Active | 2  | 2.0 |
| Vein, Degeneration                   | 1  | 2.0 |
| Vein, Inflammation, Chronic Active   | 1  | 1.0 |

|                               |    |       |
|-------------------------------|----|-------|
| Pancreas                      | 90 |       |
| Ectopic Liver                 |    | 1     |
| Acinus, Atrophy               |    | 6 1.3 |
| Acinus, Hyperplasia           |    | 2 1.5 |
| Periductal, Cholangiofibrosis |    | 2 1.5 |

|   |    |       |
|---|----|-------|
| Salivary Glands                         | 90 |       |
| Duct, Parotid Gland, Dilation           |    | 2 2.0 |
| Duct, Parotid Gland, Fibrosis           |    | 1 1.0 |
| Parotid Gland, Atrophy                  |    | 9 2.8 |
| Parotid Gland, Fibrosis                 |    | 2 1.5 |
| Parotid Gland, Inflammation, Acute      |    | 1 2.0 |
| Parotid Gland, Vacuolation, Cytoplasmic |    | 1 1.0 |
| Sublingual Gland, Atrophy               |    | 3 2.3 |
| Sublingual Gland, Fibrosis              |    | 1 2.0 |
| Submandibular Gland, Atrophy            |    | 1 2.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|  | 0<br>7<br>4<br>5      | 0<br>7<br>3<br>9      | 0<br>5<br>3<br>1      | 0<br>4<br>9<br>6      | 0<br>4<br>4<br>0      | 0<br>7<br>1<br>4      | 0<br>7<br>1<br>4      | 0<br>7<br>4<br>1      | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>9      | 0<br>4<br>9<br>3      | 0<br>7<br>4<br>1      | 0<br>4<br>5<br>0      | 0<br>7<br>4<br>1      |          |
| ANIMAL ID  | 0<br>1<br>7<br>4<br>3 | 0<br>1<br>7<br>4<br>4 | 0<br>1<br>7<br>4<br>5 | 0<br>1<br>7<br>4<br>6 | 0<br>1<br>7<br>4<br>7 | 0<br>1<br>7<br>4<br>9 | 0<br>1<br>7<br>5<br>1 | 0<br>1<br>7<br>5<br>2 | 0<br>1<br>7<br>5<br>4 | 0<br>1<br>7<br>5<br>5 | 0<br>1<br>7<br>5<br>5 | 0<br>1<br>7<br>5<br>6 | 0<br>1<br>7<br>5<br>7 | 0<br>1<br>7<br>5<br>8 | 0<br>1<br>7<br>5<br>9 |          |
| Stomach, Forestomach                                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |
| Edema  |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 1.5    |
| Fibrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |
| Inflammation, Chronic Active                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 1.5    |
| Ulcer  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3 2.0    |
| Epithelium, Hyperplasia                                  |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 8 2.3    |
| Epithelium, Hyperplasia, Basal Cell                      |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       | 2 1.0    |
| Stomach, Glandular                                       | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 89       |
| Erosion  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |
| <b>CARDIOVASCULAR SYSTEM</b>                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          |
| Aorta  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |
| Heart  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |
| Cardiomyopathy   | 1                     |                       | 1                     |                       |                       |                       |                       |                       |                       | 2                     | 1                     |                       | 2                     |                       | 1                     | 33 1.2   |
| Atrium, Endocardium, Hyperplasia, Schwann Cell           |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |
| Epicardium, Inflammation, Acute                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0    |
| Ventricle Right, Cardiomyopathy                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       | 9 1.0    |
| <b>ENDOCRINE SYSTEM</b>                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          |
| Adrenal Cortex   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |
| Accessory Adrenal Cortical Nodule                        |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 6        |
| Atrophy  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 3.5    |
| Degeneration, Cystic                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       | 1                     | 18 1.8   |
| Extramedullary Hematopoiesis                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |
| Hyperplasia  | 1                     | 2                     |                       | 2                     |                       |                       | 3                     |                       |                       |                       |                       |                       | 2                     | 1                     | 2                     | 26 1.7   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS  |            |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|------------|
|  | 0<br>7<br>4<br>5      | 0<br>7<br>3<br>9      | 0<br>5<br>3<br>1      | 0<br>4<br>9<br>6      | 0<br>4<br>4<br>3      | 0<br>7<br>4<br>0      | 0<br>7<br>1<br>4      | 0<br>7<br>4<br>1      | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>9      | 0<br>4<br>9<br>3      | 0<br>7<br>4<br>1      | 0<br>4<br>5<br>0      | 0<br>7<br>4<br>1      |           |            |
| ANIMAL ID  | 0<br>1<br>7<br>4<br>3 | 0<br>1<br>7<br>4<br>4 | 0<br>1<br>7<br>4<br>5 | 0<br>1<br>7<br>4<br>6 | 0<br>1<br>7<br>4<br>7 | 0<br>1<br>7<br>4<br>8 | 0<br>1<br>7<br>5<br>9 | 0<br>1<br>7<br>5<br>1 | 0<br>1<br>7<br>5<br>2 | 0<br>1<br>7<br>5<br>3 | 0<br>1<br>7<br>5<br>4 | 0<br>1<br>7<br>5<br>5 | 0<br>1<br>7<br>5<br>6 | 0<br>1<br>7<br>5<br>7 | 0<br>1<br>7<br>5<br>8 |           |            |
| Hypertrophy  | 2                     | 2                     |                       |                       |                       | 2                     | 1                     | 1                     |                       |                       |                       |                       | 1                     | 1                     |                       | <b>56</b> | <b>1.7</b> |
| Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>2</b>  | <b>2.5</b> |
| Pigment  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>  | <b>3.0</b> |
| Vacuolation, Cytoplasmic                                 | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>11</b> | <b>1.4</b> |
| Adrenal Medulla  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | <b>87</b> |            |
| Hyperplasia  |                       | 3                     | 1                     |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>20</b> | <b>1.3</b> |
| Islets, Pancreatic                                       | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | <b>90</b> |            |
| Hyperplasia  |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       | <b>14</b> | <b>1.1</b> |
| Parathyroid Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | <b>85</b> |            |
| Cyst   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>2</b>  |            |
| Fibrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>6</b>  | <b>1.2</b> |
| Hyperplasia, Focal                                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>2</b>  | <b>1.5</b> |
| Pituitary Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | <b>89</b> |            |
| Atrophy  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>  | <b>3.0</b> |
| Cyst   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>  |            |
| Fibrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>  | <b>1.0</b> |
| Pigment  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>2</b>  | <b>2.5</b> |
| Pars Distalis, Cyst                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>3</b>  |            |
| Pars Distalis, Hyperplasia                               |                       |                       |                       |                       |                       |                       |                       | 2                     | 3                     |                       |                       |                       |                       | 1                     | 1                     | <b>26</b> | <b>1.9</b> |
| Pars Distalis, Vacuolation, Cytoplasmic                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>  | <b>1.0</b> |
| Pars Intermedia, Cyst                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>  |            |
| Pars Intermedia, Hyperplasia                             | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>  | <b>4.0</b> |
| Thyroid Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | <b>90</b> |            |
| C-cell, Hyperplasia                                      | 1                     |                       |                       |                       |                       |                       | 2                     |                       | 2                     | 1                     | 1                     |                       |                       |                       | 1                     | <b>34</b> | <b>1.9</b> |
| Follicle, Cyst   | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>1</b>  |            |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>3.0W/kg(CDMA)chr</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|   | ANIMAL ID   | 7 | 7 | 5 | 4 | 4 | 7 | 7 | 7 | 7 | 7 | 4 | 7 | 4 | 7 | 4 |  |
|   |             | 4 | 3 | 3 | 9 | 6 | 4 | 1 | 4 | 4 | 3 | 3 | 9 | 4 | 5 | 4 |  |
|   |             | 5 | 9 | 1 | 3 | 4 | 0 | 1 | 4 | 1 | 8 | 9 | 3 | 1 | 0 | 1 |  |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|   |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |
|   |             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |  |
|   |             | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |  |
|   |             | 3 | 4 | 5 | 6 | 7 | 9 | 1 | 2 | 4 | 5 | 5 | 6 | 7 | 8 | 9 |  |
| <b>* TOTALS</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

GENERAL BODY SYSTEM

|                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |          |            |
|--------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|----------|------------|
| Tissue NOS               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>8</b> |          |            |
| Abdominal, Fat, Necrosis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          | <b>3</b> | <b>2.0</b> |
| Fat, Necrosis            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          | <b>4</b> | <b>2.8</b> |

GENITAL SYSTEM

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |            |            |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------|------------|------------|
| Clitoral Gland               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>89</b> |           |            |            |
| Inflammation, Chronic        |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |           | <b>1</b>  | <b>2.0</b> |            |
| Inflammation, Chronic Active | 1 | 2 |   |   | 1 | 1 | 3 |   |   | 1 | 1 |   |   |   | 2 |           | <b>35</b> | <b>1.7</b> |            |
| Duct, Dilation               | 4 | 2 | 4 | 3 | 3 | 3 |   | 1 |   | 1 |   |   |   | 4 | 3 |           | <b>65</b> | <b>2.7</b> |            |
| Duct, Hyperplasia            | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>4</b>  | <b>2.3</b> |            |
| Ovary                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>89</b> |           |            |            |
| Atrophy                      |   | 2 | 2 |   |   |   |   |   | 4 | 4 | 4 |   |   | 4 | 3 | 4         |           | <b>56</b>  | <b>3.5</b> |
| Cyst                         |   |   |   |   |   |   | X |   |   |   | X |   | X |   | X |           | <b>23</b> |            |            |
| Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>4.0</b> |            |
| Inflammation, Chronic        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>3.0</b> |            |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |           | <b>1</b>  | <b>3.0</b> |            |
| Bursa, Dilation              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2</b>  | <b>3.0</b> |            |
| Periovarian Tissue, Cyst     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  |            |            |
| Rete Ovarii, Cyst            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  |            |            |
| Rete Ovarii, Hyperplasia     |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |           | <b>14</b> | <b>1.6</b> |            |
| Uterus                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |           |            |            |
| Adenomyosis                  |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 1 |   |           | <b>2</b>  | <b>1.0</b> |            |
| Cyst                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>7</b>  |            |            |
| Dilation                     |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>11</b> | <b>2.7</b> |            |
| Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>3.0</b> |            |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | ANIMAL ID   | 7 | 7 | 5 | 4 | 4 | 7 | 7 | 7 | 7 | 7 | 4 | 7 | 4 | 7 | 4 | 7 |
|  |             | 4 | 3 | 3 | 9 | 6 | 4 | 1 | 4 | 4 | 3 | 3 | 9 | 4 | 5 | 4 |   |
|  |             | 5 | 9 | 1 | 3 | 4 | 0 | 1 | 4 | 1 | 8 | 9 | 3 | 1 | 0 | 1 |   |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |
|  |             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |
|  |             | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |   |
|  |             | 3 | 4 | 5 | 6 | 7 | 9 | 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |   |

\* TOTALS

|                                  |  |  |  |   |  |  |  |  |   |   |  |   |   |   |   |  |  |   |     |     |
|----------------------------------|--|--|--|---|--|--|--|--|---|---|--|---|---|---|---|--|--|---|-----|-----|
| Hemorrhage                       |  |  |  |   |  |  |  |  |   |   |  |   |   |   |   |  |  | 1 | 4.0 |     |
| Inflammation, Suppurative        |  |  |  |   |  |  |  |  | 1 |   |  |   |   |   |   |  |  | 3 | 8   | 2.1 |
| Inflammation, Acute              |  |  |  |   |  |  |  |  |   |   |  |   |   |   |   |  |  |   | 1   | 3.0 |
| Inflammation, Chronic Active     |  |  |  |   |  |  |  |  |   | 3 |  |   |   |   |   |  |  |   | 4   | 3.0 |
| Cervix, Hyperplasia, Stromal     |  |  |  |   |  |  |  |  |   |   |  |   |   |   |   |  |  |   | 1   | 4.0 |
| Endometrium, Hyperplasia, Cystic |  |  |  |   |  |  |  |  | 1 |   |  |   | 2 |   |   |  |  |   | 35  | 1.9 |
| Epithelium, Metaplasia, Squamous |  |  |  | 2 |  |  |  |  | 3 | 2 |  | 1 | 2 | 3 | 4 |  |  |   | 28  | 1.9 |

HEMATOPOIETIC SYSTEM

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |  |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|--|
| Bone Marrow                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |  |
| Hypercellularity                      |   |   | 4 | 2 | 4 | 4 |   |   |   | 2 | 1 | 3 |   | 3 | 3 |   |   | 43 | 3.1 |  |
| Lymph Node                            | + |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   | 11 |     |  |
| Bronchial, Erythrophagocytosis        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |  |
| Bronchial, Proliferation, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |  |
| Iliac, Erythrophagocytosis            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |  |
| Iliac, Hyperplasia, Lymphocyte        |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1  | 1.0 |  |
| Iliac, Proliferation, Plasma Cell     |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 2  | 2.5 |  |
| Iliac, Lymphatic Sinus, Ectasia       |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 1  | 2.0 |  |
| Inguinal, Hyperplasia, Lymphocyte     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |  |
| Inguinal, Pigment                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |  |
| Inguinal, Lymphatic Sinus, Ectasia    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |  |
| Mediastinal, Erythrophagocytosis      |   | 4 |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 4  | 2.5 |  |
| Pancreatic, Erythrophagocytosis       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |  |
| Lymph Node, Mandibular                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 89 |     |  |
| Erythrophagocytosis                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 2.0 |  |
| Hyperplasia, Lymphocyte               |   | 3 | 2 | 1 |   |   |   | 2 |   |   |   | 1 |   |   |   | 1 |   | 45 | 1.4 |  |
| Proliferation, Plasma Cell            |   | 3 | 3 | 2 |   | 1 | 2 |   | 2 | 2 | 1 |   | 1 |   | 1 |   |   | 58 | 1.7 |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |                  |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
|  | 0<br>7<br>4<br>5      | 0<br>7<br>3<br>9      | 0<br>5<br>3<br>1      | 0<br>4<br>9<br>6      | 0<br>4<br>4<br>3      | 0<br>7<br>4<br>1      | 0<br>7<br>1<br>4      | 0<br>7<br>7<br>4      | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>9      | 0<br>4<br>9<br>3      | 0<br>7<br>4<br>1      | 0<br>4<br>5<br>0      |                       | 0<br>7<br>4<br>1 |
| ANIMAL ID  | 0<br>1<br>7<br>4<br>3 | 0<br>1<br>7<br>4<br>4 | 0<br>1<br>7<br>4<br>5 | 0<br>1<br>7<br>4<br>6 | 0<br>1<br>7<br>4<br>7 | 0<br>1<br>7<br>4<br>9 | 0<br>1<br>7<br>5<br>1 | 0<br>1<br>7<br>5<br>2 | 0<br>1<br>7<br>5<br>4 | 0<br>1<br>7<br>5<br>5 | 0<br>1<br>7<br>5<br>6 | 0<br>1<br>7<br>5<br>7 | 0<br>1<br>7<br>5<br>8 | 0<br>1<br>7<br>5<br>9 | 0<br>1<br>7<br>6<br>0 |                  |
| Lymphatic Sinus, Ectasia                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 1.5            |
| Lymph Node, Mesenteric                                   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90               |
| Erythrophagocytosis                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 1.5            |
| Hyperplasia, Lymphocyte                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0            |
| Lymphatic Sinus, Ectasia                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0            |
| Spleen   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90               |
| Extramedullary Hematopoiesis                             | 1                     | 2                     | 2                     | 3                     | 4                     | 4                     | 2                     | 2                     | 1                     | 3                     | 1                     | 3                     | 2                     | 3                     | 2                     | 79 2.2           |
| Hyperplasia, Stromal                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0            |
| Pigment  | 2                     | 1                     | 1                     | 1                     | 1                     | 1                     | 2                     | 2                     | 3                     | 2                     | 3                     | 2                     | 3                     | 1                     | 2                     | 77 1.9           |
| Red Pulp, Atrophy  | 1                     |                       |                       |                       |                       |                       |                       |                       | 2                     | 2                     |                       |                       |                       |                       |                       | 13 2.0           |
| White Pulp, Atrophy                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4 2.8            |
| Thymus   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 87               |
| Atrophy  | 1                     | 4                     | 2                     | 3                     | 2                     | 4                     | 2                     | 1                     | 1                     | 1                     | 2                     | 3                     | 2                     | 2                     | 3                     | 74 1.9           |
| Cyst   | X                     |                       |                       | X                     |                       | X                     |                       | X                     | X                     | X                     | X                     |                       |                       |                       | X                     | 34               |
| Ectopic Parathyroid Gland                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                |
| Hemorrhage   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 5 2.2            |
| Hyperplasia, Epithelial                                  | 1                     | 1                     | 1                     | 1                     | 1                     | 1                     |                       | 1                     | 1                     | 1                     |                       |                       | 1                     | 2                     | 3                     | 54 1.2           |
| Hyperplasia, Lymphocyte                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       | 1 2.0            |
| Artery, Inflammation, Chronic Active                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       | 1 3.0            |
| <b>INTEGUMENTARY SYSTEM</b>                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |
| Mammary Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90               |
| Galactocele  |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       | 17               |
| Hyperplasia  | 4                     | 3                     | 2                     |                       | 1                     | 4                     | 4                     |                       |                       |                       | 1                     | 1                     | 1                     |                       | 1                     | 46 2.2           |
| Inflammation, Granulomatous                              |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       | 2 3.5            |
| Inflammation, Chronic Active                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       | 2 1.5            |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|  | 0<br>7<br>4<br>5      | 0<br>7<br>3<br>9      | 0<br>5<br>3<br>1      | 0<br>4<br>9<br>6      | 0<br>4<br>6<br>4      | 0<br>7<br>4<br>1      | 0<br>7<br>7<br>1      | 0<br>7<br>4<br>4      | 0<br>7<br>7<br>1      | 0<br>7<br>4<br>3      | 0<br>7<br>7<br>3      | 0<br>7<br>4<br>9      | 0<br>7<br>4<br>1      | 0<br>7<br>4<br>5      | 0<br>7<br>4<br>1      |          |
| ANIMAL ID  | 0<br>1<br>7<br>4<br>3 | 0<br>1<br>7<br>4<br>4 | 0<br>1<br>7<br>4<br>5 | 0<br>1<br>7<br>4<br>6 | 0<br>1<br>7<br>4<br>7 | 0<br>1<br>7<br>4<br>9 | 0<br>1<br>7<br>5<br>1 | 0<br>1<br>7<br>5<br>2 | 0<br>1<br>7<br>5<br>4 | 0<br>1<br>7<br>5<br>5 | 0<br>1<br>7<br>5<br>6 | 0<br>1<br>7<br>5<br>7 | 0<br>1<br>7<br>5<br>8 | 0<br>1<br>7<br>5<br>9 | 0<br>1<br>7<br>6<br>0 |          |
| Duct, Dilation   |                       |                       | 3                     |                       |                       |                       | 2                     | 1                     | 3                     | 4                     |                       | 3                     | 2                     |                       |                       | 51 2.0   |
| Skin   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |
| Cyst Epithelial Inclusion                                |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       | X                     |                       |                       |                       | 3        |
| Ulcer  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0    |
| <b>MUSCULOSKELETAL SYSTEM</b>                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          |
| Bone   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |
| Skeletal Muscle  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |
| Degeneration   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 10 1.4   |
| <b>NERVOUS SYSTEM</b>                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          |
| Brain  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |
| Compression  | 1                     |                       |                       |                       |                       |                       | 2                     |                       |                       |                       | 2                     |                       |                       |                       |                       | 16 1.9   |
| Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |
| Pigment  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |
| Cerebrum, Degeneration                                   |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |
| Glial Cell, Hyperplasia                                  |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0    |
| Meninges, Hyperplasia                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |
| Meninges, Mineral  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0    |
| Pineal Gland, Vacuolation, Cytoplasmic                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 1.0    |
| Nerve Trigeminal   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | M                     | +                     | +                     | +                     | +                     | +                     | +                     | 85       |
| Degeneration   | 2                     | 2                     | 2                     |                       |                       | 2                     | 2                     | 3                     | 3                     |                       | 2                     |                       | 2                     |                       | 3                     | 64 2.1   |
| Gliosis  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 3.0    |
| Peripheral Nerve, Sciatic                                | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90       |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 20105 - 56

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Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |    |     |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----|-----|
|  | 0<br>7<br>4<br>5      | 0<br>7<br>3<br>9      | 0<br>5<br>3<br>1      | 0<br>4<br>9<br>6      | 0<br>4<br>6<br>4      | 0<br>7<br>4<br>1      | 0<br>7<br>7<br>1      | 0<br>7<br>4<br>4      | 0<br>7<br>7<br>1      | 0<br>7<br>4<br>3      | 0<br>7<br>7<br>3      | 0<br>7<br>4<br>9      | 0<br>7<br>4<br>5      | 0<br>7<br>4<br>0      | 0<br>7<br>4<br>1      |                       |    |     |
| ANIMAL ID  | 0<br>1<br>7<br>4<br>3 | 0<br>1<br>7<br>4<br>4 | 0<br>1<br>7<br>4<br>5 | 0<br>1<br>7<br>4<br>6 | 0<br>1<br>7<br>4<br>7 | 0<br>1<br>7<br>4<br>8 | 0<br>1<br>7<br>4<br>9 | 0<br>1<br>7<br>5<br>1 | 0<br>1<br>7<br>5<br>2 | 0<br>1<br>7<br>5<br>3 | 0<br>1<br>7<br>5<br>4 | 0<br>1<br>7<br>5<br>5 | 0<br>1<br>7<br>5<br>6 | 0<br>1<br>7<br>5<br>7 | 0<br>1<br>7<br>5<br>8 | 0<br>1<br>7<br>5<br>9 |    |     |
| Degeneration   | 2                     | 2                     | 1                     | 1                     | 1                     | 2                     | 2                     | 1                     | 2                     | 1                     | 1                     | 1                     | 2                     | 2                     |                       |                       | 83 | 1.7 |
| Peripheral Nerve, Tibial<br>Degeneration                 | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 89 |     |
|  | 2                     | 2                     | 2                     | 1                     | 1                     | 1                     | 2                     | 1                     | 2                     | 2                     | 1                     | 1                     |                       |                       |                       | 1                     | 83 | 1.7 |
| Spinal Cord, Cervical<br>Degeneration                    | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90 |     |
|  |                       | 1                     |                       |                       | 1                     |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       | 1                     | 22 | 1.0 |
| Spinal Cord, Lumbar<br>Degeneration                      | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 89 |     |
| Nerve, Degeneration                                      |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     | 15 | 1.3 |
|  | 2                     | 2                     | 1                     |                       |                       | 3                     | 1                     | 1                     | 2                     | 2                     | 1                     |                       | 2                     |                       | 3                     |                       | 77 | 2.0 |
| Spinal Cord, Thoracic<br>Degeneration                    | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90 |     |
|  | 1                     | 1                     |                       |                       |                       | 2                     | 2                     |                       | 2                     | 1                     | 1                     |                       | 1                     |                       | 2                     |                       | 59 | 1.5 |
| Trigeminal Ganglion<br>Degeneration                      | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | M                     | +                     | +                     | +                     | 81 |     |
|  |                       | 1                     | 1                     |                       |                       |                       | 1                     | 1                     |                       |                       |                       |                       |                       |                       |                       | 1                     | 22 | 1.0 |
| <b>RESPIRATORY SYSTEM</b>                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |    |     |
| Lung   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90 |     |
| Congestion   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       | 9  | 1.6 |
| Inflammation, Granulomatous                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1  | 1.0 |
| Inflammation, Chronic Active                             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       | 6  | 1.0 |
| Alveolus, Infiltration Cellular, Histiocyte              | 2                     | 2                     | 2                     | 1                     | 1                     | 3                     | 1                     | 1                     | 1                     |                       | 1                     | 1                     | 2                     | 1                     | 1                     |                       | 84 | 1.5 |
| Epithelium Alveolus, Hyperplasia                         |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3  | 2.7 |
| Pleura, Inflammation, Acute                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1  | 1.0 |
| Nose   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 90 |     |
| Foreign Body   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1  |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST   | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0             |
|---|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
|   | 7               | 7 | 5 | 4 | 4 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 7 | 4 | 7 | 4 | 7 | 7             |
| <b>HARLAN SPRAGUE DAWLEY RATS FEMALE</b>              | 4               | 3 | 3 | 9 | 6 | 4 | 1 | 4 | 4 | 3 | 3 | 9 | 4 | 5 | 4 |   |   |               |
|   | 5               | 9 | 1 | 3 | 4 | 0 | 1 | 4 | 1 | 8 | 9 | 3 | 1 | 0 | 1 |   |   |               |
| <b>3.0W/kg(CDMA)chr</b>                               | ANIMAL ID       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0             |
|   |                 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1             |
|   | 7               | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7             |
|   | 4               | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6             |
|   | 3               | 4 | 5 | 6 | 7 | 9 | 1 | 2 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |   |   |               |
|   | <b>* TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
| Inflammation, Suppurative                             |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 3               | 3 | 2 | 2 | 2 | 1 | 2 | 4 | 2 | 2 | 1 | 2 | 2 | 2 | 2 |   |   | <b>86 2.3</b> |
| Olfactory Epithelium, Hyperplasia                     |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |                 |   |   |   |   |   |   |   |   |   |   | 2 | 1 |   | 1 |   |   | <b>22 1.0</b> |
| Trachea   | +               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>89</b>     |
| <b>SPECIAL SENSES SYSTEM</b>                          |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
| Ear   |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |
| Eye   | +               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>88</b>     |
| Anterior Chamber, Inflammation, Acute                 |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Choroid, Inflammation, Chronic Active                 |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Cornea, Inflammation, Acute                           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Retina, Atrophy                                       |                 |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   |   | <b>18 1.2</b> |
| Retina, Dysplasia                                     |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Harderian Gland                                       | +               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |
| Atrophy   |                 |   |   |   |   | 1 |   |   |   |   |   | 1 |   | 1 |   | 1 |   | <b>16 1.1</b> |
| Inflammation, Granulomatous                           |                 |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | <b>4 1.0</b>  |
| Inflammation, Chronic                                 |                 |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Inflammation, Chronic Active                          |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | <b>2 1.0</b>  |
| <b>URINARY SYSTEM</b>                                 |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
| Kidney  | +               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b>     |
| Nephropathy, Chronic Progressive                      | 1               | 1 |   | 1 |   |   | 1 | 1 | 1 | 3 | 1 | 1 | 2 | 1 | 1 |   |   | <b>76 1.2</b> |
| Pelvis, Dilation                                      |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 2.0</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked





Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6.0W/kg(CDMA)chr | DAY ON TEST | 0738 | 0696 | 0744 | 0743 | 0739 | 0770 | 0688 | 0771 | 0673 | 0763 | 0571 | 0774 | 0773 | 0575 | 0773 | 0773 | 0774 | 0579 | 0672 | 0740 | 0572 | 0752 | ANIMAL ID | 0866 | 0188 | 0186 | 0167 | 0177 | 0177 | 0187 | 0188 | 0177 | 0177 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | females<br>(cont...) |
|  | ANIMAL ID   | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 |           | 0188 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |

ALIMENTARY SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Acute               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Intestine Large, Cecum            | + | A | + | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum           | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum         | + | A | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum            | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum          | + | A | + | + | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |
| Basophilic Focus                  |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   | X | X | X | X |   |   | X |
| Clear Cell Focus                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Congestion                        |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus                |   |   |   |   |   | X |   |   |   |   |   | X |   |   | X |   |   |   |   | X |   |   |   |
| Extramedullary Hematopoiesis      |   |   |   |   |   |   |   |   |   | 1 | 1 |   | 1 |   |   |   |   |   |   |   |   |   | 1 |
| Hepatodiaphragmatic Nodule        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Mixed Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Mitotic Alteration                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus                  |   |   | X | X | X |   |   |   |   |   | X |   | X | X | X |   |   |   | X |   |   |   | X |
| Bile Duct, Cyst                   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | X |   |   |   | X |   |   |   |   |
| Bile Duct, Hyperplasia            |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6.0W/kg(CDMA)chr | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID | females<br>(cont...) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|----------------------|
|  | 0<br>7<br>3<br>8      | 0<br>6<br>9<br>6      | 0<br>7<br>4<br>4      | 0<br>7<br>4<br>0      | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>9      | 0<br>7<br>4<br>0      | 0<br>6<br>3<br>8      | 0<br>7<br>3<br>7      | 0<br>6<br>5<br>1      | 0<br>7<br>4<br>1      | 0<br>5<br>9<br>3      | 0<br>7<br>4<br>4      | 0<br>7<br>3<br>8      | 0<br>7<br>4<br>0      | 0<br>5<br>3<br>7      | 0<br>7<br>4<br>5      | 0<br>7<br>3<br>9      | 0<br>7<br>4<br>0      | 0<br>5<br>7<br>9      | 0<br>6<br>2<br>6      | 0<br>7<br>4<br>0      | 0<br>5<br>2<br>0      | 0<br>7<br>4<br>2      |                       |           |                      |
|  | 0<br>1<br>8<br>6<br>6 | 0<br>1<br>8<br>6<br>7 | 0<br>1<br>8<br>6<br>8 | 0<br>1<br>8<br>6<br>9 | 0<br>1<br>8<br>7<br>0 | 0<br>1<br>8<br>7<br>1 | 0<br>1<br>8<br>7<br>2 | 0<br>1<br>8<br>8<br>3 | 0<br>1<br>8<br>8<br>4 | 0<br>1<br>8<br>8<br>6 | 0<br>1<br>8<br>8<br>8 | 0<br>1<br>8<br>8<br>9 | 0<br>1<br>8<br>8<br>0 | 0<br>1<br>8<br>8<br>1 | 0<br>1<br>8<br>8<br>4 | 0<br>1<br>8<br>8<br>5 | 0<br>1<br>8<br>8<br>6 | 0<br>1<br>8<br>8<br>8 | 0<br>1<br>8<br>8<br>9 | 0<br>1<br>8<br>9<br>0 | 0<br>1<br>8<br>9<br>1 | 0<br>1<br>8<br>9<br>2 | 0<br>1<br>8<br>9<br>3 | 0<br>1<br>8<br>9<br>4 | 0<br>1<br>8<br>9<br>5 |           |                      |

Hepatocyte, Hypertrophy  
Hepatocyte, Necrosis  
Hepatocyte, Vacuolation, Cytoplasmic  
Kupffer Cell, Hyperplasia  
Kupffer Cell, Pigment  
Periductal, Cholangiofibrosis

1 1 1 2

Mesentery  
Inflammation, Chronic Active  
Necrosis  
Vein, Inflammation, Chronic Active

+ 3 1

Pancreas  
Inflammation, Chronic Active  
Necrosis  
Acinus, Atrophy  
Acinus, Hyperplasia  
Artery, Inflammation, Chronic Active  
Periductal, Cholangiofibrosis

+  
1 1 2 1

Salivary Glands  
Parotid Gland, Atrophy  
Parotid Gland, Fibrosis  
Parotid Gland, Mineral  
Sublingual Gland, Metaplasia  
Submandibular Gland, Atrophy

+  
1

Stomach, Forestomach  
Cyst, Squamous  
Edema

+  
2 2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                   |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------------|
| <b>HARLAN SPRAGUE DAWLEY RATS FEMALE</b><br><b>6.0W/kg(CDMA)chr</b> | DAY ON TEST | 0738 | 0696 | 0744 | 0743 | 0739 | 0770 | 0688 | 0771 | 0673 | 0761 | 0773 | 0574 | 0774 | 0773 | 0575 | 0773 | 0773 | 0774 | 0577 | 0662 | 0774 | 0575 | 0672 | 0752 | females (cont...) |
|   | ANIMAL ID   | 0186 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 |                   |

Inflammation, Acute  
 Inflammation, Chronic Active  
 Ulcer  
 Epithelium, Hyperplasia

1  
 2  
 1  
 3 2 2

Stomach, Glandular  
 Erosion

+ +

CARDIOVASCULAR SYSTEM

Aorta

+ +

Blood Vessel  
 Pulmonary Artery, Degeneration

+  
 1

Heart  
 Cardiomyopathy  
 Endocardium, Hyperplasia, Schwann Cell  
 Ventricle Right, Cardiomyopathy

+  
 1 1 1 1 1 1 1 1 1 1  
 1  
 1

ENDOCRINE SYSTEM

Adrenal Cortex  
 Accessory Adrenal Cortical Nodule  
 Degeneration, Cystic  
 Hyperplasia  
 Hypertrophy  
 Necrosis  
 Vacuolation, Cytoplasmic

+  
 X X X  
 4 1 2 1 2 2 1 1 2 2  
 1 2 1 1 1 1 2 2 1 4 2 1 2 3  
 1 2 1

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6.0W/kg(CDMA)chr | DAY ON TEST | 0738 | 0696 | 0744 | 0773 | 0773 | 0777 | 0663 | 0776 | 0671 | 0753 | 0774 | 0777 | 0778 | 0575 | 0777 | 0777 | 0777 | 0777 | 0575 | 0662 | 0775 | 0575 | 0672 | 0752 | 0575 | females<br>(cont...) |
|  | ANIMAL ID   | 0186 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 |                      |
|  |             | 666  | 777  | 888  | 999  | 000  | 111  | 222  | 333  | 444  | 555  | 666  | 777  | 888  | 999  | 000  | 111  | 222  | 333  | 444  | 555  | 666  | 777  | 888  | 999  | 000  |                      |

GENITAL SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland                   | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Granulomatous      |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active     |   |   | 2 | 1 |   | 1 |   | 3 | 1 |   | 2 | 2 | 1 | 1 | 1 |   | 2 |   | 1 | 1 |   | 1 |   | 2 | 1 |
| Duct, Dilation                   |   |   | 1 | 4 |   | 1 | 1 |   | 2 | 3 | 2 |   | 4 | 3 | 2 | 1 |   |   | 3 | 4 | 4 | 3 | 2 | 4 | 2 |
| Duct, Hyperplasia                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ovary                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy                          | 3 | 2 | 4 |   | 4 | 4 | 4 | 3 | 4 | 2 | 4 |   | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 4 | 3 |
| Cyst                             | X |   |   |   |   |   |   | X |   |   |   |   | X | X |   |   |   | X | X | X |   | X |   |   |   |
| Fibrosis                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                       |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigment                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bursa, Dilation                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Follicle, Cyst                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Rete Ovarii, Hyperplasia         | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 1 |   |   |   |
| Uterus                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   |   |
| Dilation                         |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Hemorrhage                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Inflammation, Suppurative        |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Acute              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active     |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Cervix, Hyperplasia, Stromal     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Endometrium, Hyperplasia, Cystic | 1 |   | 2 | 2 | 2 | 3 | 1 |   | 1 |   | 2 |   | 2 |   | 2 |   |   | 3 | 1 | 2 |   | 2 | 2 | 2 | 2 |
| Epithelium, Metaplasia, Squamous | 1 |   | 1 |   |   |   | 1 |   | 1 | 4 | 2 |   |   | 4 | 1 | 1 | 2 |   | 2 |   | 2 |   | 1 | 4 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                    |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------------------------------------|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>6.0W/kg(CDMA)chr</b> | DAY ON TEST | 0738 | 0696 | 0744 | 0743 | 0734 | 0733 | 0648 | 0638 | 0771 | 0671 | 0573 | 0774 | 0773 | 0578 | 0775 | 0773 | 0774 | 0574 | 0579 | 0627 | 0746 | 0570 | 0752 | 0575 | <b>females</b><br><b>(cont...)</b> |
|   | ANIMAL ID   | 0186 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 |                                    |
|   |             | 0118 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 | 0111 |                                    |

Vagina +  
 Cyst X

HEMATOPOIETIC SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hypercellularity                              | 3 |   |   |   | 3 | 2 |   |   | 4 | 4 |   | 3 |   |   | 4 |   |   |   |   | 3 | 4 |   |   |   | 4 |
| Lymph Node                                    |   |   |   |   |   |   |   |   | + | + |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |
| Axillary, Erythrophagocytosis                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Deep Cervical, Erythrophagocytosis            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Iliac, Erythrophagocytosis                    |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Iliac, Hyperplasia, Lymphocyte                |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Iliac, Infiltration Cellular, Histiocyte      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Iliac, Pigment                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Iliac, Proliferation, Plasma Cell             |   |   |   |   |   |   |   |   |   |   | 2 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Iliac, Lymphatic Sinus, Ectasia               |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Hyperplasia, Lymphocyte               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Lymphatic Sinus, Ectasia              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Erythrophagocytosis              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreatic, Infiltration Cellular, Histiocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mandibular                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Congestion                                    |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Erythrophagocytosis                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lymphocyte                       | 2 | 2 |   |   | 1 | 1 |   |   | 2 |   |   |   |   |   | 2 | 1 |   |   |   | 2 | 2 | 2 | 1 |   |   |
| Infiltration Cellular, Histiocyte             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigment                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Proliferation, Plasma Cell                    | 1 | 2 |   |   | 1 | 1 |   |   | 1 |   |   |   |   |   | 1 | 1 | 2 | 1 |   | 2 | 2 | 3 | 1 | 2 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>6.0W/kg(CDMA)chr</b> | DAY ON TEST | 0738 | 0696 | 0744 | 0743 | 0739 | 0770 | 0688 | 0771 | 0673 | 0761 | 0573 | 0774 | 0773 | 0778 | 0575 | 0773 | 0773 | 0774 | 0577 | 0662 | 0774 | 0562 | 0774 | 0575 |
|   | ANIMAL ID   | 0186 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 | 0188 |

females (cont...)

|  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Lymphatic Sinus, Ectasia   | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymph Node, Mesenteric Infiltration Cellular, Histiocyte Lymphatic Sinus, Ectasia            | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spleen Extramedullary Hematopoiesis Hemorrhage Pigment Red Pulp, Atrophy White Pulp, Atrophy | +<br>2 1 2 2 1 2 4 4 2 2 2 2 3 2 1 2 2 3 2 2 3 2 2 4<br>1 4 2 2 1 2 3 3 2 1 2 2 2 2 2 3 2 2 1 1 2 2 1<br>4 2 2 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Thymus Atrophy Cyst Ectopic Parathyroid Gland Hemorrhage Hyperplasia, Epithelial             | + + + + + + + + + + + + + + + + M + + + + + + + +<br>1 1 1 1 2 3 4 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2<br>X X<br>X 2 2 1<br>1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

INTEGUMENTARY SYSTEM

|   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Mammary Gland Galactocele Hyperplasia Inflammation, Acute Inflammation, Chronic Active Duct, Dilation | +<br>X X<br>3 4 1<br>1 2 1 1 1 2 2 1 1 2 1 1 2 1 2 2 1 2 1 2 1 2 2 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Skin  | +  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                              |                       |                       |
|---|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|-----------------------|-----------------------|
| <b>HARLAN SPRAGUE DAWLEY RATS<br/>FEMALE</b><br><br><b>6.0W/kg(CDMA)chr</b> | DAY ON TEST | 0<br>7<br>3<br>8      | 0<br>6<br>9<br>6      | 0<br>7<br>4<br>4      | 0<br>7<br>4<br>0      | 0<br>7<br>3<br>9      | 0<br>7<br>3<br>4      | 0<br>7<br>4<br>0      | 0<br>6<br>3<br>8      | 0<br>7<br>3<br>1      | 0<br>6<br>5<br>1      | 0<br>7<br>4<br>3      | 0<br>7<br>4<br>8      | 0<br>5<br>9<br>0      | 0<br>7<br>4<br>7      | 0<br>7<br>3<br>5      | 0<br>7<br>4<br>9      | 0<br>7<br>3<br>0      | 0<br>5<br>7<br>6      | 0<br>6<br>2<br>0      | 0<br>7<br>4<br>0      | 0<br>5<br>2<br>2      | <b>females<br/>(cont...)</b> |                       |                       |
|   | ANIMAL ID   | 0<br>1<br>8<br>6<br>6 | 0<br>1<br>8<br>6<br>7 | 0<br>1<br>8<br>6<br>8 | 0<br>1<br>8<br>6<br>9 | 0<br>1<br>8<br>7<br>0 | 0<br>1<br>8<br>7<br>1 | 0<br>1<br>8<br>7<br>2 | 0<br>1<br>8<br>7<br>3 | 0<br>1<br>8<br>7<br>4 | 0<br>1<br>8<br>7<br>6 | 0<br>1<br>8<br>7<br>8 | 0<br>1<br>8<br>7<br>9 | 0<br>1<br>8<br>8<br>0 | 0<br>1<br>8<br>8<br>1 | 0<br>1<br>8<br>8<br>4 | 0<br>1<br>8<br>8<br>5 | 0<br>1<br>8<br>8<br>6 | 0<br>1<br>8<br>8<br>8 | 0<br>1<br>8<br>8<br>9 | 0<br>1<br>8<br>9<br>0 | 0<br>1<br>8<br>9<br>1 |                              | 0<br>1<br>8<br>9<br>2 | 0<br>1<br>8<br>9<br>3 |

Cyst Epithelial Inclusion X  
 Inflammation, Chronic Active  
 Lymphatic, Subcutaneous Tissue, Angiectasis

**MUSCULOSKELETAL SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle<br>Degeneration<br>Diaphragm, Hernia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

**NERVOUS SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain<br>Compression<br>Glial Cell, Hyperplasia<br>Meninges, Hyperplasia, Granular Cell | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Nerve Trigeminal<br>Degeneration  | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | M | + | M | + | + |
| Peripheral Nerve, Sciatic<br>Degeneration   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Peripheral Nerve, Tibial<br>Degeneration  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spinal Cord, Cervical<br>Degeneration   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

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Experiment Number: 20105 - 56

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6.0W/kg(CDMA)chr | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |        |  |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|--------|--|
|  | 0738        | 0696 | 0744 | 0744 | 0733 | 0733 | 0744 | 0638 | 0771 | 0667 | 0751 | 0771 | 0771 | 0771 | 0549 | 0744 | 0744 | 0334 | 0549 | 0734 | 0734 | 0734 | 0734 | 0572 |           |                      | 0672 | 0752 | 0752   |  |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                    | 0    | 0    | 118666 |  |

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spinal Cord, Lumbar Degeneration   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Nerve, Degeneration                | 3 | 2 | 3 | 2 | 2 | 1 | 3 | 2 | 2 | 3 | 1 | 1 | 2 | 1 | 3 |   |   |   |   | 3 | 3 | 1 |   |   | 2 | 2 | 1 | 1 |
| Spinal Cord, Thoracic Degeneration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Trigeminal Ganglion Degeneration   | + | + | + | + | + | M | + | + | + | + | M | + | + | M | I | + | + | + | + | M | + | + | + | I | + | + | + | + |

RESPIRATORY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung Congestion                                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Foreign Body  | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative                           | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Granulomatous                         |   |   |   | 1 | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active                        |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolar Epithelium, Metaplasia, Squamous           |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolus, Infiltration Cellular, Histiocyte         | 1 | 3 | 1 | 2 |   |   | 1 | 2 |   | 4 | 1 | 1 | 2 | 2 | 1 | 2 |   |   | 1 | 1 | 2 | 2 | 3 | 2 | 1 | 2 |   |   |
| Artery, Muscularis, Hyperplasia                     |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium Alveolus, Hyperplasia                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nose Foreign Body                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Suppurative                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Olfactory Epithelium, Accumulation, Hyaline Droplet | 1 | 2 | 1 | 2 |   |   | 2 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 1 |   |   | 2 | 1 | 3 | 3 | 2 | 2 | 3 | 2 | 3 |   |
| Olfactory Epithelium, Metaplasia, Respiratory       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST | HARLAN SPRAGUE DAWLEY RATS FEMALE |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females (cont...) |  |
|-------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-------------------|--|
|             | 0738                              | 0696 | 0744 | 0744 | 0733 | 0733 | 0744 | 0638 | 0737 | 0661 | 0767 | 0573 | 0774 | 0774 | 0733 | 0544 | 0753 | 0744 | 0733 | 0744 | 0577 | 0652 | 0764 | 0575 |           |                   |  |
|             | 0                                 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 11186667          |  |

Respiratory Epithelium, Accumulation, Hyaline Droplet 1  
 Respiratory Epithelium, Hyperplasia 3  
 Respiratory Epithelium, Metaplasia, Squamous 1

Trachea +  
 Glands, Cyst

SPECIAL SENSES SYSTEM

Ear  
 Eye + A + + + + + A + + + + + + + + + + + + + + + + + +  
 Anterior Chamber, Inflammation, Acute  
 Cornea, Inflammation, Acute  
 Cornea, Ulcer  
 Cornea, Epithelium, Hyperplasia  
 Retina, Atrophy 1 1 2 1 1  
 Retina, Dysplasia 1 1  
 Harderian Gland +  
 Atrophy 1 2 1  
 Cyst  
 Hyperplasia  
 Hypertrophy  
 Infiltration Cellular, Lymphocyte  
 Inflammation, Granulomatous 1 1 1  
 Inflammation, Chronic

URINARY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST                              | ANIMAL ID |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |      |
|--|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|
|  | 0738      | 0696 | 0744 | 0744 | 0733 | 0733 | 0744 | 0638 | 0737 | 0671 | 0761 | 0573 | 0774 | 0774 | 0573 | 0774 | 0774 | 0774 | 0774 | 0573 | 0672 | 0774 | 0672 | 0774 |                      | 0573 |
| <b>HARLAN SPRAGUE DAWLEY RATS FEMALE</b> | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0                    |      |
| <b>6.0W/kg(CDMA)chr</b>                  | 1         | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1                    |      |
|  | 8         | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8                    |      |
|  | 6         | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6                    |      |
|  | 7         | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 6    | 8    | 9    | 0    | 1    | 4    | 5    | 6    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5                    |      |
| Kidney                                   | +         | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    |      |
| Nephropathy, Chronic Progressive         |           |      |      | 2    | 1    |      | 1    |      |      |      |      |      | 1    | 1    | 1    |      | 1    | 1    | 1    | 1    | 1    |      | 1    | 2    | 1                    |      |
| Pelvis, Mineral                          |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |
| Urinary Bladder                          | +         | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    |      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
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 I .. Insufficient tissue  
 M .. Missing tissue  
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 BLANK .. Not examined microscopically

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Experiment Number: 20105 - 56

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 01/02/2018

Test Type: CHRONIC

Cell Phone Radiation: CDMA

Time Report Requested: 13:31:21

Route: Whole Body Exposure

CAS Number: CELLPRADCDMA

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

Species/Strain: RATS/HSD

Lab: IIT

|  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |           |                      |    |    |
|--|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----------|----------------------|----|----|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6.0W/kg(CDMA)chr | DAY ON TEST | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | ANIMAL ID | females<br>(cont...) |    |    |
|  |             | 02 | 03 | 04 | 01 | 04 | 04 | 03 | 03 | 04 | 08 | 03 | 03 | 06 | 07 | 04 | 03 | 01 | 03 | 04 | 05 | 04 | 03 | 03 |           |                      | 04 | 01 |
|  |             | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01        | 01                   |    |    |
|  |             | 08 | 08 | 08 | 08 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09        | 09                   |    |    |
|  |             | 09 | 09 | 09 | 09 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 02 | 02 | 02 | 02 | 02        | 02                   |    |    |
|  |             | 06 | 07 | 08 | 09 | 01 | 02 | 03 | 05 | 06 | 07 | 08 | 00 | 02 | 03 | 04 | 05 | 06 | 07 | 09 | 00 | 01 | 02 | 03 | 04        | 05                   |    |    |

ALIMENTARY SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Acute               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Cecum            | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | A | + | + | + | + | + | + | + | + |
| Intestine Large, Colon            | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum           | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum         | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum            | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum          | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | A | + | + | + | + | + | + | + | + |
| Liver                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                       |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                  |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | X |   |   |   |   |   |   | X |   |   |
| Clear Cell Focus                  |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |
| Congestion                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   |
| Extramedullary Hematopoiesis      | 1 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |
| Infiltration Cellular, Mixed Cell |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mitotic Alteration                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |
| Mixed Cell Focus                  | X | X | X |   | X |   |   |   | X |   |   |   |   |   | X | X |   | X | X | X |   |   |   |   | X |
| Bile Duct, Cyst                   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |
| Bile Duct, Hyperplasia            |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   | 1 |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically      M .. Missing tissue      1-4 .. Lesion qualified as:  
X .. Lesion present      A .. Autolysis precludes evaluation      1) Minimal 3) Moderate  
I .. Insufficient tissue      BLANK .. Not examined microscopically      2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                                    |                      |
|---|-------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------------------|----------------------|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>6.0W/kg(CDMA)chr</b> | DAY ON TEST | 07<br>03<br>22       | 07<br>04<br>09       | 07<br>01<br>04       | 07<br>04<br>04       | 07<br>03<br>07       | 07<br>03<br>08       | 07<br>04<br>04       | 07<br>08<br>07       | 07<br>03<br>09       | 07<br>03<br>08       | 05<br>06<br>00       | 07<br>07<br>04       | 07<br>03<br>01       | 07<br>07<br>07       | 07<br>03<br>08       | 07<br>04<br>00       | 05<br>05<br>00       | 07<br>04<br>01       | 07<br>03<br>09       | 07<br>03<br>00       | 07<br>04<br>01       | <b>females</b><br><b>(cont...)</b> |                      |
|   | ANIMAL ID   | 01<br>08<br>09<br>06 | 01<br>08<br>09<br>07 | 01<br>08<br>09<br>09 | 01<br>08<br>09<br>00 | 01<br>09<br>00<br>02 | 01<br>09<br>00<br>03 | 01<br>09<br>00<br>05 | 01<br>09<br>00<br>07 | 01<br>09<br>00<br>08 | 01<br>09<br>01<br>02 | 01<br>09<br>01<br>03 | 01<br>09<br>01<br>04 | 01<br>09<br>01<br>05 | 01<br>09<br>01<br>06 | 01<br>09<br>01<br>07 | 01<br>09<br>02<br>08 | 01<br>09<br>02<br>09 | 01<br>09<br>02<br>10 | 01<br>09<br>02<br>11 | 01<br>09<br>02<br>12 | 01<br>09<br>02<br>13 |                                    | 01<br>09<br>02<br>14 |

Hepatocyte, Hypertrophy 2  
Hepatocyte, Necrosis 1  
Hepatocyte, Vacuolation, Cytoplasmic 1 1  
Kupffer Cell, Hyperplasia 1  
Kupffer Cell, Pigment  
Periductal, Cholangiofibrosis 4

Mesentery + +  
Inflammation, Chronic Active 1  
Necrosis 3  
Vein, Inflammation, Chronic Active

Pancreas + + + + + + + + + + A + + + + + + + + + + + + + +  
Inflammation, Chronic Active 1  
Necrosis  
Acinus, Atrophy 2  
Acinus, Hyperplasia  
Artery, Inflammation, Chronic Active  
Periductal, Cholangiofibrosis

Salivary Glands +  
Parotid Gland, Atrophy 3  
Parotid Gland, Fibrosis 1  
Parotid Gland, Mineral  
Sublingual Gland, Metaplasia  
Submandibular Gland, Atrophy 2

Stomach, Forestomach +  
Cyst, Squamous X  
Edema 2

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+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

|  |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                              |
|--|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------------------------------|
| <p><b>HARLAN SPRAGUE DAWLEY RATS</b><br/><b>FEMALE</b><br/><b>6.0W/kg(CDMA)chr</b></p> | DAY ON TEST | 0<br>7 | 0<br>7 | 0<br>7 | 0<br>7 | 0<br>7 | 0<br>7 | 0<br>7 | 0<br>7 | 0<br>7 | 0<br>7 | 0<br>5 | 0<br>7 | 0<br>7 | 0<br>5 | 0<br>6 | 0<br>7 | 0<br>7 | 0<br>7 | 0<br>7 | 0<br>5 | 0<br>7 | 0<br>7 | 0<br>7 | 0<br>7 | 0<br>7 | <p>females<br/>(cont...)</p> |
|  | ANIMAL ID   | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 | 0<br>1 |                              |
|  |             | 2      | 3      | 4      | 1      | 4      | 4      | 3      | 3      | 4      | 8      | 3      | 3      | 6      | 7      | 4      | 3      | 1      | 3      | 4      | 5      | 4      | 4      | 3      | 3      | 4      |                              |

Inflammation, Acute  
Inflammation, Chronic Active  
Ulcer  
Epithelium, Hyperplasia

2

2

2  
1

Stomach, Glandular  
Erosion

+ + + + + + + + + + + A + + + + + + + + + + + +  
1

**CARDIOVASCULAR SYSTEM**

Aorta

+ +

Blood Vessel  
Pulmonary Artery, Degeneration

Heart  
Cardiomyopathy  
Endocardium, Hyperplasia, Schwann Cell  
Ventricle Right, Cardiomyopathy

+  
2 1 1 1 1 1 1 1 1 1 1 1 2 1 1 1  
1 1 1 1 1 2 1 1  
1 1

**ENDOCRINE SYSTEM**

Adrenal Cortex  
Accessory Adrenal Cortical Nodule  
Degeneration, Cystic  
Hyperplasia  
Hypertrophy  
Necrosis  
Vacuolation, Cytoplasmic

+  
X X X  
2 3 2 2 1  
1 3 1 2 1 2 1 2 2 3  
2 1 1 1 1 2 1 1 1 3  
2 1 1 1 2 2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked













Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6.0W/kg(CDMA)chr | DAY ON TEST          |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      | ANIMAL ID            | females<br>(cont...) |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|  | 07<br>00<br>22       | 07<br>03<br>29       | 07<br>04<br>04       | 07<br>01<br>04       | 07<br>04<br>04       | 07<br>04<br>07       | 07<br>03<br>08       | 07<br>03<br>04       | 07<br>04<br>07       | 07<br>08<br>04       | 07<br>05<br>07       | 07<br>03<br>08       | 07<br>03<br>09       | 07<br>06<br>00       | 07<br>04<br>01       | 07<br>03<br>07       | 07<br>07<br>08       | 07<br>04<br>00       | 07<br>05<br>00       | 07<br>04<br>01       | 07<br>03<br>07       | 07<br>03<br>09       | 07<br>04<br>00       | 07<br>07<br>01       |                      |                      |
|  | 01<br>88<br>99<br>67 | 01<br>11<br>08<br>77 | 01<br>11<br>08<br>77 | 01<br>11<br>09<br>77 | 01<br>11<br>09<br>77 | 01<br>11<br>00<br>02 | 01<br>11<br>00<br>03 | 01<br>11<br>00<br>05 | 01<br>11<br>00<br>06 | 01<br>11<br>00<br>07 | 01<br>11<br>00<br>08 | 01<br>11<br>00<br>00 | 01<br>11<br>00<br>02 | 01<br>11<br>01<br>03 | 01<br>11<br>01<br>04 | 01<br>11<br>01<br>05 | 01<br>11<br>01<br>06 | 01<br>11<br>01<br>07 | 01<br>11<br>01<br>09 | 01<br>11<br>02<br>00 | 01<br>11<br>02<br>01 | 01<br>11<br>02<br>02 | 01<br>11<br>02<br>03 | 01<br>11<br>02<br>04 | 01<br>11<br>02<br>05 |                      |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spinal Cord, Lumbar Degeneration Nerve, Degeneration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | 1 | 3 | 2 | 2 | 4 |   | 4 | 2 | 3 |   | 2 | 3 | 1 | 1 | 2 | 1 | 2 | 1 | 2 |   | 1 | 1 | 1 | 2 | 3 |
| Spinal Cord, Thoracic Degeneration                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 2 | 3 |   | 2 | 2 |   | 1 | 2 | 2 | 1 | 2 | 2 |   | 3 | 2 | 1 | 2 | 2 |
| Trigeminal Ganglion Degeneration                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | M | + | + | + | M |
|  |   | 1 |   |   | 1 | 1 | 1 | 1 |   |   |   |   |   | 1 | 1 |   |   | 1 | 1 |   |   |   | 1 | 1 |   |

RESPIRATORY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung Congestion  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Foreign Body Hemorrhage  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Granulomatous                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolar Epithelium, Metaplasia, Squamous                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolus, Infiltration Cellular, Histiocyte                      | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 1 |   | 1 | 3 | 1 | 3 | 1 | 1 | 2 |   | 1 | 1 | 1 | 1 |   | 1 | 3 |   |
| Artery, Muscularis, Hyperplasia Epithelium Alveolus, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nose Foreign Body  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Inflammation, Suppurative  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Olfactory Epithelium, Accumulation, Hyaline Droplet              | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 1 | 1 | 1 | 3 | 1 | 3 |
| Olfactory Epithelium, Metaplasia, Respiratory                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked





Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>6.0W/kg(CDMA)chr</b> | DAY ON TEST | 0738  | 0740  | 0779  | 0774  | 0573  | 0773  | 0777  | 0777  | 0777  | 0373  | 0774  | 0774  | 0773  | 0678  | 0774  | 0774  | 0492  | 0678  | 0774  | 0663  | 0774  | 0773  | 0695  | females<br>(cont...) |
|   | ANIMAL ID   | 01926 | 01927 | 01928 | 01929 | 01930 | 01931 | 01932 | 01933 | 01934 | 01935 | 01936 | 01937 | 01938 | 01939 | 01940 | 01941 | 01942 | 01943 | 01944 | 01945 | 01946 | 01947 | 01948 |                      |

ALIMENTARY SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus Inflammation, Acute     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Intestine Large, Cecum            | + | + | + | + | + | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | A | + | + | A |
| Intestine Large, Colon            | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum            | + | + | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Intestine Small, Jejunum          | + | + | + | + | + | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | A | + | + | A |
| Liver                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Basophilic Focus                  |   | X |   | X | X |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clear Cell Focus                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |
| Congestion                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Extramedullary Hematopoiesis      |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   |   |   |   | 1 |   |   |   |
| Hepatodiaphragmatic Nodule        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Mixed Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mitotic Alteration                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus                  | X |   | X |   |   |   |   | X | X |   |   | X | X |   | X |   | X | X |   |   |   |   | X |   |   |
| Bile Duct, Cyst                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |
| Bile Duct, Hyperplasia            |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |

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+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
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BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked









Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                      |
|--|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6.0W/kg(CDMA)chr | DAY ON TEST | 0<br>7<br>3<br>8      | 0<br>7<br>4<br>0      | 0<br>7<br>3<br>9      | 0<br>7<br>4<br>4      | 0<br>7<br>4<br>4      | 0<br>5<br>3<br>6      | 0<br>7<br>3<br>8      | 0<br>7<br>4<br>1      | 0<br>7<br>4<br>1      | 0<br>7<br>4<br>1      | 0<br>3<br>0<br>5      | 0<br>7<br>4<br>5      | 0<br>7<br>4<br>4      | 0<br>7<br>3<br>9      | 0<br>6<br>7<br>8      | 0<br>7<br>4<br>4      | 0<br>7<br>9<br>2      | 0<br>6<br>3<br>8      | 0<br>7<br>6<br>0      | 0<br>6<br>6<br>3      | 0<br>7<br>4<br>1      | 0<br>7<br>3<br>9      | 0<br>6<br>9<br>5      | females<br>(cont...) |
|  | ANIMAL ID   | 0<br>1<br>9<br>2<br>6 | 0<br>1<br>9<br>2<br>7 | 0<br>1<br>9<br>2<br>8 | 0<br>1<br>9<br>2<br>9 | 0<br>1<br>9<br>2<br>3 | 0<br>1<br>9<br>2<br>3 | 0<br>1<br>9<br>2<br>1 | 0<br>1<br>9<br>2<br>3 | 0<br>1<br>9<br>2<br>3 | 0<br>1<br>9<br>2<br>3 | 0<br>1<br>9<br>2<br>3 | 0<br>1<br>9<br>2<br>7 | 0<br>1<br>9<br>2<br>8 | 0<br>1<br>9<br>2<br>9 | 0<br>1<br>9<br>2<br>0 | 0<br>1<br>9<br>2<br>4 | 0<br>1<br>9<br>2<br>4 | 0<br>1<br>9<br>2<br>5 | 0<br>1<br>9<br>2<br>6 | 0<br>1<br>9<br>2<br>7 | 0<br>1<br>9<br>2<br>8 | 0<br>1<br>9<br>2<br>9 | 0<br>1<br>9<br>2<br>1 |                      |

GENITAL SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + |
| Inflammation, Granulomatous      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic            |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active     | 1 | 3 |   | 2 | 2 | 1 |   | 1 | 2 |   |   | 2 |   | 1 |   |   | 2 |   |   |   |   | 2 |   |   |
| Duct, Dilation                   | 2 | 2 | 1 | 4 | 3 |   |   | 4 | 3 | 1 | 3 | 1 | 1 |   |   | 2 |   | 3 | 2 | 3 | 2 | 4 |   | 3 |
| Duct, Hyperplasia                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |
| Ovary                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy                          | 4 | 4 | 4 | 4 | 4 | 3 | 4 |   | 4 | 4 |   | 4 |   | 4 |   | 4 | 4 | 3 | 4 | 2 | 4 | 2 | 4 | 2 |
| Cyst                             | X | X |   | X |   |   |   | X | X | X |   |   |   |   |   | X | X |   | X |   | X |   | X |   |
| Fibrosis                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigment                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bursa, Dilation                  |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Follicle, Cyst                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Rete Ovarii, Hyperplasia         | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |
| Uterus                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst                             |   |   |   | X | X | X |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Dilation                         |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 |   |   | 4 |   |   |   |   |   |   |   | 4 |
| Hemorrhage                       |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Inflammation, Suppurative        |   |   |   |   |   | 2 |   |   |   |   |   |   | 1 |   |   | 4 |   |   |   |   |   |   |   | 2 |
| Inflammation, Acute              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Cervix, Hyperplasia, Stromal     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Endometrium, Hyperplasia, Cystic |   | 1 | 1 | 2 | 1 |   | 2 | 1 |   | 1 |   | 2 |   |   |   |   | 1 |   |   | 1 |   | 2 | 2 |   |
| Epithelium, Metaplasia, Squamous |   |   |   | 3 |   | 4 | 1 |   |   | 1 |   | 1 |   | 2 | 4 | 4 | 3 | 3 | 4 |   | 1 | 1 | 1 | 1 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
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BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |           |                      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6.0W/kg(CDMA)chr | DAY ON TEST | 0738  | 0740  | 0739  | 0744  | 0744  | 0536  | 0778  | 0771  | 0771  | 0771  | 0335  | 0775  | 0774  | 0779  | 0678  | 0774  | 0774  | 0492  | 0738  | 0668  | 0740  | 0663  | 0741  | 0779  | 0695  | ANIMAL ID | females<br>(cont...) |
|  | ANIMAL ID   | 01926 | 01927 | 01928 | 01929 | 01930 | 01931 | 01932 | 01933 | 01934 | 01935 | 01936 | 01937 | 01938 | 01939 | 01940 | 01941 | 01942 | 01943 | 01944 | 01945 | 01946 | 01947 | 01948 | 01949 | 01950 |           |                      |

Lymphatic Sinus, Ectasia

Lymph Node, Mesenteric  
Infiltration Cellular, Histiocyte  
Lymphatic Sinus, Ectasia

Spleen  
Extramedullary Hematopoiesis  
Hemorrhage  
Pigment  
Red Pulp, Atrophy  
White Pulp, Atrophy

Thymus  
Atrophy  
Cyst  
Ectopic Parathyroid Gland  
Hemorrhage  
Hyperplasia, Epithelial

INTEGUMENTARY SYSTEM

Mammary Gland  
Galactocele  
Hyperplasia  
Inflammation, Acute  
Inflammation, Chronic Active  
Duct, Dilation

Skin

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>HARLAN SPRAGUE DAWLEY RATS FEMALE</b><br><b>6.0W/kg(CDMA)chr</b> | DAY ON TEST | 078   | 070   | 073   | 074   | 074   | 053   | 073   | 074   | 074   | 071   | 071   | 071   | 035   | 074   | 074   | 073   | 067   | 074   | 063   | 066   | 074   | 064   | 073   | 073   | 069   | 065   |
|   | ANIMAL ID   | 01926 | 01927 | 01928 | 01929 | 01930 | 01931 | 01932 | 01933 | 01934 | 01935 | 01936 | 01937 | 01938 | 01939 | 01940 | 01941 | 01942 | 01943 | 01944 | 01945 | 01946 | 01947 | 01948 | 01949 | 01950 | 01951 |

females (cont...)

Cyst Epithelial Inclusion  
Inflammation, Chronic Active  
Lymphatic, Subcutaneous Tissue, Angiectasis

1

MUSCULOSKELETAL SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle Degeneration<br>Diaphragm, Hernia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

NERVOUS SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain Compression<br>Glial Cell, Hyperplasia<br>Meninges, Hyperplasia, Granular Cell | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  |   | 1 | 1 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nerve Trigeminal Degeneration  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | 1 | 1 | 3 | 2 | 3 |   |   | 1 | 3 | 2 |   | 2 | 1 | 2 | 2 |   | 2 | 1 | 3 |   | 2 | 1 | 3 | 3 | 1 |   |   |
| Peripheral Nerve, Sciatic Degeneration   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 3 | 4 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 1 |   |   |
| Peripheral Nerve, Tibial Degeneration  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | 1 | 2 | 2 | 1 | 2 |   | 2 | 2 | 2 | 1 |   | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 1 |   |   |
| Spinal Cord, Cervical Degeneration   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  |   | 1 | 1 |   |   |   |   |   |   | 1 |   |   |   | 1 |   | 1 |   |   | 1 |   | 1 |   | 1 |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
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Route: Whole Body Exposure

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6.0W/kg(CDMA)chr | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |  |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|--|
|  | 0669        | 0739  | 0741  | 0778  | 0771  | 0770  | 0772  | 0774  | 0764  | 0773  | 0773  | 0763  | 0579  | 0745  | 0775  |          |  |
| ANIMAL ID  | 01954       | 01955 | 01956 | 01958 | 01959 | 01959 | 01959 | 01959 | 01966 | 01966 | 01966 | 01966 | 01966 | 01967 | 01968 | 01970    |  |
|  | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0        |  |

**ALIMENTARY SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |        |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Esophagus                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |        |
| Inflammation, Acute               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 1.0  |
| Intestine Large, Cecum            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 80 |        |
| Intestine Large, Colon            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 88 |        |
| Intestine Large, Rectum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 88 |        |
| Intestine Small, Duodenum         | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | 85 |        |
| Intestine Small, Ileum            | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | 83 |        |
| Intestine Small, Jejunum          | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | 79 |        |
| Liver                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |        |
| Angiectasis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3 1.3  |
| Basophilic Focus                  |   |   |   | X |   |   |   | X |   |   |   |   |   |   |   |    | 15     |
| Clear Cell Focus                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3      |
| Congestion                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 1.0  |
| Eosinophilic Focus                |   |   | X |   |   |   |   | X |   |   | X |   |   |   |   |    | 9      |
| Extramedullary Hematopoiesis      | 1 |   | 1 |   | 1 | 1 |   |   |   |   |   |   |   |   |   |    | 13 1.0 |
| Hepatodiaphragmatic Nodule        |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |    | 3      |
| Infiltration Cellular, Mixed Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2 1.0  |
| Mitotic Alteration                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 1.0  |
| Mixed Cell Focus                  |   |   | X | X | X |   |   |   |   | X | X |   |   |   |   |    | 35     |
| Bile Duct, Cyst                   |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   |    | 9      |
| Bile Duct, Hyperplasia            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 7 1.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6.0W/kg(CDMA)chr | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 069         | 0739  | 0741  | 0738  | 0711  | 0702  | 0704  | 0706  | 0694  | 0708  | 0709  | 0673  | 0579  | 0745  | 0775  |          |
| ANIMAL ID  | 01954       | 01195 | 01199 | 01199 | 01199 | 01199 | 01199 | 01199 | 01199 | 01199 | 01199 | 01199 | 01199 | 01199 | 01199 |          |
| Hepatocyte, Hypertrophy                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0 |          |
| Hepatocyte, Necrosis                                     |             |       |       |       |       |       |       |       |       |       |       |       | 1 1   |       | 4 1.3 |          |
| Hepatocyte, Vacuolation, Cytoplasmic                     |             |       | 2     |       |       |       |       |       | 2     |       |       |       | 2     |       | 9 1.4 |          |
| Kupffer Cell, Hyperplasia                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0 |          |
| Kupffer Cell, Pigment                                    |             |       | 1     |       |       |       |       |       |       |       |       |       |       |       | 1 1.0 |          |
| Periductal, Cholangiofibrosis                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 4.0 |          |
| Mesentery  |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |          |
| Inflammation, Chronic Active                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0 |          |
| Necrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 2 3.0 |          |
| Vein, Inflammation, Chronic Active                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0 |          |
| Pancreas   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 89    |          |
| Inflammation, Chronic Active                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 3 1.0 |          |
| Necrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 3.0 |          |
| Acinus, Atrophy  |             |       |       |       |       |       | 1     |       |       |       |       |       |       |       | 2 1.5 |          |
| Acinus, Hyperplasia                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 2 1.5 |          |
| Artery, Inflammation, Chronic Active                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0 |          |
| Periductal, Cholangiofibrosis                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0 |          |
| Salivary Glands  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 90    |          |
| Parotid Gland, Atrophy                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 3.0 |          |
| Parotid Gland, Fibrosis                                  |             |       |       |       |       |       |       |       |       |       |       |       |       | 1     | 3 1.0 |          |
| Parotid Gland, Mineral                                   |             |       |       |       |       |       |       |       |       |       |       |       |       | 1     | 1 1.0 |          |
| Sublingual Gland, Metaplasia                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0 |          |
| Submandibular Gland, Atrophy                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0 |          |
| Stomach, Forestomach                                     | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 90    |          |
| Cyst, Squamous   |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Edema  |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 3 2.0 |          |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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Date Report Requested: 01/02/2018

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

Lab: IIT

| DAY ON TEST                          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                      | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 7 | 7 |
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE | 6 | 3 | 4 | 3 | 1 | 0 | 2 | 4 | 9 | 3 | 3 | 3 | 7 | 4 | 4 | 4 | 4 |
|                                      | 9 | 9 | 1 | 8 | 1 | 2 | 0 | 0 | 4 | 8 | 9 | 3 | 9 | 5 | 4 | 5 | 5 |
| 6.0W/kg(CDMA)chr                     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| ANIMAL ID                            | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|                                      | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 |
|                                      | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 |

\* TOTALS

|                              |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |   |     |     |
|------------------------------|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|---|-----|-----|
| Inflammation, Acute          |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |   | 1   | 1.0 |
| Inflammation, Chronic Active |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |   | 1   | 2.0 |
| Ulcer                        |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  | 3 | 1.7 |     |
| Epithelium, Hyperplasia      |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  | 8 | 2.0 |     |

|                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Stomach, Glandular Erosion | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 88 |     |
|                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |

CARDIOVASCULAR SYSTEM

|       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| Aorta | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |  |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|

|                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |
|--------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-----|
| Blood Vessel                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |     |
| Pulmonary Artery, Degeneration |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1.0 |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Heart                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
| Cardiomyopathy                         |   |   | 2 | 1 | 1 |   |   | 1 |   | 1 |   | 2 |   | 1 | 1 |   | 45 | 1.1 |
| Endocardium, Hyperplasia, Schwann Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Ventricle Right, Cardiomyopathy        |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 1 |   | 9  | 1.0 |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |
| Accessory Adrenal Cortical Nodule |   | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   | 12 |     |
| Degeneration, Cystic              | 1 | 2 |   | 1 |   |   |   |   | 1 | 1 |   |   |   |   |   |   | 19 | 1.9 |
| Hyperplasia                       |   |   |   | 4 | 2 |   | 2 |   |   | 2 |   |   |   |   |   |   | 19 | 1.7 |
| Hypertrophy                       |   | 2 |   | 2 |   |   |   |   | 2 |   |   |   | 1 | 1 | 1 |   | 50 | 1.4 |
| Necrosis                          |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 4  | 2.5 |
| Vacuolation, Cytoplasmic          |   |   |   |   | 1 |   | 2 |   |   |   |   |   |   |   |   |   | 14 | 1.5 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|------|-----|
|  | 0669        | 0739  | 0741  | 0778  | 0778  | 0778  | 0778  | 0778  | 0778  | 0778  | 0778  | 0778  | 0778  | 0778  | 0778  |          | 0778 |     |
| ANIMAL ID  | 01954       | 01955 | 01956 | 01958 | 01959 | 01959 | 01959 | 01959 | 01959 | 01959 | 01959 | 01959 | 01959 | 01959 | 01959 | 01959    |      |     |
| Adrenal Medulla  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 88   |     |
| Hyperplasia  | 2           |       |       |       | 1     |       |       |       | 1     |       | 2     |       |       |       | 1     |          | 18   | 1.9 |
| Hypertrophy  |             |       |       |       |       |       | 1     |       |       |       |       |       |       |       |       |          | 1    | 1.0 |
| Necrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1    | 4.0 |
| Islets, Pancreatic                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 88   |     |
| Hyperplasia  | 4           |       |       |       |       |       |       |       |       |       | 1     |       |       |       | 1     |          | 13   | 1.8 |
| Parathyroid Gland  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 85   |     |
| Fibrosis   |             | 1     | M     |       |       |       |       |       |       |       |       |       |       |       | 1     |          | 10   | 1.5 |
| Hyperplasia  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 3    | 1.3 |
| Hypertrophy, Focal                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1    | 1.0 |
| Pituitary Gland  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 90   |     |
| Pars Distalis, Cyst                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1    |     |
| Pars Distalis, Hyperplasia                               |             |       |       |       |       |       |       |       | 3     |       | 2     |       |       |       |       |          | 22   | 2.8 |
| Pars Intermedia, Cyst                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 3    |     |
| Pars Nervosa, Developmental Malformation                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1    |     |
| Thyroid Gland  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 89   |     |
| C-cell, Hyperplasia                                      |             |       |       |       |       |       |       | 4     |       | 1     | 2     |       |       |       | 2     | 2        | 38   | 2.1 |
| C-cell, Hypoplasia                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1    | 3.0 |

**GENERAL BODY SYSTEM**

|                          |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |     |
|--------------------------|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|---|-----|
| Tissue NOS               |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  | 6 |     |
| Abdominal, Fat, Necrosis |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  | 2 | 2.0 |
| Fat, Necrosis            |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  | 3 | 2.7 |
| Mediastinum, Cyst        |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  | 1 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
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|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6.0W/kg(CDMA)chr | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS |
|  | ANIMAL ID   | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 |   |          |
|  |             | 6 | 3 | 4 | 3 | 1 | 0 | 2 | 4 | 9 | 3 | 3 | 7 | 4 | 4 |   |          |
|  |             | 9 | 9 | 1 | 8 | 1 | 2 | 0 | 4 | 4 | 8 | 9 | 3 | 5 | 5 |   |          |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |          |
|  |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |          |
|  |             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |   |          |
|  |             | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |   |          |
|  |             | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 |   |          |

GENITAL SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |        |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|--------|
| Clitoral Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 86     |        |
| Inflammation, Granulomatous      |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0  |        |
| Inflammation, Chronic            |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0  |        |
| Inflammation, Chronic Active     | 4 |   | 2 |   |   |   | 2 | 1 |   |   |   |   | 3 | 4 | 42 1.7 |        |
| Duct, Dilation                   | 4 | 4 | 4 | 4 |   |   | 3 |   | 4 |   |   | 2 | 4 | 1 | 60 2.6 |        |
| Duct, Hyperplasia                |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0  |        |
| Ovary                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90     |        |
| Atrophy                          | 3 | 2 |   | 4 | 1 | 2 | 4 | 4 |   | 4 | 4 |   | 2 | 4 | 4      | 77 3.5 |
| Cyst                             |   |   |   | X |   | X |   |   |   | X |   |   |   |   | X      | 34     |
| Fibrosis                         |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |        | 1 4.0  |
| Hemorrhage                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 1 1.0  |
| Pigment                          |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |        | 1 3.0  |
| Bursa, Dilation                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 1 2.0  |
| Follicle, Cyst                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 1      |
| Rete Ovarii, Hyperplasia         |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |        | 11 1.7 |
| Uterus                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90     |        |
| Cyst                             |   |   |   |   |   |   |   |   |   | X |   |   |   |   |        | 11     |
| Dilation                         |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |        | 8 3.8  |
| Hemorrhage                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 4 3.3  |
| Inflammation, Suppurative        |   |   |   | 2 |   |   |   |   | 2 |   |   |   | 2 | 1 |        | 12 2.0 |
| Inflammation, Acute              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 1 1.0  |
| Inflammation, Chronic Active     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 1 2.0  |
| Cervix, Hyperplasia, Stromal     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 1 4.0  |
| Endometrium, Hyperplasia, Cystic | 1 |   |   | 2 |   |   | 1 | 1 |   |   | 2 |   |   |   | 2      | 46 1.7 |
| Epithelium, Metaplasia, Squamous | 1 |   |   | 1 |   | 2 |   | 1 |   | 1 | 1 |   | 3 | 4 | 3      | 46 2.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>6.0W/kg(CDMA)chr</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|   | ANIMAL ID   | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 |  |
|   |             | 6 | 3 | 4 | 3 | 1 | 0 | 2 | 4 | 9 | 3 | 3 | 3 | 7 | 4 | 4 |  |
|   |             | 9 | 9 | 1 | 8 | 1 | 2 | 0 | 0 | 4 | 8 | 9 | 3 | 9 | 5 | 5 |  |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|   |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |
|   |             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |  |
|   |             | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 |  |
|   |             | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 0 |  |
| <b>* TOTALS</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

|        |   |
|--------|---|
| Vagina | 1 |
| Cyst   | 1 |

**HEMATOPOIETIC SYSTEM**

|                  |        |
|------------------|--------|
| Bone Marrow      | 90     |
| Hypercellularity | 43 3.2 |

|   |       |
|---|-------|
| Lymph Node                                    | 20    |
| Axillary, Erythrophagocytosis                 | 1 3.0 |
| Deep Cervical, Erythrophagocytosis            | 1 3.0 |
| Iliac, Erythrophagocytosis                    | 3 2.3 |
| Iliac, Hyperplasia, Lymphocyte                | 6 1.2 |
| Iliac, Infiltration Cellular, Histiocyte      | 1 2.0 |
| Iliac, Pigment                                | 3 1.3 |
| Iliac, Proliferation, Plasma Cell             | 5 1.6 |
| Iliac, Lymphatic Sinus, Ectasia               | 5 2.2 |
| Lumbar, Hyperplasia, Lymphocyte               | 1 2.0 |
| Lumbar, Lymphatic Sinus, Ectasia              | 1 1.0 |
| Mediastinal, Erythrophagocytosis              | 4 1.8 |
| Pancreatic, Infiltration Cellular, Histiocyte | 1 2.0 |

|                                   |        |
|-----------------------------------|--------|
| Lymph Node, Mandibular            | 90     |
| Congestion                        | 1 2.0  |
| Erythrophagocytosis               | 3 1.7  |
| Hyperplasia, Lymphocyte           | 43 1.5 |
| Infiltration Cellular, Histiocyte | 1 1.0  |
| Pigment                           | 1 2.0  |
| Proliferation, Plasma Cell        | 56 1.6 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>6.0W/kg(CDMA)chr</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|   | ANIMAL ID   | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 |  |
|   |             | 6 | 3 | 4 | 3 | 1 | 0 | 2 | 4 | 9 | 3 | 3 | 3 | 7 | 4 | 4 |  |
|   |             | 9 | 9 | 1 | 8 | 1 | 2 | 0 | 0 | 4 | 8 | 9 | 3 | 9 | 5 | 5 |  |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|   |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |
|   |             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |  |
|   |             | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |  |
|   |             | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  |
| <b>* TOTALS</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |            |            |            |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|------------|------------|
| Lymphatic Sinus, Ectasia          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3</b>  | <b>1.0</b> |            |            |
| Lymph Node, Mesenteric            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +         | <b>89</b>  |            |            |
| Infiltration Cellular, Histiocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |            | <b>1</b>   | <b>1.0</b> |
| Lymphatic Sinus, Ectasia          |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |           |            | <b>1</b>   | <b>1.0</b> |
| Spleen                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +         | <b>90</b>  |            |            |
| Extramedullary Hematopoiesis      | 3 | 2 | 3 | 1 | 4 | 2 |   | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 1 |           | <b>82</b>  | <b>2.1</b> |            |
| Hemorrhage                        |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |           | <b>1</b>   | <b>1.0</b> |            |
| Pigment                           | 1 | 3 |   |   |   | 2 | 3 | 2 |   | 2 | 2 | 2 | 1 | 3 | 3 |           | <b>79</b>  | <b>1.8</b> |            |
| Red Pulp, Atrophy                 |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |           | <b>6</b>   | <b>2.2</b> |            |
| White Pulp, Atrophy               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>   | <b>2.0</b> |            |
| Thymus                            | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | <b>87</b> |            |            |            |
| Atrophy                           | 3 | 2 | 2 | 1 | 2 | 3 | 1 |   |   | 1 | 2 | 3 |   | 3 | 2 |           | <b>63</b>  | <b>1.7</b> |            |
| Cyst                              | X |   | X | X |   |   | X | X |   | X | X |   |   | X |   |           | <b>45</b>  |            |            |
| Ectopic Parathyroid Gland         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2</b>   |            |            |
| Hemorrhage                        |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |           | <b>3</b>   | <b>2.3</b> |            |
| Hyperplasia, Epithelial           | 1 |   |   | 1 | 1 | 3 | 1 |   |   | 1 | 1 |   |   | 1 | 1 |           | <b>38</b>  | <b>1.4</b> |            |

**INTEGUMENTARY SYSTEM**

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |            |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------|------------|
| Mammary Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |           |            |
| Galactocele                  |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |           | <b>10</b> |            |
| Hyperplasia                  | 2 | 4 | 2 | 2 | 3 | 1 |   |   |   |   | 2 |   |   |   | 2 |           | <b>34</b> | <b>2.1</b> |
| Inflammation, Acute          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>1.0</b> |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>1.0</b> |
| Duct, Dilation               | 1 | 1 |   | 1 |   | 3 | 2 | 2 |   | 1 | 2 |   |   | 3 | 4 |           | <b>70</b> | <b>1.6</b> |
| Skin                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>90</b> |           |            |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>6.0W/kg(CDMA)chr</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|   | ANIMAL ID   | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 |   |  |
|   |             | 6 | 3 | 4 | 3 | 1 | 0 | 2 | 4 | 9 | 3 | 3 | 7 | 4 | 4 |   |  |
|   |             | 9 | 9 | 1 | 8 | 1 | 2 | 0 | 4 | 8 | 9 | 3 | 9 | 5 | 5 |   |  |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
|   |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |  |
|   |             | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |   |  |
|   |             | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |   |  |
|   |             | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 |   |  |
| <b>* TOTALS</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

|   |   |     |
|---|---|-----|
| Cyst Epithelial Inclusion                   | 1 |     |
| Inflammation, Chronic Active                | 1 | 1.0 |
| Lymphatic, Subcutaneous Tissue, Angiectasis | 1 | 3.0 |

**MUSCULOSKELETAL SYSTEM**

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Bone              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |     |
| Skeletal Muscle   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |     |
| Degeneration      |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 1.0 |     |
| Diaphragm, Hernia |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 1   | 3.0 |

**NERVOUS SYSTEM**

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Brain                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |     |
| Compression                          |   |   |   |   |   |   | 1 | 2 | 1 |   |   |   | 1 | 1 | 20 | 1.4 |     |
| Glial Cell, Hyperplasia              |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |     |
| Meninges, Hyperplasia, Granular Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |     |
| Nerve Trigeminal                     | + | + | + | + | + | + | + | + | + | M | + | + | + | + | 84 |     |     |
| Degeneration                         | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 1 | 3 | 1 |   | 1 | 3 | 2 | 1  | 72  | 2.1 |
| Peripheral Nerve, Sciatic            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |     |
| Degeneration                         | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 3 | 1 | 2 | 1 | 1 | 1 | 2 | 89 | 1.7 |     |
| Peripheral Nerve, Tibial             | + | + | + | + | I | + | + | + | + | + | + | + | + | + | 89 |     |     |
| Degeneration                         | 1 | 2 | 1 | 1 |   | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2  | 86  | 1.7 |
| Spinal Cord, Cervical                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |     |
| Degeneration                         |   | 1 | 1 |   |   | 1 | 1 |   | 1 |   |   |   | 1 |   | 35 | 1.0 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6.0W/kg(CDMA)chr | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 069         | 0739  | 0741  | 0738  | 0711  | 0702  | 0700  | 0704  | 0694  | 0708  | 0709  | 0673  | 0579  | 0745  | 0775  |          |
| ANIMAL ID  | 01954       | 01955 | 01956 | 01958 | 01959 | 01959 | 01959 | 01959 | 01959 | 01959 | 01959 | 01959 | 01959 | 01959 | 01959 |          |

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Spinal Cord, Lumbar Degeneration   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 | 12  | 1.3 |
| Nerve, Degeneration                | 2 | 1 | 1 | 1 | 2 |   | 3 | 2 | 1 | 2 | 2 | 3 | 1 | 2 | 2 | 80 | 2.0 |     |
| Spinal Cord, Thoracic Degeneration | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 | 70  | 1.8 |
| Trigeminal Ganglion Degeneration   | + | + | + | + | + | + | M | M | + | + | + | + | + | + | + | 75 | 28  | 1.0 |

RESPIRATORY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|--|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 90 |     |  |
| Congestion  |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   | 5  | 1.8 |  |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |  |
| Hemorrhage  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |  |
| Inflammation, Suppurative                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |  |
| Inflammation, Granulomatous                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 1.0 |  |
| Inflammation, Chronic Active                        |   |   | 1 |   | 1 | 2 |   |   |   |   |   | 1 |   |   |   | 11 | 1.1 |  |
| Alveolar Epithelium, Metaplasia, Squamous           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 4.0 |  |
| Alveolus, Infiltration Cellular, Histiocyte         | 1 | 1 | 1 | 1 | 3 | 3 | 2 | 1 |   | 1 | 3 | 3 | 3 |   | 2 | 81 | 1.8 |  |
| Artery, Muscularis, Hyperplasia                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |  |
| Epithelium Alveolus, Hyperplasia                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |  |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | 89 |     |  |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |     |  |
| Inflammation, Suppurative                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 1.0 |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet | 1 | 2 | 3 | 1 | 3 | 2 | 2 | 3 | 2 | 3 | 2 |   | 2 | 1 | 2 | 86 | 2.2 |  |
| Olfactory Epithelium, Metaplasia, Respiratory       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 2.0 |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| DAY ON TEST   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |     |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
|   | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 6 | 7 | 7  |     |
| <b>HARLAN SPRAGUE DAWLEY RATS<br/>FEMALE</b>          | 6 | 3 | 4 | 3 | 1 | 0 | 2 | 4 | 9 | 3 | 3 | 3 | 7 | 4 | 4 |   |   |    |     |
|   | 9 | 9 | 1 | 8 | 1 | 2 | 0 | 0 | 4 | 8 | 9 | 3 | 9 | 5 | 5 |   |   |    |     |
| <b>6.0W/kg(CDMA)chr</b>                               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |     |
|   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  |     |
| ANIMAL ID   | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9  |     |
|   | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7  |     |
|   | 4 | 5 | 6 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 0 |   |   |    |     |
| <b>* TOTALS</b>                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 11 | 1.0 |
| Respiratory Epithelium, Hyperplasia                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 2.0 |
| Respiratory Epithelium, Metaplasia, Squamous          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Trachea   | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |   |   |    |     |
| Glands, Cyst  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 89 | 2   |
| <b>SPECIAL SENSES SYSTEM</b>                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
| Ear   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | 1  |     |
| Eye   | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |   |   |    |     |
| Anterior Chamber, Inflammation, Acute                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 2  | 1.0 |
| Cornea, Inflammation, Acute                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 2  | 2.0 |
| Cornea, Ulcer   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 1  | 2.0 |
| Cornea, Epithelium, Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Retina, Atrophy                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 18 | 1.1 |
| Retina, Dysplasia                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 2.0 |
| Harderian Gland                                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |    |     |
| Atrophy   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 17 | 1.1 |
| Cyst  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1  |     |
| Hyperplasia   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Hypertrophy   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Infiltration Cellular, Lymphocyte                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Inflammation, Granulomatous                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 9  | 1.0 |
| Inflammation, Chronic                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 1.0 |

URINARY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 20105 - 56

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 01/02/2018

Time Report Requested: 13:31:21

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6.0W/kg(CDMA)chr | DAY ON TEST |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |     |
|--|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|
|  | 06<br>69    | 07<br>39 | 07<br>41 | 07<br>38 | 07<br>11 | 07<br>02 | 07<br>20 | 07<br>40 | 06<br>44 | 07<br>38 | 07<br>39 | 06<br>33 | 05<br>79 | 07<br>45 | 07<br>75 |          |     |
| ANIMAL ID  | 01<br>94    | 01<br>95 | 01<br>96 | 01<br>98 | 01<br>99 | 01<br>99 | 01<br>99 | 01<br>99 | 01<br>99 | 01<br>99 | 01<br>99 | 01<br>99 | 01<br>99 | 01<br>99 | 01<br>99 | * TOTALS |     |
| Kidney   | +           | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | 89       |     |
| Nephropathy, Chronic Progressive                         | 1           | 1        | 1        | 1        | 1        | 1        | 1        | 1        |          | 1        | 1        | 1        |          | 1        | 1        | 65       | 1.1 |
| Pelvis, Mineral  |             |          |          |          |          |          |          |          |          |          |          |          |          |          |          | 1        | 1.0 |
| Urinary Bladder  | +           | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | 90       |     |

\*\*\* END OF REPORT \*\*\*

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked