Experiment Number: 20105 - 78

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 08/24/2017 AVERAGE SEVERITY GRADES[b]

Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

Route: Whole Body Exposure Species/Strain: MICE/B6C3F1

Test Type: CHRONIC

Final 1 GSM Mice Core Study

NTP Study Number: C20105

Lock Date: 04/07/2016

Cage Range: ALL

Date Range: ALL

Reasons For Removal: 25023 MISS 25022 ACCK 25021 TSAC

25020 NATD 25019 MSAC

Removal Date Range: ALL

Treatment Groups: Include ALL

Study Gender: Both

TDMSE Version: 3.0.2.4_cartox

PWG Approval Date: NONE

Cell Phone Radiation: GSM CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| B6C3F1 MICE MALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|---|----------|----------|----------|----------|
| Disposition Summary | | | | |
| Animals Initially In Study | 105 | 105 | 105 | 105 |
| Early Deaths | | | | |
| Accidentally Killed | | 1 | | |
| Moribund Sacrifice | 8 | 6 | 2 | 6 |
| Natural Death | 16 | 19 | 8 | 12 |
| Survivors | | | | |
| Natural Death | | | 1 | 4 |
| Terminal Sacrifice | 66 | 63 | 79 | 68 |
| Missing | | 1 | | |
| Animals Examined Microscopically | 90 | 89 | 90 | 90 |
| ALIMENTARY SYSTEM | | | | |
| Esophagus | (88) | (87) | (88) | (90) |
| Gallbladder | (73) | (66) | (74) | (79) |
| Inflammation, Acute | | 1 [2.0] | | |
| Intestine Large, Cecum | (81) | (77) | (84) | (78) |
| Intestine Large, Colon | (84) | (83) | (85) | (84) |
| Intestine Large, Rectum | (84) | (85) | (86) | (84) |
| Intestine Small, Duodenum | (77) | (77) | (83) | (79) |
| Intestine Small, Ileum | (81) | (79) | (85) | (80) |
| Peyer's Patch, Hyperplasia, Lymphoid | 1 [3.0] | 1 [3.0] | 1 [2.0] | 1 [3.0] |
| Peyer's Patch, Infiltration Cellular, Plasma Cell | 1 [2.0] | | | |
| Intestine Small, Jejunum | (79) | (79) | (82) | (79) |
| Inflammation, Granulomatous | 1 [2.0] | | | |
| Epithelium, Cyst | 1 | | | |
| Peyer's Patch, Hyperplasia, Lymphoid | | | 1 [3.0] | 1 [4.0] |
| Liver | (90) | (89) | (90) | (90) |
| Angiectasis | | | 2 [2.5] | |
| Basophilic Focus | 1 | 2 | 4 | 3 |
| Clear Cell Focus | 28 | 34 | 41 | 31 |
| Eosinophilic Focus | 4 | 4 | 8 | 1 |
| Extramedullary Hematopoiesis | 2 [1.5] | 2 [1.0] | 2 [2.0] | |
| Fatty Change | 37 [1.8] | 31 [2.2] | 35 [2.1] | 35 [1.9] |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 20105 - 78

Route: Whole Body Exposure Species/Strain: MICE/B6C3F1

Cell Phone Radiation: GSM CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| 6C3F1 MICE MALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg | |
|--------------------------------------|----------|----------|----------|----------|--|
| Fibrosis | 1 [2.0] | | | | |
| Hemorrhage | 1 [3.0] | | | | |
| Infiltration Cellular, Lymphocyte | 2 [1.5] | | | 2 [1.5] | |
| Infiltration Cellular, Mixed Cell | 1 [1.0] | | | | |
| Inflammation, Focal | 1 [1.0] | 1 [1.0] | 3 [1.0] | | |
| Inflammation, Chronic | | | | 2 [1.5] | |
| Inflammation, Chronic Active | 2 [1.5] | | 1 [3.0] | 1 [1.0] | |
| Mixed Cell Focus | 2 | 3 | 7 | 4 | |
| Necrosis | 6 [2.2] | 6 [3.0] | 4 [3.0] | 3 [2.0] | |
| Bile Duct, Cyst | | 2 | 1 | | |
| Hepatocyte, Fatty Change, Focal | | 1 [1.0] | | 2 [1.5] | |
| Mesentery | (12) | (14) | (13) | (17) | |
| Artery, Inflammation, Chronic Active | | 1 [2.0] | | 2 [2.5] | |
| Fat, Hemorrhage | | 1 [3.0] | | | |
| Fat, Inflammation, Granulomatous | | | | 1 [3.0] | |
| Fat, Mineral | | | 1 [2.0] | | |
| Fat, Necrosis | 8 [2.3] | 11 [2.8] | 12 [2.7] | 13 [2.6] | |
| Pancreas | (87) | (88) | (88) | (86) | |
| Hemorrhage | 1 [3.0] | | | | |
| Infiltration Cellular, Lymphocyte | 3 [1.0] | 5 [1.4] | 3 [1.0] | 1 [1.0] | |
| Infiltration Cellular, Mixed Cell | | | | 1 [3.0] | |
| Inflammation, Granulomatous | 1 [3.0] | | | | |
| Inflammation, Acute | | | | 1 [2.0] | |
| Inflammation, Chronic Active | | | | 1 [1.0] | |
| Acinus, Atrophy | | 1 [3.0] | | | |
| Duct, Cyst | 1 | 2 | | | |
| Duct, Fibrosis | 1 [2.0] | | | | |
| Salivary Glands | (90) | (89) | (89) | (89) | |
| Infiltration Cellular, Lymphocyte | 58 [1.6] | 59 [1.6] | 65 [1.6] | 65 [1.5] | |
| Stomach, Forestomach | (88) | (87) | (89) | (87) | |
| Cyst, Squamous | | | 1 | 3 | |
| Hyperkeratosis | | 1 [2.0] | | 2 [2.5] | |
| Infiltration Cellular, Lymphocyte | | | 1 [2.0] | | |
| Inflammation, Chronic | | | 1 [3.0] | | |
| Epithelium, Hyperplasia, Focal | 3 [2.0] | 2 [2.5] | 2 [2.5] | | |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Epithelium, Hyperplasia, Diffuse

Experiment Number: 20105 - 78

Route: Whole Body Exposure Species/Strain: MICE/B6C3F1

Test Type: CHRONIC

1 [2.0]

1 [2.0]

Experiment Number: 20105 - 78 P18: INCII

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: MICE/B6C3F1

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 08/24/2017 AVERAGE SEVERITY GRADES[b]

Cell Phone Radiation: GSM CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

| B6C3F1 MICE MALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|--------------------------------------|----------|----------|----------|----------|
| Stomach, Glandular | (87) | (86) | (88) | (85) |
| Accumulation, Hyaline Droplet | , , | 2 [2.0] | , , | , , |
| Cyst | | | | 1 |
| Hemorrhage | 1 [2.0] | | | |
| Ulcer | | | | 1 [2.0] |
| Epithelium, Hyperplasia, Focal | 1 [2.0] | | | |
| Tooth | (27) | (26) | (16) | (20) |
| Dysplasia | 26 [2.6] | 26 [2.6] | 14 [2.7] | 20 [2.5] |
| Inflammation, Suppurative | 2 [2.5] | | 2 [3.0] | |
| Inflammation, Chronic Active | | | | 1 [3.0] |
| CARDIOVASCULAR SYSTEM | | | | |
| Aorta | (89) | (89) | (89) | (87) |
| Blood Vessel | (1) | (0) | (0) | (0) |
| Inflammation, Chronic | 1 [3.0] | . , | . , | . , |
| Heart | (90) | (89) | (90) | (90) |
| Bacteria | 1 | 2 | , , | . , |
| Cardiomyopathy | 10 [1.2] | 2 [1.5] | 1 [1.0] | 2 [1.5] |
| Inflammation, Acute | 1 [2.0] | | | |
| Inflammation, Chronic Active | 2 [1.5] | 2 [2.0] | | 1 [1.0] |
| Thrombus | 1 [4.0] | 2 [3.0] | | 1 [2.0] |
| Artery, Inflammation, Chronic Active | 1 [2.0] | 2 [1.5] | | 3 [1.7] |
| Endocardium, Mineral | 1 [2.0] | | | |
| Endothelium, Hyperplasia | | 1 [1.0] | | 1 [2.0] |
| Epicardium, Inflammation, Chronic | 1 [2.0] | | | - • |
| Epicardium, Mineral | 1 [2.0] | | | |
| Myocardium, Hemorrhage | | 1 [2.0] | | |
| Myocardium, Mineral | 2 [1.5] | 2 [1.5] | 1 [1.0] | 1 [1.0] |
| Myocardium, Necrosis | 1 [2.0] | 2 [2.0] | | |
| ENDOCRINE SYSTEM | | | | |
| Adrenal Cortex | (90) | (89) | (89) | (88) |
| Accessory Adrenal Cortical Nodule | 1 | (/ | () | (/ |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Cell Phone Radiation: GSM CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| B6C3F1 MICE MALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg | |
|---|----------|----------|----------|----------|--|
| Angiectasis | 1 [3.0] | | | | |
| Hyperplasia, Focal | 3 [2.3] | 1 [2.0] | 6 [2.8] | 6 [1.8] | |
| Hypertrophy, Focal | 2 [1.5] | 8 [1.9] | 9 [1.7] | 1 [2.0] | |
| Infiltration Cellular, Mononuclear Cell | | | | 1 [3.0] | |
| Bilateral, Hyperplasia, Focal | | | 1 [3.0] | | |
| Bilateral, Hypertrophy, Focal | 1 [2.0] | 5 [2.0] | 4 [2.0] | 1 [2.0] | |
| Subcapsular, Hyperplasia | 69 [1.7] | 72 [1.7] | 80 [1.9] | 72 [1.7] | |
| Adrenal Medulla | (90) | (88) | (88) | (86) | |
| Islets, Pancreatic | (88) | (88) | (90) | (89) | |
| Atrophy | | | | 1 [4.0] | |
| Hyperplasia | 18 [2.3] | 20 [2.4] | 16 [2.1] | 10 [2.8] | |
| Infiltration Cellular, Lymphocyte | 2 [1.5] | 1 [1.0] | 2 [1.0] | | |
| Parathyroid Gland | (68) | (68) | (67) | (66) | |
| Cyst | | 2 | 4 | 1 | |
| Pituitary Gland | (86) | (85) | (87) | (85) | |
| Pars Distalis, Angiectasis | 1 [2.0] | | | | |
| Pars Distalis, Cyst | 3 | 4 | 3 | 4 | |
| Pars Distalis, Hyperplasia, Focal | 1 [2.0] | 2 [1.5] | 1 [2.0] | | |
| Thyroid Gland | (89) | (88) | (88) | (88) | |
| Infiltration Cellular, Lymphocyte | | | 1 [1.0] | 1 [1.0] | |
| GENERAL BODY SYSTEM | | | | | |
| Peritoneum | (1) | (0) | (0) | (0) | |
| Tissue NOS | (0) | (0) | (0) | (1) | |
| 115546 1406 | (0) | (0) | (0) | (1) | |
| GENITAL SYSTEM | | | | | |
| Coagulating Gland | (2) | (2) | (0) | (4) | |
| Cyst | 2 | 1 | (0) | 3 | |
| Bilateral, Inflammation, Chronic Active | 4 | 1 [3.0] | | J | |
| Epididymis | (90) | (89) | (90) | (90) | |
| Granuloma Sperm | 1 [3.0] | 1 [2.0] | 1 [2.0] | 1 [2.0] | |
| Infiltration Cellular, Lymphocyte | 29 [1.1] | 17 [1.1] | 22 [1.3] | 28 [1.1] | |
| Spermatocele | 20 [1.1] | 17 [1.1] | ۲۲ [۱۰۰] | 1 [2.0] | |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 20105 - 78

Route: Whole Body Exposure

Species/Strain: MICE/B6C3F1

Cell Phone Radiation: GSM CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| B6C3F1 MICE MALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg | |
|--|----------|----------|----------|----------|--|
| Bilateral, Duct, Atrophy | | | | 1 [3.0] | |
| Preputial Gland | (89) | (88) | (90) | (89) | |
| Infiltration Cellular, Lymphocyte | 43 [1.6] | 32 [1.5] | 38 [1.7] | 33 [1.5] | |
| Inflammation, Suppurative | 1 [3.0] | | | | |
| Inflammation, Chronic Active | 1 [2.0] | | 1 [4.0] | | |
| Bilateral, Hyperplasia | | | 1 [2.0] | | |
| Bilateral, Duct, Dilation | 6 [2.2] | 2 [3.0] | 9 [2.3] | 2 [2.5] | |
| Duct, Dilation | 10 [3.0] | 6 [2.3] | 11 [2.7] | 4 [2.8] | |
| Duct, Inflammation, Chronic Active | | | 1 [4.0] | | |
| Duct, Necrosis | 1 [2.0] | | | | |
| Prostate | (90) | (87) | (90) | (87) | |
| Hyperplasia, Focal | , | (/ | , | 1 [2.0] | |
| Infiltration Cellular, Lymphocyte | 4 [1.3] | 3 [1.7] | 6 [1.2] | 9 [1.3] | |
| Inflammation, Acute | | 1 [2.0] | | 5 [1.8] | |
| Inflammation, Chronic Active | 1 [3.0] | | 1 [3.0] | | |
| Seminal Vesicle | (90) | (88) | (90) | (90) | |
| Dilation | 4 [2.8] | 4 [2.3] | 5 [2.4] | 4 [2.3] | |
| Hyperplasia | , | , | - 1 | 1 [3.0] | |
| Inflammation, Chronic Active | 1 [2.0] | 1 [3.0] | | | |
| Bilateral, Atrophy | , | 11 | | 1 [3.0] | |
| Bilateral, Dilation | 27 [2.4] | 26 [2.5] | 23 [2.5] | 29 [2.5] | |
| Bilateral, Fibrosis | | | | 1 [2.0] | |
| Bilateral, Inflammation, Acute | | | | 1 [2.0] | |
| Bilateral, Inflammation, Chronic | | 1 [3.0] | 1 [1.0] | . [=] | |
| Bilateral, Inflammation, Chronic Active | | 11 | 1 | 1 [3.0] | |
| Testis | (90) | (88) | (90) | (90) | |
| Bilateral, Germ Cell, Degeneration | () | () | () | 1 [2.0] | |
| Germ Cell, Degeneration | 2 [1.0] | 1 [2.0] | 1 [2.0] | , [] | |
| HEMATOPOIETIC SYSTEM | | | | | |
| Bone Marrow | (90) | (88) | (90) | (90) | |
| Hypercellularity | 3 [2.7] | (30) | 2 [2.5] | 3 [2.7] | |
| Lymph Node | (6) | (8) | (7) | (9) | |
| Bronchial, Infiltration Cellular, Mixed Cell | (0) | (3) | (' / | 1 [3.0] | |
| | | | | . [0.0] | |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 20105 - 78

Route: Whole Body Exposure Species/Strain: MICE/B6C3F1

Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| 86C3F1 MICE MALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg | |
|---|----------|----------|----------|----------|--|
| Iliac, Erythrophagocytosis | | 1 [2.0] | | | |
| Iliac, Hemorrhage | | 1 [2.0] | | | |
| Iliac, Hyperplasia, Lymphoid | | 1 [2.0] | | 2 [1.5] | |
| Iliac, Infiltration Cellular, Histiocyte | | 2 [2.0] | 2 [2.0] | | |
| Iliac, Infiltration Cellular, Plasma Cell | | | | 1 [3.0] | |
| Iliac, Pigment | | | 2 [2.0] | | |
| Lumbar, Hemorrhage | | | | 1 [2.0] | |
| Mediastinal, Hyperplasia, Lymphoid | | | | 1 [2.0] | |
| Mediastinal, Infiltration Cellular, Plasma Cell | | 1 [2.0] | | | |
| Pancreatic, Hyperplasia, Lymphoid | | | 2 [2.5] | | |
| Renal, Hemorrhage | 1 [3.0] | | 1 [2.0] | | |
| Renal, Hyperplasia, Lymphoid | | | 1 [3.0] | | |
| Renal, Infiltration Cellular, Mixed Cell | | | | 1 [2.0] | |
| Lymph Node, Mandibular | (72) | (61) | (63) | (60) | |
| Hemorrhage | , , | 1 [2.0] | , , | , , | |
| Hyperplasia, Lymphoid | 2 [1.0] | | | | |
| Infiltration Cellular, Histiocyte | 1 [1.0] | | | 1 [2.0] | |
| Lymph Node, Mesenteric | (85) | (82) | (88) | (83) | |
| Erythrophagocytosis | 1 [3.0] | 5 [2.2] | 4 [1.8] | 1 [3.0] | |
| Hemorrhage | 10 [1.8] | 11 [2.0] | 7 [2.1] | 13 [1.7] | |
| Hyperplasia, Lymphoid | 4 [2.5] | 2 [2.0] | 2 [3.0] | 5 [2.6] | |
| Infiltration Cellular, Histiocyte | 8 [2.4] | 7 [2.1] | 5 [2.2] | 4 [2.0] | |
| Infiltration Cellular, Mixed Cell | | 2 [2.0] | | | |
| Infiltration Cellular, Plasma Cell | 1 [3.0] | 1 [3.0] | 1 [4.0] | 1 [3.0] | |
| Spleen | (87) | (88) | (89) | (88) | |
| Extramedullary Hematopoiesis | 15 [2.2] | 15 [2.3] | 13 [2.2] | 12 [2.2] | |
| Hyperplasia, Lymphoid | 5 [2.2] | 2 [2.5] | 5 [2.2] | 3 [2.0] | |
| White Pulp, Atrophy | | | 1 [2.0] | | |
| Thymus | (75) | (83) | (81) | (72) | |
| Atrophy | 11 [3.3] | 16 [3.3] | 4 [3.0] | 14 [3.1] | |
| Cyst | 11 | 16 | 26 | 15 | |
| Hemorrhage | 1 [3.0] | 1 [2.0] | 1 [3.0] | | |
| Infiltration Cellular, Histiocyte | | | | 1 [3.0] | |

Experiment Number: 20105 - 78

Route: Whole Body Exposure

Species/Strain: MICE/B6C3F1

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: MICE/B6C3F1

Experiment Number: 20105 - 78

Cell Phone Radiation: GSM CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

| B6C3F1 MICE MALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg | |
|--|----------|----------|---------------|----------|--|
| NTEGUMENTARY SYSTEM | | | | | |
| Mammary Gland | (2) | (5) | (2) | (8) | |
| Skin | (90) | (89) | (90) | (90) | |
| Cyst, Squamous | | | | 1 | |
| Hyperkeratosis | | 1 [2.0] | | | |
| Infiltration Cellular, Mixed Cell | 1 [1.0] | | | | |
| Inflammation, Chronic | | 1 [2.0] | | | |
| Ulcer | 2 [3.0] | 2 [4.0] | 2 [3.0] | 1 [3.0] | |
| Epidermis, Hyperplasia, Focal | r1 | 1 [2.0] | r1 | r1 | |
| Hair Follicle, Atrophy | | . [] | | 2 [3.0] | |
| Subcutaneous Tissue, Inflammation, Granulomatous | | | 1 [4.0] | = [a.a] | |
| MUCCUL OCKELETAL OVOTEM | | | | | |
| MUSCULOSKELETAL SYSTEM | | | | | |
| Bone | (90) | (88) | (90) | (90) | |
| Callus | | | | 1 [3.0] | |
| Increased Bone | | | 1 [1.0] | | |
| Skeletal Muscle | (90) | (89) | (90) | (90) | |
| Degeneration | 1 [2.0] | | | 1 [1.0] | |
| Infiltration Cellular, Lymphocyte | 3 [1.3] | | 5 [1.2] | 5 [1.4] | |
| Inflammation, Acute | | 1 [3.0] | | 1 [2.0] | |
| Inflammation, Chronic Active | | | | 1 [2.0] | |
| Necrosis | | 1 [3.0] | | | |
| NERVOUS SYSTEM | | | | | |
| | (0.7) | /a-: | 12 - 3 | (2.2) | |
| Brain | (90) | (89) | (90) | (90) | |
| Hemorrhage | 2 [2.0] | 2 [1.5] | | | |
| Infiltration Cellular, Lymphocyte | 1 [2.0] | | | | |
| Inflammation, Acute | | 1 [1.0] | | | |
| Mineral | 79 [1.5] | 81 [1.6] | 80 [1.6] | 76 [1.6] | |
| Squamous Cyst | | | 1 | | |
| Artery, Meninges, Inflammation, Chronic Active | 1 [2.0] | | | 1 [1.0] | |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07

First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| B6C3F1 MICE MALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg | |
|---|---------|----------|---------|---------|--|
| Brain Trigeminal Ganglion | (69) | (79) | (72) | (79) | |
| Nerve Trigeminal | (67) | (53) | (66) | (63) | |
| Peripheral Nerve, Sciatic | (89) | (89) | (90) | (89) | |
| Axon, Degeneration | 9 [1.1] | 9 [1.1] | 9 [1.2] | 4 [1.0] | |
| Spinal Cord | (90) | (89) | (90) | (90) | |
| Cyst, Squamous | , , | , , | 1 | , , | |
| Degeneration | | 1 [1.0] | | | |
| Hemorrhage | | 1 [1.0] | | | |
| Necrosis | 1 [1.0] | 1 [2.0] | | 1 [1.0] | |
| Artery, Meninges, Inflammation, Chronic Active | 1 [1.0] | | 2 [1.0] | 1 [1.0] | |
| RESPIRATORY SYSTEM | | | | | |
| Lung | (90) | (89) | (90) | (90) | |
| Congestion | 2 [2.5] | 2 [2.0] | 3 [2.0] | 3 [2.7] | |
| Hemorrhage | 3 [2.0] | 5 [1.6] | 4 [1.8] | 3 [2.0] | |
| Infiltration Cellular, Histiocyte | 6 [2.0] | 1 [1.0] | 1 [3.0] | 2 [3.0] | |
| Infiltration Cellular, Lymphocyte | 1 [2.0] | | 1 [2.0] | | |
| Inflammation, Chronic Active | | 1 [1.0] | | | |
| Alveolar Epithelium, Hyperplasia, Focal | 6 [1.8] | 8 [1.6] | 8 [1.8] | 7 [1.7] | |
| Bronchiole, Foreign Body | 1 | | | | |
| Bronchiole, Inflammation, Suppurative | 1 [2.0] | | | | |
| Mediastinum | (0) | (0) | (2) | (1) | |
| Nose | (90) | (89) | (90) | (89) | |
| Inflammation, Acute | 1 [2.0] | (/ | (/ | () | |
| Respiratory Epithelium, Accumulation, Hyaline Droplet | 1 [2.0] | | | | |
| Respiratory Epithelium, Hyperplasia | 5 [1.8] | | | | |
| Vomeronasal Organ, Fibrosis | 1 [2.0] | | | | |
| Trachea | (90) | (89) | (89) | (90) | |
| SPECIAL SENSES SYSTEM | | | | | |
| Eye | (90) | (89) | (90) | (90) | |
| Phthisis Bulbi | (00) | 1 | 3 | 1 | |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 20105 - 78

Route: Whole Body Exposure

Species/Strain: MICE/B6C3F1

Cell Phone Radiation: GSM **CAS Number: CELLPRADGSM** Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| B6C3F1 MICE MALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|---|----------|----------|----------|----------|
| Cornea, Fibrosis | 1 [3.0] | | | , |
| Cornea, Inflammation, Chronic Active | 1 [5.0] | | | 1 [2.0] |
| Optic Nerve, Degeneration | | | 1 [3.0] | 1 [2.0] |
| Retina, Atrophy | | | . [0.0] | 1 [4.0] |
| Retina, Degeneration | | | 1 [3.0] | . [•] |
| Harderian Gland | (88) | (89) | (90) | (90) |
| Hemorrhage | 1 [2.0] | () | () | () |
| Hyperplasia, Focal | 2 [2.0] | 1 [2.0] | 2 [2.0] | 1 [2.0] |
| Infiltration Cellular, Lymphocyte | 36 [1.3] | 36 [1.3] | 32 [1.4] | 40 [1.3] |
| | | | | |
| URINARY SYSTEM | | | | |
| Kidney | (90) | (89) | (90) | (89) |
| Bacteria | | 1 | | |
| Infarct | 7 [2.0] | 4 [1.8] | 4 [1.5] | 8 [1.5] |
| Infiltration Cellular, Histiocyte | | 1 [1.0] | | |
| Infiltration Cellular, Mixed Cell | | 1 [1.0] | | |
| Inflammation, Suppurative | 1 [3.0] | | | |
| Inflammation, Granulomatous | 1 [2.0] | | | |
| Inflammation, Acute | | 1 [2.0] | | |
| Metaplasia, Osseous | 3 | 6 | 5 | 1 |
| Mineral | | 2 [1.0] | | |
| Nephropathy, Chronic Progressive | 74 [1.4] | 66 [1.4] | 76 [1.1] | 74 [1.3] |
| Bilateral, Bacteria | | 1 | | |
| Bilateral, Inflammation, Acute | | 1 [2.0] | | 1 [3.0] |
| Bilateral, Renal Tubule, Bacteria | | | | 1 |
| Bilateral, Renal Tubule, Pigment | | 1 [2.0] | | 1 [3.0] |
| Glomerulus, Cyst | 1 | | | 1 |
| Interstitium, Infiltration Cellular, Lymphocyte | 41 [1.6] | 50 [1.6] | 56 [1.6] | 44 [1.4] |
| Pelvis, Dilation | 1 [3.0] | | | 1 [3.0] |
| Renal Tubule, Accumulation, Hyaline Droplet | | | | 1 [2.0] |
| Renal Tubule, Bacteria | | 1 | | |
| Renal Tubule, Cyst | 8 | 3 | 4 | 5 |
| Renal Tubule, Dilation | | | | 1 [2.0] |
| Renal Tubule, Mineral | 1 [2.0] | | | 4 [1.5] |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 20105 - 78

Route: Whole Body Exposure

Species/Strain: MICE/B6C3F1

Test Type: CHRONIC

Cell Phone Radiation: GSM **CAS Number: CELLPRADGSM**

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| B6C3F1 MICE MALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|--|----------|----------|----------|----------|
| Urothelium, Inflammation, Chronic Active | 1 [1.0] | | | |
| Urinary Bladder | (87) | (88) | (90) | (89) |
| Hemorrhage | 3 [2.0] | | | |
| Infiltration Cellular, Lymphocyte | 26 [1.3] | 20 [1.3] | 24 [1.5] | 21 [1.3] |
| Inflammation, Acute | | 1 [2.0] | | |
| Inflammation, Chronic Active | | 1 [2.0] | | |
| Transitional Epithelium, Hyperplasia, Diffuse | | 1 [3.0] | | |
| Transitional Epithelium, Hyperplasia, Multifocal | | 2 [2.0] | | |

^{***} END OF MALE ***

Experiment Number: 20105 - 78

Route: Whole Body Exposure

Species/Strain: MICE/B6C3F1

Cell Phone Radiation: GSM CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| B6C3F1 MICE FEMALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|--|----------|----------|----------|----------|
| Disposition Summary | | | | |
| Animals Initially In Study | 105 | 105 | 105 | 105 |
| Early Deaths | | | | |
| Moribund Sacrifice | 9 | 9 | 9 | 6 |
| Natural Death | 14 | 7 | 11 | 11 |
| Survivors | | | | |
| Natural Death | 1 | 4 | 2 | 1 |
| Terminal Sacrifice | 66 | 70 | 68 | 72 |
| Animals Examined Microscopically | 90 | 90 | 90 | 90 |
| ALIMENTARY SYSTEM | | | | |
| Esophagus | (87) | (90) | (87) | (90) |
| Gallbladder | (79) | (75) | (74) | (72) |
| Cyst | | 1 | 1 | |
| Infiltration Cellular, Lymphocyte | 2 [2.0] | 5 [1.6] | 2 [1.5] | 4 [1.5] |
| Intestine Large, Cecum | (84) | (82) | (83) | (82) |
| Intestine Large, Colon | (84) | (84) | (86) | (85) |
| Intestine Large, Rectum | (88) | (86) | (88) | (86) |
| Intestine Small, Duodenum | (82) | (83) | (84) | (81) |
| Inflammation, Acute | 1 [2.0] | | | |
| Intestine Small, Ileum | (83) | (82) | (82) | (80) |
| Peyer's Patch, Hyperplasia, Lymphoid | | | 1 [3.0] | |
| Intestine Small, Jejunum | (84) | (81) | (81) | (80) |
| Peyer's Patch, Hyperplasia, Lymphoid | 1 [2.0] | 1 [2.0] | | |
| Liver | (89) | (90) | (90) | (89) |
| Basophilic Focus | 4 | 2 | 5 | 5 |
| Clear Cell Focus | 1 | | | |
| Eosinophilic Focus | 2 | 1 | 1 | |
| Extramedullary Hematopoiesis | 1 [1.0] | | 1 [3.0] | |
| Fatty Change | 7 [2.1] | 1 [2.0] | | 2 [3.0] |
| Hemorrhage | 1 [2.0] | 1 [2.0] | 1 [4.0] | |
| Infiltration Cellular, Lymphocyte | 33 [1.3] | 25 [1.4] | 21 [1.2] | 32 [1.3] |
| Infiltration Cellular, Mononuclear Cell | 1 [2.0] | 2 [2.0] | 1 [2.0] | |
| Infiltration Cellular, Polymorphonuclear | | 1 [2.0] | | |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 20105 - 78

Route: Whole Body Exposure Species/Strain: MICE/B6C3F1

Test Type: CHRONIC Cell Phone Radiation: GSM
Route: Whole Body Exposure CAS Number: CELLPRADGSM
Species/Strain: MICE/B6C3F1

Experiment Number: 20105 - 78

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

| B6C3F1 MICE FEMALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|---|------------|----------|------------|----------|
| Inflammation, Focal | 4 [1.3] | 2 [1.5] | | |
| Inflammation, Acute | | | 1 [3.0] | |
| Inflammation, Chronic Active | 1 [2.0] | | | |
| Mixed Cell Focus | 5 | 1 | | 1 |
| Necrosis | 6 [2.8] | 5 [2.2] | 6 [2.7] | 3 [1.7] |
| Artery, Inflammation, Chronic | | | 1 [2.0] | |
| Bile Duct, Cyst | | 1 | 1 | |
| Centrilobular, Hepatocyte, Hypertrophy | | | | 1 [3.0] |
| Hepatocyte, Fatty Change, Focal | 3 [1.3] | | 1 [1.0] | |
| Hepatocyte, Hyperplasia | - - | | 1 [2.0] | |
| Hepatocyte, Hypertrophy | | | 1 [2.0] | |
| Hepatocyte, Inclusion Body Intracytoplasmic | | | - - | 1 [2.0] |
| Hepatocyte, Vacuolization Cytoplasmic | | | 4 [1.5] | 1 [2.0] |
| Kupffer Cell, Hyperplasia | 1 [3.0] | | | |
| Mesentery | (29) | (24) | (32) | (30) |
| Artery, Inflammation, Chronic | | 2 [3.0] | | |
| Fat, Infiltration Cellular, Lymphocyte | 2 [3.0] | 1 [1.0] | | |
| Fat, Inflammation, Granulomatous | | 1 [2.0] | | |
| Fat, Inflammation, Chronic Active | 1 [2.0] | | | |
| Fat, Mineral | | 1 [2.0] | 1 [2.0] | |
| Fat, Necrosis | 25 [2.6] | 19 [2.4] | 27 [2.5] | 27 [2.5] |
| Oral Mucosa | (0) | (0) | (2) | (0) |
| Pancreas | (87) | (88) | (89) | (86) |
| Degeneration | | | | 1 [2.0] |
| Infiltration Cellular, Lipocyte | | 1 [4.0] | | 1 [4.0] |
| Infiltration Cellular, Histiocyte | | | 1 [3.0] | |
| Infiltration Cellular, Lymphocyte | 27 [1.4] | 26 [1.2] | 30 [1.3] | 24 [1.4] |
| Inflammation, Suppurative | | | | 1 [3.0] |
| Inflammation, Chronic Active | 1 [4.0] | | | |
| Necrosis | | | | 1 [3.0] |
| Acinus, Atrophy | | | 2 [3.0] | 1 [4.0] |
| Duct, Cyst | 1 | 1 | 2 | 3 |
| Duct, Inflammation, Chronic Active | | | | 1 [4.0] |
| Salivary Glands | (89) | (89) | (90) | (90) |
| Atrophy | 1 [2.0] | | | |
| Infiltration Cellular, Lymphocyte | 59 [1.4] | 54 [1.5] | 55 [1.5] | 62 [1.5] |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Test Type: CHRONIC Cell Phone Radiation: GSM
Route: Whole Body Exposure CAS Number: CELLPRADGSM
Species/Strain: MICE/B6C3F1

Experiment Number: 20105 - 78

Time Report Requested: 12:19:07
First Dose M/F: 06/18/12 / 06/18/12

| B6C3F1 MICE FEMALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|---|---------|----------|---------|---------|
| Inflammation, Acute | | 1 [3.0] | | |
| Mineral | | | 1 [1.0] | |
| Arteriole, Inflammation, Chronic | | 1 [2.0] | | |
| Stomach, Forestomach | (86) | (89) | (90) | (85) |
| Cyst | | | 1 | |
| Hyperkeratosis | | | 1 [2.0] | |
| Ulcer | | 1 [2.0] | | |
| Epithelium, Hyperplasia, Focal | | | 2 [2.0] | |
| Stomach, Glandular | (85) | (87) | (85) | (85) |
| Cyst | 3 | 3 | 4 | |
| Infiltration Cellular, Lymphocyte | | | 1 [2.0] | 2 [1.0] |
| Ulcer | | | 1 [3.0] | |
| Tongue | (0) | (0) | (1) | (0) |
| Tooth | (0) | (0) | (1) | (0) |
| CARDIOVASCULAR SYSTEM Aorta | (84) | (88) | (90) | (89) |
| Degeneration | (0.) | (00) | (00) | 1 [4.0] |
| Inflammation, Chronic Active | 1 [3.0] | | | . [] |
| Blood Vessel | (0) | (0) | (2) | (0) |
| Heart | (90) | (90) | (90) | (90) |
| Bacteria | 1 | 1 | 2 | \ / |
| Cardiomyopathy | 3 [1.3] | 1 [1.0] | 3 [1.7] | 3 [1.0] |
| Thrombus | 3 [2.7] | 1 [3.0] | 2 [3.5] | |
| Artery, Inflammation, Chronic Active | | 4 [2.5] | | 1 [2.0] |
| Endocardium, Hyperplasia | | | 1 [1.0] | |
| Epicardium, Infiltration Cellular, Mixed Cell | 1 [2.0] | | - • | |
| Epicardium, Infiltration Cellular, Mononuclear Cell | 1 [1.0] | | | |
| Myocardium, Fibrosis | 1 [1.0] | | | |
| Myocardium, Infiltration Cellular, Lymphocyte | | | 1 [1.0] | 2 [1.0] |
| Myocardium, Inflammation, Acute | | 1 [2.0] | 2 [2.5] | |
| Myocardium, Inflammation, Chronic Active | 1 [2.0] | | | |
| Myocardium, Mineral | 4 [1.8] | | | 1 [2.0] |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| B6C3F1 MICE FEMALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|--|----------|----------|----------|----------|
| Valve, Hemorrhage | 1 [2.0] | | | |
| Valve, Infiltration Cellular, Lymphocyte | 1 [1.0] | | | |
| Valve, Inflammation, Chronic | | | 1 [3.0] | |
| Valve, Thrombus | 1 [3.0] | | | |
| ENDOCRINE SYSTEM | | | | |
| Adrenal Cortex | (84) | (88) | (90) | (90) |
| Accessory Adrenal Cortical Nodule | | 1 | 1 | 1 |
| Angiectasis | 1 [3.0] | | | |
| Hemorrhage | 1 [2.0] | | 3 [2.3] | |
| Mineral | 1 [2.0] | | | |
| Vacuolization Cytoplasmic | | 2 [2.0] | | |
| Bilateral, Extramedullary Hematopoiesis | 1 [1.0] | | | |
| Bilateral, Hyperplasia, Focal | | 1 [2.0] | | |
| Bilateral, Vacuolization Cytoplasmic | | 3 [2.3] | 1 [1.0] | 1 [2.0] |
| Subcapsular, Hyperplasia | 81 [2.2] | 85 [2.0] | 88 [2.0] | 86 [2.0] |
| Adrenal Medulla | (83) | (84) | (86) | (87) |
| Hemorrhage | 2 [2.0] | | 1 [2.0] | |
| Hyperplasia | | | 2 [2.0] | |
| Mineral | 1 [2.0] | | | |
| Islets, Pancreatic | (87) | (88) | (90) | (86) |
| Hyperplasia | 1 [2.0] | 3 [2.0] | 1 [3.0] | |
| Infiltration Cellular, Lymphocyte | 3 [1.3] | 2 [1.5] | 2 [1.0] | 3 [1.7] |
| Parathyroid Gland | (60) | (57) | (64) | (62) |
| Cyst | 1 | | | |
| Infiltration Cellular, Lymphocyte | | | 1 [3.0] | 1 [2.0] |
| Pituitary Gland | (80) | (80) | (84) | (84) |
| Pars Distalis, Angiectasis | 2 [2.0] | 7 [1.9] | 6 [1.7] | 5 [2.2] |
| Pars Distalis, Cyst | 1 | 3 | | 1 |
| Pars Distalis, Cytoplasmic Alteration | | | | 1 [2.0] |
| Pars Distalis, Hyperplasia, Focal | 2 [3.0] | 4 [2.3] | 5 [1.8] | 4 [2.3] |
| Thyroid Gland | (86) | (89) | (86) | (86) |
| Infiltration Cellular, Lymphocyte | 1 [1.0] | 6 [1.2] | 6 [1.2] | 3 [1.0] |
| Ultimobranchial Cyst | | | 2 | |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 20105 - 78

Route: Whole Body Exposure

Species/Strain: MICE/B6C3F1

Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| B6C3F1 MICE FEMALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|-------------------------------------|----------|----------|----------|----------|
| Follicle, Cyst | 1 | 1 | | |
| Follicular Cell, Hyperplasia, Focal | | 4 [1.8] | | |
| GENERAL BODY SYSTEM | | | | |
| Peritoneum | (0) | (0) | (1) | (0) |
| Tissue NOS | (1) | (1) | (1) | (2) |
| GENITAL SYSTEM | | | | |
| Clitoral Gland | (82) | (84) | (80) | (86) |
| Infiltration Cellular, Lymphocyte | 3 [1.0] | | | 1 [2.0] |
| Duct, Cyst | 1 | | 1 | |
| Ovary | (75) | (86) | (82) | (80) |
| Angiectasis | | 1 [3.0] | 1 [4.0] | 2 [2.0] |
| Cyst | 9 | 13 | 8 | 7 |
| Cyst, Squamous | | | 1 | |
| Hemorrhage | 1 [3.0] | 2 [3.5] | 1 [4.0] | |
| Hyperplasia, Cystic, Papillary | | 1 [3.0] | 1 [3.0] | |
| Hyperplasia, Tubulostromal | | | | 1 [2.0] |
| Infiltration Cellular, Lymphocyte | | | | 1 [2.0] |
| Mineral | 1 [2.0] | | | |
| Thrombus | | | 1 [3.0] | 1 [4.0] |
| Bursa, Cyst | | | | 1 |
| Follicle, Cyst | 9 | 11 | 6 | 7 |
| Granulosa Cell, Hyperplasia | | 2 [2.5] | | |
| Paraovarian Tissue, Cyst | | | | 1 |
| Oviduct | (0) | (0) | (1) | (0) |
| Uterus | (89) | (90) | (90) | (89) |
| Angiectasis | 1 [3.0] | 6 [3.0] | 5 [3.2] | 3 [3.0] |
| Congestion | | 1 [2.0] | | |
| Dilation | 35 [2.5] | 29 [2.9] | 30 [2.9] | 26 [3.0] |
| Hemorrhage | 1 [4.0] | 1 [3.0] | 1 [3.0] | |
| Infiltration Cellular, Lymphocyte | | | 1 [3.0] | |
| Inflammation, Acute | | 1 [3.0] | | |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 20105 - 78

Route: Whole Body Exposure Species/Strain: MICE/B6C3F1

Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| B6C3F1 MICE FEMALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|---|----------|----------|----------|----------|
| Thrombus | 1 [3.0] | | | |
| Endometrium, Cyst | 3 | | | 1 |
| Endometrium, Hyperplasia | - | 1 [3.0] | | 1 [2.0] |
| Endometrium, Hyperplasia, Cystic | 68 [2.5] | 75 [2.5] | 72 [2.4] | 68 [2.4] |
| Endometrium, Metaplasia, Squamous | 1 [3.0] | - 1 - 1 | | |
| Vagina | (0) | (0) | (1) | (0) |
| HEMATOPOIETIC SYSTEM | | | | |
| Bone Marrow | (90) | (89) | (89) | (90) |
| Hypercellularity | 7 [2.4] | 8 [2.7] | 4 [2.8] | 4 [3.0] |
| Hypocellularity | 1 [3.0] | 1 [2.0] | | |
| Myeloid Cell, Hypercellularity | 1 [4.0] | | | |
| Lymph Node | (18) | (20) | (16) | (14) |
| Hemorrhage | | | 1 [2.0] | 1 [3.0] |
| Hyperplasia, Lymphoid | 1 [2.0] | | | |
| Axillary, Infiltration Cellular, Mixed Cell | 1 [2.0] | | | |
| Axillary, Pigment | 1 [2.0] | | | |
| Bronchial, Hyperplasia, Lymphoid | 2 [2.0] | | | 4 [2.0] |
| Iliac, Erythrophagocytosis | | 1 [2.0] | | |
| Iliac, Hemorrhage | 1 [3.0] | | 2 [2.5] | |
| Iliac, Hyperplasia, Lymphoid | 4 [2.5] | 2 [2.5] | 6 [2.3] | 2 [2.0] |
| Iliac, Infiltration Cellular, Histiocyte | | 1 [3.0] | 1 [2.0] | |
| Iliac, Infiltration Cellular, Mixed Cell | 1 [2.0] | 1 [2.0] | 4 [2.0] | |
| Iliac, Pigment | | | 4 [2.0] | |
| Lumbar, Hyperplasia, Lymphoid | | 1 [3.0] | | |
| Lumbar, Infiltration Cellular, Mixed Cell | 1 [2.0] | | | |
| Mediastinal, Hyperplasia, Lymphoid | 1 [2.0] | 2 [1.0] | | |
| Mediastinal, Infiltration Cellular, Plasma Cell | | 1 [2.0] | | |
| Pancreatic, Hyperplasia, Lymphoid | 1 [3.0] | | | |
| Renal, Erythrophagocytosis | | | 1 [3.0] | |
| Renal, Hemorrhage | 1 [3.0] | | | |
| Renal, Hyperplasia, Lymphoid | 3 [3.3] | 2 [3.0] | 1 [3.0] | |
| Lymph Node, Mandibular | (76) | (77) | (81) | (83) |
| Hemorrhage | 3 [2.7] | 2 [1.5] | 1 [2.0] | 1 [3.0] |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 20105 - 78

Route: Whole Body Exposure Species/Strain: MICE/B6C3F1

Cell Phone Radiation: GSM CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| 6C3F1 MICE FEMALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg | |
|--|----------|----------|----------|----------|--|
| Hyperplasia, Lymphoid | 1 [2.0] | 1 [3.0] | 1 [3.0] | 4 [2.8] | |
| Infiltration Cellular, Histiocyte | | | 2 [2.5] | | |
| Infiltration Cellular, Mixed Cell | 1 [2.0] | | | | |
| Lymph Node, Mesenteric | (71) | (84) | (80) | (83) | |
| Angiectasis | | 1 [3.0] | | | |
| Erythrophagocytosis | 1 [2.0] | | 1 [2.0] | | |
| Hemorrhage | 1 [1.0] | 4 [2.0] | 2 [3.0] | 1 [1.0] | |
| Hyperplasia, Lymphoid | 1 [3.0] | 10 [2.2] | 3 [2.3] | 3 [3.0] | |
| Infiltration Cellular, Histiocyte | 3 [2.0] | 8 [2.0] | 6 [2.0] | 4 [2.3] | |
| Infiltration Cellular, Plasma Cell | | 2 [3.0] | | | |
| Spleen | (86) | (87) | (89) | (87) | |
| Atrophy | 1 [3.0] | | | | |
| Extramedullary Hematopoiesis | 20 [2.5] | 15 [2.6] | 19 [2.6] | 11 [2.5] | |
| Hyperplasia, Lymphoid | 11 [2.2] | 7 [2.0] | 13 [2.2] | 10 [2.2] | |
| Capsule, Fibrosis | 1 [3.0] | | | | |
| Capsule, Inflammation, Chronic Active | | | 1 [3.0] | | |
| Thymus | (85) | (80) | (84) | (86) | |
| Atrophy | 5 [3.6] | 3 [3.0] | 8 [3.0] | 1 [3.0] | |
| Cyst | 2 | 2 | 7 | 2 | |
| Hemorrhage | | | 1 [2.0] | 1 [2.0] | |
| Hyperplasia, Lymphoid | 1 [2.0] | | 2 [3.5] | 2 [3.0] | |
| Infiltration Cellular, Histiocyte | | 1 [3.0] | | | |
| NTEGUMENTARY SYSTEM | | | | | |
| Mammary Gland | (85) | (88) | (88) | (84) | |
| Hyperplasia, Focal | 1 [3.0] | | 1 [2.0] | | |
| Hyperplasia, Diffuse | 1 [2.0] | 1 [2.0] | 1 [2.0] | 1 [2.0] | |
| Duct, Dilation | 1 [3.0] | 1 [2.0] | 2 [2.0] | 1 [3.0] | |
| Skin | (90) | (90) | (90) | (90) | |
| Inflammation, Chronic | | 1 [4.0] | | | |
| Ulcer | 2 [3.5] | 2 [4.0] | 2 [3.5] | 2 [3.0] | |
| Epidermis, Hyperplasia, Multifocal | | | | 1 [3.0] | |
| Hair Follicle, Atrophy | 2 [3.0] | 1 [3.0] | 4 [2.8] | 8 [3.0] | |
| Subcutaneous Tissue, Inflammation, Chronic | | | 1 [2.0] | | |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 20105 - 78

Route: Whole Body Exposure

Species/Strain: MICE/B6C3F1

Cell Phone Radiation: GSM CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| B6C3F1 MICE FEMALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg | |
|---|----------|----------|----------|----------|--|
| | | | | | |
| MUSCULOSKELETAL SYSTEM | | | | | |
| Bone | (90) | (90) | (89) | (90) | |
| Decreased Bone | | 1 [3.0] | | | |
| Fibro-Osseous Lesion | 11 [2.1] | 6 [2.2] | 4 [2.0] | 3 [2.7] | |
| Increased Bone | | 1 [2.0] | | 1 [2.0] | |
| Periosteum, Vertebra, Inflammation, Granulomatous | | 1 [2.0] | | | |
| Skeletal Muscle | (89) | (90) | (90) | (90) | |
| Degeneration | | | 2 [1.0] | 1 [2.0] | |
| Infiltration Cellular, Lymphocyte | 16 [1.1] | 5 [1.2] | 10 [1.3] | 16 [1.4] | |
| Inflammation, Chronic Active | | | | 1 [2.0] | |
| Mineral | 1 [1.0] | | | | |
| Arteriole, Inflammation, Chronic | | 2 [2.5] | | | |
| NERVOUS SYSTEM | | | | | |
| Brain | (87) | (90) | (90) | (90) | |
| Cyst, Squamous | | | 2 | | |
| Hemorrhage | 2 [2.0] | | 3 [2.0] | | |
| Hydrocephalus | 1 [2.0] | | | | |
| Inflammation, Acute | 1 [2.0] | | | | |
| Inflammation, Chronic | | 1 [2.0] | | | |
| Mineral | 80 [1.6] | 78 [1.4] | 77 [1.4] | 78 [1.4] | |
| Necrosis | 1 [2.0] | 1 [3.0] | 1 [2.0] | 1 [1.0] | |
| Artery, Meninges, Inflammation, Chronic Active | | 5 [2.0] | 3 [2.0] | 2 [2.0] | |
| Brain Trigeminal Ganglion | (75) | (74) | (80) | (79) | |
| Nerve Trigeminal | (56) | (58) | (53) | (35) | |
| Peripheral Nerve | (0) | (0) | (1) | (0) | |
| Peripheral Nerve, Sciatic | (88) | (87) | (88) | (88) | |
| Axon, Degeneration | 12 [1.2] | 6 [1.5] | 7 [1.7] | 6 [1.8] | |
| Spinal Cord | (90) | (90) | (90) | (90) | |
| Cyst, Squamous | | 1 | | | |
| Necrosis | | 3 [2.0] | | | |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Experiment Number: 20105 - 78

Route: Whole Body Exposure Species/Strain: MICE/B6C3F1

Test Type: CHRONIC

Route: Whole Body Exposure

Species/Strain: MICE/B6C3F1

Experiment Number: 20105 - 78

Cell Phone Radiation: GSM CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

| B6C3F1 MICE FEMALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg | |
|--|---------|----------|---------|---------|--|
| Artery, Meninges, Inflammation, Chronic Active | | 5 [1.2] | 1 [1.0] | 2 [1.5] | |
| RESPIRATORY SYSTEM | | | | | |
| Larynx | (0) | (0) | (2) | (0) | |
| Lung | (90) | (90) | (90) | (90) | |
| Congestion | | 2 [2.0] | 2 [3.0] | 1 [3.0] | |
| Hemorrhage | 4 [2.5] | 1 [3.0] | 3 [2.0] | 3 [2.3] | |
| Hyperplasia, Lymphoid | | 1 [2.0] | 1 [2.0] | | |
| Infiltration Cellular, Histiocyte | 1 [3.0] | 2 [2.5] | | | |
| Infiltration Cellular, Lymphocyte | 3 [2.0] | 1 [2.0] | 2 [2.0] | 3 [2.0] | |
| Infiltration Cellular, Mononuclear Cell | | 1 [1.0] | | | |
| Inflammation, Acute | 1 [3.0] | | | | |
| Inflammation, Chronic | 1 [2.0] | | | | |
| Inflammation, Chronic Active | | | | 1 [2.0] | |
| Alveolar Epithelium, Hyperplasia, Focal | 1 [2.0] | 1 [2.0] | 1 [2.0] | 3 [1.7] | |
| Serosa, Inflammation, Chronic | | 1 [1.0] | | | |
| Mediastinum | (2) | (0) | (0) | (0) | |
| Nose | (89) | (90) | (90) | (90) | |
| Inflammation, Acute | 1 [3.0] | | | | |
| Respiratory Epithelium, Accumulation, Hyaline Droplet | | 1 [2.0] | | | |
| Respiratory Epithelium, Hyperplasia | | | 1 [2.0] | | |
| Vomeronasal Organ, Cyst | | | | 1 | |
| Pleura | (0) | (0) | (1) | (0) | |
| Trachea | (90) | (89) | (90) | (90) | |
| SPECIAL SENSES SYSTEM | | | | | |
| Ear | (0) | (0) | (1) | (0) | |
| Eye | (89) | (88) | (90) | (90) | |
| Phthisis Bulbi | (55) | (30) | 1 | (00) | |
| Anterior Chamber, Inflammation, Acute | | | • | 1 [2.0] | |
| Bilateral, Retina, Hemorrhage | | | 1 [4.0] | . !1 | |
| Cornea, Inflammation, Acute | | | 1 [3.0] | 1 [2.0] | |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

Cell Phone Radiation: GSM CAS Number: CELLPRADGSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| B6C3F1 MICE FEMALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg | |
|---|----------|----------|----------|----------|---|
| Cornea, Inflammation, Chronic | | | 2 [1.5] | | |
| Cornea, Inflammation, Chronic Active | | 1 [3.0] | | | |
| Cornea, Necrosis | | 1 [4.0] | 1 [3.0] | | |
| Harderian Gland | (89) | (90) | (90) | (87) | |
| Hyperplasia, Focal | | | 1 [2.0] | | |
| Infiltration Cellular, Lymphocyte | 58 [1.2] | 68 [1.2] | 69 [1.1] | 63 [1.2] | |
| Inflammation, Chronic Active | | | | 1 [2.0] | |
| Lacrimal Gland | (0) | (1) | (2) | (0) | |
| Zymbal's Gland | (0) | (0) | (1) | (0) | |
| URINARY SYSTEM | | | | | , |
| Kidney | (89) | (87) | (89) | (88) | |
| Cyst | 1 | | | | |
| Glomerulopathy, Hyaline | | 2 [3.5] | | | |
| Hemorrhage | | | | 1 [1.0] | |
| Infarct | 14 [1.7] | 19 [1.8] | 20 [1.7] | 14 [1.5] | |
| Inflammation, Acute | | | 1 [2.0] | | |
| Metaplasia, Osseous | 2 | 2 | 2 | 2 | |
| Nephropathy, Chronic Progressive | 8 [1.5] | 15 [1.1] | 19 [1.4] | 14 [1.1] | |
| Bilateral, Infarct | 1 [3.0] | | | | |
| Interstitium, Infiltration Cellular, Lymphocyte | 63 [1.6] | 60 [1.3] | 65 [1.5] | 56 [1.4] | |
| Papilla, Mineral | | 2 [1.5] | 1 [1.0] | 1 [1.0] | |
| Pelvis, Dilatation | 1 [3.0] | - • | | | |
| Pelvis, Mineral | | | | 1 [1.0] | |
| Pelvis, Necrosis | | | 1 [2.0] | | |
| Renal Tubule, Dilation | 1 [1.0] | | 1 [2.0] | 1 [2.0] | |
| Renal Tubule, Hyaline Droplet | | 1 [2.0] | | | |
| Renal Tubule, Mineral | 1 [1.0] | | 1 [2.0] | | |
| Renal Tubule, Vacuolization Cytoplasmic | | 1 [3.0] | | | |
| Ureter | (0) | (0) | (1) | (0) | |
| Urethra | (0) | (0) | (1) | (0) | |
| Urinary Bladder | (86) | (87) | (86) | (86) | |
| Angiectasis | () | () | () | 2 [2.0] | |
| 1.00 | 00.14.01 | | | - [] | |

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

62 [1.8]

Experiment Number: 20105 - 78

Route: Whole Body Exposure

Species/Strain: MICE/B6C3F1

Infiltration Cellular, Lymphocyte

Test Type: CHRONIC

65 [1.6]

68 [1.7]

67 [1.6]

Experiment Number: 20105 - 78

Route: Whole Body Exposure

Species/Strain: MICE/B6C3F1

Test Type: CHRONIC

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 08/24/2017 AVERAGE SEVERITY GRADES[b]

CAS Number: CELLPRADGSM

Cell Phone Radiation: GSM

Time Report Requested: 12:19:07 First Dose M/F: 06/18/12 / 06/18/12

Lab: IIT

| B6C3F1 MICE FEMALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|--|--------|----------|---------|---------|
| Inflammation, Acute | | 4 [0.0] | 1 [2.0] | |
| Arteriole, Inflammation, Chronic Urothelium, Hyperplasia | | 1 [2.0] | 1 [2.0] | |

*** END OF REPORT ***

a - Number of animals examined microscopically at site and number of animals with lesion b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)