

**Experiment Number:** C20105-59

**Test Type:** TOX

**Route:** Whole Body Exposure

**Species/Strain:** Rat/Harlan Sprague Dawley

**PA41: Clinical Chemistry Summary**

**Test Compound:** Cell Phone Radiation: GSM

**CAS Number:** CELLPRADGSM

**Date Report Requested:** 02/17/2017

**Time Report Requested:** 07:22:42

**Lab:** NTP

**C Number:**

C20105-59

**Cage Range:**

All

**Date Range:**

All

**Reasons For Removal:**

All

**Removal Date Range:**

All

**Treatment Groups:**

All

**Study Gender:**

Both

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Male

Treatment Groups

	Phase Day	0.0 W/kg	1.5 W/kg	3.0 W/kg	6.0 W/kg
Urea Nitrogen (mg/dL)	SD 94	18.1 ± 0.6 (10)	17.6 ± 0.4 (10)	17.7 ± 0.4 (10)	18.1 ± 0.5 (10)
Percent of Control			97	98	100
Creatinine (mg/dL)	SD 94	0.50 ± 0.01 (10) **	0.54 ± 0.02 (10)	0.54 ± 0.01 (10) *	0.56 ± 0.01 (10) **
Percent of Control			109	109	113
Glucose (mg/dL)	SD 94	134.7 ± 5.5 (10)	134.4 ± 3.7 (10)	127.0 ± 2.2 (10)	128.0 ± 2.5 (10)
Percent of Control			100	94	95
Total Protein (g/dL)	SD 94	6.14 ± 0.05 (10)	6.15 ± 0.07 (10)	6.14 ± 0.06 (10)	6.25 ± 0.06 (10)
Percent of Control			100	100	102
Albumin (g/dL)	SD 94	3.61 ± 0.03 (10)	3.65 ± 0.05 (10)	3.65 ± 0.03 (10)	3.72 ± 0.04 (10)
Percent of Control			101	101	103
Cholesterol (mg/dL)	SD 94	92.1 ± 2.4 (10)	85.8 ± 3.2 (10)	86.6 ± 2.6 (10)	88.4 ± 4.2 (10)
Percent of Control			93	94	96
Triglyceride (mg/dL)	SD 94	87.9 ± 6.1 (10)	88.3 ± 9.5 (10)	97.7 ± 6.3 (10)	95.7 ± 6.2 (10)
Percent of Control			100	111	109
Alanine Aminotransferase (IU/L)	SD 94	54.70 ± 2.08 (10)	49.00 ± 1.18 (10)	57.20 ± 3.66 (10)	50.70 ± 2.15 (10)
Percent of Control			90	105	93
Alkaline Phosphatase (IU/L)	SD 94	284.4 ± 12.0 (10)	315.5 ± 18.8 (10)	315.1 ± 18.5 (10)	318.1 ± 15.5 (10)
Percent of Control			111	111	112
Creatine Kinase (IU/L)	SD 94	276.5 ± 82.5 (10)	467.4 ± 160.6 (10)	284.1 ± 68.1 (10)	663.8 ± 266.1 (10)
Percent of Control			169	103	240
Sorbitol Dehydrogenase (IU/L)	SD 94	33.3 ± 0.7 (10)	32.5 ± 0.8 (10)	33.9 ± 1.3 (10)	33.0 ± 0.8 (10)
Percent of Control			98	102	99

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**Male**

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**Treatment Groups**

	<b>Phase Day</b>	<b>0.0 W/kg</b>	<b>1.5 W/kg</b>	<b>3.0 W/kg</b>	<b>6.0 W/kg</b>
Bile salt/acids ( $\mu\text{mol/L}$ )	SD 94	27.3 $\pm$ 3.8 (10)	20.5 $\pm$ 3.1 (10)	33.0 $\pm$ 4.8 (10)	29.6 $\pm$ 4.8 (10)
Percent of Control			75	121	109

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Female

Treatment Groups

	Phase Day	0.0 W/kg	1.5 W/kg	3.0 W/kg	6.0 W/kg
Urea Nitrogen (mg/dL)	SD 93	17.5 ± 0.9 (10)	18.1 ± 0.8 (10)	16.9 ± 0.5 (10)	15.9 ± 0.9 (10)
Percent of Control			103	97	91
Creatinine (mg/dL)	SD 93	0.57 ± 0.03 (10)	0.56 ± 0.03 (10)	0.56 ± 0.02 (10)	0.63 ± 0.02 (10)
Percent of Control			98	97	109
Glucose (mg/dL)	SD 93	150.8 ± 9.1 (10)	146.3 ± 8.5 (10)	141.4 ± 4.6 (10)	146.1 ± 5.8 (10)
Percent of Control			97	94	97
Total Protein (g/dL)	SD 93	6.19 ± 0.05 (10)	6.21 ± 0.07 (10)	6.26 ± 0.07 (10)	6.29 ± 0.05 (10)
Percent of Control			100	101	102
Albumin (g/dL)	SD 93	3.79 ± 0.03 (10)	3.82 ± 0.03 (10)	3.87 ± 0.03 (10)	3.89 ± 0.05 (10)
Percent of Control			101	102	103
Cholesterol (mg/dL)	SD 93	78.4 ± 3.8 (10) **	71.6 ± 2.8 (10)	69.4 ± 2.6 (10)	63.5 ± 2.9 (10) **
Percent of Control			91	89	81
Triglyceride (mg/dL)	SD 93	70.1 ± 8.9 (10) *	50.9 ± 4.2 (10)	61.4 ± 8.0 (10)	43.8 ± 4.5 (10) *
Percent of Control			73	88	62
Alanine Aminotransferase (IU/L)	SD 93	48.30 ± 2.41 (10) *	40.90 ± 1.73 (10)	43.40 ± 2.02 (10)	40.80 ± 2.16 (10)
Percent of Control			85	90	84
Alkaline Phosphatase (IU/L)	SD 93	277.1 ± 23.9 (10)	272.8 ± 15.9 (10)	265.1 ± 13.1 (10)	225.7 ± 12.4 (10)
Percent of Control			98	96	81
Creatine Kinase (IU/L)	SD 93	209.3 ± 34.8 (10)	295.1 ± 54.2 (10)	218.0 ± 26.7 (10)	275.4 ± 68.4 (10)
Percent of Control			141	104	132
Sorbitol Dehydrogenase (IU/L)	SD 93	31.3 ± 4.2 (10)	28.2 ± 4.5 (10)	28.2 ± 3.9 (10)	32.2 ± 4.3 (10)
Percent of Control			90	90	103

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**Treatment Groups**

	<b>Phase Day</b>	<b>0.0 W/kg</b>	<b>1.5 W/kg</b>	<b>3.0 W/kg</b>	<b>6.0 W/kg</b>
Bile salt/acids ( $\mu\text{mol/L}$ )	SD 93	33.7 $\pm$ 6.1 (10)	22.8 $\pm$ 3.7 (10)	28.0 $\pm$ 4.5 (10)	31.5 $\pm$ 6.3 (10)
Percent of Control			68	83	93

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LEGEND

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SD – Study Day; GD – Gestation Day; LD – Lactation Day; PND – Postnatal Day, adults post-weaning

Values given as mean  $\pm$  SEM (N) with Percent of Control calculated by (dosed group mean / control group mean) x 100

Clinical Chemistry for gestation phase includes pregnant females only

Statistical analysis performed by Jonckheere (trend) and Shirley or Dunn (pairwise) tests

Statistical significance for the control group indicates a significant trend test

\* Statistically significant at  $P \leq 0.05$

\*\* Statistically significant at  $P \leq 0.01$

**\*\* END OF REPORT \*\***