

Experiment Number: C20105-56

Test Type: TOX

Route: Whole Body Exposure

Species/Strain: Rat/Harlan Sprague Dawley

PA43: Hematology Summary

Test Compound: Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 02/17/2017

Time Report Requested: 12:12:01

Lab: NTP

C Number: C20105-56

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
Hematocrit (%)	SD 94	52.0 ± 0.3 (10)	51.9 ± 0.4 (10)	51.4 ± 0.5 (10)	51.9 ± 0.8 (10)
Percent of Control			100	99	100
Manual Hematocrit (%)	SD 94	50 ± 0 (10)	50 ± 1 (10)	50 ± 1 (10)	50 ± 1 (9)
Percent of Control			101	100	101
Hemoglobin (g/dL)	SD 94	16.5 ± 0.1 (10)	16.6 ± 0.1 (10)	16.6 ± 0.1 (10)	16.7 ± 0.3 (10)
Percent of Control			101	100	101
Red Blood Cells (10^6/uL)	SD 94	8.88 ± 0.07 (10)	8.92 ± 0.07 (10)	8.91 ± 0.10 (10)	8.82 ± 0.13 (10)
Percent of Control			100	100	99
Reticulocytes (10^3/uL)	SD 94	270.4 ± 3.9 (10)	266.8 ± 5.7 (10)	257.4 ± 5.6 (10)	274.8 ± 15.1 (10)
Percent of Control			99	95	102
Nucleated Red Blood Cells (/100 WBC)	SD 94	0.00 ± 0.00 (10)	0.00 ± 0.00 (10)	0.00 ± 0.00 (10)	0.00 ± 0.00 (10)
Percent of Control					
Mean Cell Volume (fL)	SD 94	58.5 ± 0.4 (10)	58.2 ± 0.4 (10)	57.7 ± 0.5 (10)	58.9 ± 0.5 (10)
Percent of Control			99	99	101
Mean Cell Hemoglobin (pg)	SD 94	18.6 ± 0.1 (10)	18.7 ± 0.1 (10)	18.6 ± 0.1 (10)	18.9 ± 0.1 (10)
Percent of Control			100	100	102
Mean Cell Hemoglobin Concentration (g/dL)	SD 94	31.7 ± 0.1 (10)	32.0 ± 0.2 (10)	32.3 ± 0.2 (10)	32.1 ± 0.2 (10)
Percent of Control			101	102	101
Platelets (10^3/uL)	SD 94	894 ± 41 (10)	839 ± 26 (10)	911 ± 22 (10)	926 ± 35 (10)
Percent of Control			94	102	104
White Blood Cells (10^3/uL)	SD 94	9.34 ± 0.50 (10)	10.46 ± 0.64 (10)	10.08 ± 0.55 (10)	9.52 ± 0.88 (10)
Percent of Control			112	108	102

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Treatment Groups

	Phase Day	0.0 W/kg	1.5 W/kg	3.0 W/kg	6.0 W/kg
Neutrophils ($10^3/\mu\text{L}$)	SD 94	1.19 ± 0.09 (10)	1.06 ± 0.14 (10)	1.11 ± 0.06 (10)	1.03 ± 0.10 (10)
Percent of Control			89	93	86
Lymphocytes ($10^3/\mu\text{L}$)	SD 94	7.66 ± 0.48 (10)	8.94 ± 0.64 (10)	8.49 ± 0.52 (10)	8.09 ± 0.82 (10)
Percent of Control			117	111	106
Monocytes ($10^3/\mu\text{L}$)	SD 94	0.26 ± 0.03 (10)	0.22 ± 0.03 (10)	0.21 ± 0.03 (10)	0.20 ± 0.03 (10)
Percent of Control			84	81	78
Basophils ($10^3/\mu\text{L}$)	SD 94	0.05 ± 0.01 (10)	0.06 ± 0.01 (10)	0.05 ± 0.00 (10)	0.05 ± 0.01 (10)
Percent of Control			131	102	102
Eosinophils ($10^3/\mu\text{L}$)	SD 94	0.10 ± 0.01 (10)	0.10 ± 0.01 (10)	0.13 ± 0.04 (10)	0.07 ± 0.01 (10)
Percent of Control			100	130	74
Large Unstained Cells ($10^3/\mu\text{L}$)	SD 94	0.09 ± 0.01 (10)	0.08 ± 0.01 (10)	0.09 ± 0.01 (10)	0.07 ± 0.01 (10)
Percent of Control			95	102	83

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Treatment Groups

	Phase Day	0.0 W/kg	1.5 W/kg	3.0 W/kg	6.0 W/kg
Hematocrit (%)	SD 93	48.1 ± 0.5 (10)	48.9 ± 0.3 (10) 102	48.7 ± 0.4 (10) 101	48.4 ± 0.4 (10) 101
Percent of Control					
Manual Hematocrit (%)	SD 93	47 ± 0 (10)	48 ± 0 (10) 103	48 ± 0 (10) *	48 ± 0 (10) 102
Percent of Control					
Hemoglobin (g/dL)	SD 93	15.6 ± 0.2 (10)	15.8 ± 0.1 (10) 102	15.8 ± 0.1 (10) 101	15.7 ± 0.1 (10) 101
Percent of Control					
Red Blood Cells (10^6/uL)	SD 93	8.15 ± 0.07 (10)	8.13 ± 0.08 (10) 100	8.23 ± 0.03 (10) 101	8.17 ± 0.08 (10) 100
Percent of Control					
Reticulocytes (10^3/uL)	SD 93	245.7 ± 14.9 (10)	282.5 ± 10.3 (10) 115	268.0 ± 19.8 (10) 109	267.9 ± 14.4 (10) 109
Percent of Control					
Nucleated Red Blood Cells (/100 WBC)	SD 93	0.00 ± 0.00 (10)	0.00 ± 0.00 (10)	0.00 ± 0.00 (10)	0.00 ± 0.00 (10)
Percent of Control					
Mean Cell Volume (fL)	SD 93	58.9 ± 0.3 (10)	60.2 ± 0.4 (10) 102	59.2 ± 0.5 (10) 100	59.3 ± 0.7 (10) 101
Percent of Control					
Mean Cell Hemoglobin (pg)	SD 93	19.1 ± 0.1 (10)	19.5 ± 0.2 (10) 102	19.2 ± 0.1 (10) 100	19.3 ± 0.2 (10) 101
Percent of Control					
Mean Cell Hemoglobin Concentration (g/dL)	SD 93	32.4 ± 0.1 (10)	32.4 ± 0.1 (10) 100	32.4 ± 0.2 (10) 100	32.6 ± 0.2 (10) 100
Percent of Control					
Platelets (10^3/uL)	SD 93	963 ± 40 (10)	978 ± 36 (10) 102	989 ± 38 (10) 103	983 ± 33 (10) 102
Percent of Control					
White Blood Cells (10^3/uL)	SD 93	8.80 ± 0.50 (10)	8.12 ± 0.83 (10) 92	7.82 ± 0.56 (10) 89	8.83 ± 0.97 (10) 100
Percent of Control					

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	Phase Day	0.0 W/kg	1.5 W/kg	3.0 W/kg	6.0 W/kg
Neutrophils ($10^3/\mu\text{L}$)	SD 93	1.15 ± 0.12 (10)	0.96 ± 0.15 (10)	0.98 ± 0.11 (10)	1.28 ± 0.28 (10)
Percent of Control			84	86	111
Lymphocytes ($10^3/\mu\text{L}$)	SD 93	7.22 ± 0.40 (10)	6.75 ± 0.67 (10)	6.47 ± 0.48 (10)	7.12 ± 0.68 (10)
Percent of Control			94	90	99
Monocytes ($10^3/\mu\text{L}$)	SD 93	0.19 ± 0.02 (10)	0.20 ± 0.03 (10)	0.18 ± 0.03 (10)	0.19 ± 0.03 (10)
Percent of Control			110	98	105
Basophils ($10^3/\mu\text{L}$)	SD 93	0.05 ± 0.01 (10)	0.04 ± 0.01 (10)	0.03 ± 0.00 (10)	0.04 ± 0.01 (10)
Percent of Control			85	62	79
Eosinophils ($10^3/\mu\text{L}$)	SD 93	0.11 ± 0.02 (10)	0.09 ± 0.01 (10)	0.09 ± 0.01 (10)	0.12 ± 0.03 (10)
Percent of Control			82	80	109
Large Unstained Cells ($10^3/\mu\text{L}$)	SD 93	0.09 ± 0.01 (10)	0.07 ± 0.01 (10)	0.06 ± 0.01 (10) *	0.08 ± 0.01 (10)
Percent of Control			82	70	90

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LEGEND

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) \times 100

Hematology for gestation phase includes pregnant females only

Statistical analysis performed by Jonchkeere (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 **