

Experiment Number: C20105-59

Test Type: TOX

Route: Whole Body Exposure

Species/Strain: Rat/Harlan Sprague Dawley

C Number:

C20105-59

Cage Range:

All

Date Range:

All

Reasons For Removal:

All

Removal Date Range:

All

Treatment Groups:

All

Study Gender:

Both

PA43: Hematology Summary

Test Compound: Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 02/17/2017

Time Report Requested: 07:22:56

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Male

| | Phase Day | Treatment Groups | | | |
|---|-----------|------------------|------------------|------------------|------------------|
| | | 0.0 W/kg | 1.5 W/kg | 3.0 W/kg | 6.0 W/kg |
| Hematocrit (%) | SD 94 | 52.0 ± 0.3 (10) | 51.7 ± 0.2 (10) | 51.8 ± 0.6 (10) | 52.4 ± 0.4 (10) |
| Percent of Control | | | 99 | 100 | 101 |
| Manual Hematocrit (%) | SD 94 | 50 ± 0 (10) | 50 ± 0 (10) | 50 ± 1 (10) | 51 ± 1 (10) |
| Percent of Control | | | 99 | 101 | 102 |
| Hemoglobin (g/dL) | SD 94 | 16.5 ± 0.1 (10) | 16.5 ± 0.1 (10) | 16.6 ± 0.2 (10) | 16.7 ± 0.2 (10) |
| Percent of Control | | | 100 | 101 | 101 |
| Red Blood Cells (10 ⁶ /uL) | SD 94 | 8.88 ± 0.07 (10) | 8.92 ± 0.05 (10) | 9.15 ± 0.10 (10) | 8.94 ± 0.08 (10) |
| Percent of Control | | | 100 | 103 | 101 |
| Reticulocytes (10 ³ /uL) | SD 94 | 270.4 ± 3.9 (10) | 259.4 ± 7.3 (10) | 258.2 ± 7.0 (10) | 265.6 ± 9.5 (10) |
| Percent of Control | | | 96 | 95 | 98 |
| Nucleated Red Blood Cells (/100 WBC) | SD 94 | 0.00 ± 0.00 (10) | 0.00 ± 0.00 (10) | 0.00 ± 0.00 (10) | 0.10 ± 0.10 (10) |
| Percent of Control | | | | | |
| Mean Cell Volume (fL) | SD 94 | 58.5 ± 0.4 (10) | 58.0 ± 0.5 (10) | 56.7 ± 0.5 (10) | 58.6 ± 0.5 (10) |
| Percent of Control | | | 99 | 97 | 100 |
| Mean Cell Hemoglobin (pg) | SD 94 | 18.6 ± 0.1 (10) | 18.5 ± 0.1 (10) | 18.2 ± 0.2 (10) | 18.8 ± 0.2 (10) |
| Percent of Control | | | 100 | 98 | 101 |
| Mean Cell Hemoglobin Concentration (g/dL) | SD 94 | 31.7 ± 0.1 (10) | 31.9 ± 0.1 (10) | 32.0 ± 0.2 (10) | 32.0 ± 0.2 (10) |
| Percent of Control | | | 101 | 101 | 101 |
| Platelets (10 ³ /uL) | SD 94 | 894 ± 41 (10) | 896 ± 34 (10) | 954 ± 57 (10) | 896 ± 24 (10) |
| Percent of Control | | | 100 | 107 | 100 |
| White Blood Cells (10 ³ /uL) | SD 94 | 9.34 ± 0.50 (10) | 9.23 ± 0.45 (10) | 9.38 ± 0.52 (10) | 9.63 ± 0.65 (10) |
| Percent of Control | | | 99 | 100 | 103 |

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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 |
|---|-----------|------------------|-------------------------|-------------------------|-------------------------|
| Neutrophils (10 ³ /uL) Percent of Control | SD 94 | 1.19 ± 0.09 (10) | 1.02 ± 0.06 (10) 86 | 1.29 ± 0.11 (10) 108 | 1.33 ± 0.11 (10) 111 |
| Lymphocytes (10 ³ /uL) Percent of Control | SD 94 | 7.66 ± 0.48 (10) | 7.78 ± 0.43 (10) 102 | 7.68 ± 0.53 (10) 100 | 7.87 ± 0.59 (10) 103 |
| Monocytes (10 ³ /uL) Percent of Control | SD 94 | 0.26 ± 0.03 (10) | 0.22 ± 0.02 (10) 85 | 0.20 ± 0.02 (10) 75 | 0.22 ± 0.02 (10) 84 |
| Basophils (10 ³ /uL) Percent of Control | SD 94 | 0.05 ± 0.01 (10) | 0.05 ± 0.00 (10) 102 | 0.05 ± 0.01 (10) 116 | 0.05 ± 0.01 (10) 116 |
| Eosinophils (10 ³ /uL) Percent of Control | SD 94 | 0.10 ± 0.01 (10) | 0.08 ± 0.01 (10) 86 | 0.09 ± 0.01 (10) 94 | 0.09 ± 0.01 (10) 90 |
| Large Unstained Cells (10 ³ /uL) Percent of Control | SD 94 | 0.09 ± 0.01 (10) | 0.09 ± 0.01 (10) 101 | 0.07 ± 0.01 (10) 82 | 0.08 ± 0.01 (10) 87 |

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Female

| | Phase Day | Treatment Groups | | | |
|---|-----------|--------------------|------------------|--------------------|-------------------|
| | | 0.0 W/kg | 1.5 W/kg | 3.0 W/kg | 6.0 W/kg |
| Hematocrit (%) | SD 93 | 48.1 ± 0.5 (10) | 49.1 ± 0.5 (10) | 48.6 ± 0.4 (10) | 48.7 ± 0.6 (10) |
| Percent of Control | | | 102 | 101 | 101 |
| Manual Hematocrit (%) | SD 93 | 47 ± 0 (10) * | 49 ± 0 (10) * | 49 ± 0 (10) ** | 49 ± 0 (10) * |
| Percent of Control | | | 104 | 105 | 104 |
| Hemoglobin (g/dL) | SD 93 | 15.6 ± 0.2 (10) | 15.9 ± 0.1 (10) | 15.8 ± 0.1 (10) | 15.8 ± 0.1 (10) |
| Percent of Control | | | 102 | 101 | 101 |
| Red Blood Cells (10 ⁶ /uL) | SD 93 | 8.15 ± 0.07 (10) | 8.33 ± 0.12 (10) | 8.29 ± 0.06 (10) | 8.18 ± 0.11 (10) |
| Percent of Control | | | 102 | 102 | 100 |
| Reticulocytes (10 ³ /uL) | SD 93 | 245.7 ± 14.9 (10) | 232.8 ± 6.3 (10) | 241.9 ± 13.8 (10) | 273.1 ± 17.6 (10) |
| Percent of Control | | | 95 | 98 | 111 |
| 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) | 59.0 ± 0.6 (10) | 58.7 ± 0.6 (10) | 59.5 ± 0.5 (10) |
| Percent of Control | | | 100 | 100 | 101 |
| Mean Cell Hemoglobin (pg) | SD 93 | 19.1 ± 0.1 (10) | 19.2 ± 0.2 (10) | 19.0 ± 0.2 (10) | 19.3 ± 0.2 (10) |
| Percent of Control | | | 100 | 100 | 101 |
| Mean Cell Hemoglobin Concentration (g/dL) | SD 93 | 32.4 ± 0.1 (10) | 32.5 ± 0.2 (10) | 32.5 ± 0.2 (10) | 32.3 ± 0.2 (10) |
| Percent of Control | | | 100 | 100 | 100 |
| Platelets (10 ³ /uL) | SD 93 | 963 ± 40 (10) | 933 ± 33 (10) | 1022 ± 38 (10) | 954 ± 55 (10) |
| Percent of Control | | | 97 | 106 | 99 |
| White Blood Cells (10 ³ /uL) | SD 93 | 8.80 ± 0.50 (10) * | 7.90 ± 0.67 (10) | 6.86 ± 0.51 (10) * | 7.34 ± 0.41 (10) |
| Percent of Control | | | 90 | 78 | 83 |

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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 |
|---|-----------|---------------------|------------------------|---------------------------|---------------------------|
| Neutrophils (10 ³ /uL) Percent of Control | SD 93 | 1.15 ± 0.12 (10) | 0.88 ± 0.09 (10) 77 | 0.93 ± 0.13 (10) 81 | 1.02 ± 0.10 (10) 89 |
| Lymphocytes (10 ³ /uL) Percent of Control | SD 93 | 7.22 ± 0.40 (10) * | 6.66 ± 0.61 (10) 92 | 5.60 ± 0.40 (10) ** 78 | 6.00 ± 0.37 (10) 83 |
| Monocytes (10 ³ /uL) Percent of Control | SD 93 | 0.19 ± 0.02 (10) | 0.15 ± 0.01 (10) 83 | 0.16 ± 0.02 (10) 85 | 0.14 ± 0.01 (10) 75 |
| Basophils (10 ³ /uL) Percent of Control | SD 93 | 0.05 ± 0.01 (10) * | 0.04 ± 0.01 (10) 71 | 0.03 ± 0.00 (10) * 58 | 0.03 ± 0.00 (10) * 62 |
| Eosinophils (10 ³ /uL) Percent of Control | SD 93 | 0.11 ± 0.02 (10) | 0.10 ± 0.01 (10) 92 | 0.08 ± 0.01 (10) 76 | 0.09 ± 0.01 (10) 82 |
| Large Unstained Cells (10 ³ /uL) Percent of Control | SD 93 | 0.09 ± 0.01 (10) ** | 0.07 ± 0.01 (10) 81 | 0.06 ± 0.01 (10) ** 65 | 0.06 ± 0.01 (10) ** 71 |

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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) x 100

Hematology 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 ****