

Experiment Number: 20105 - 78
Test Type: CHRONIC
Route: Whole Body Exposure
Species/Strain: MICE/B6C3F1

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Cell Phone Radiation: GSM
CAS Number: CELLPRADGSM

Date Report Requested: 08/28/2017
Time Report Requested: 17:23:19
First Dose M/F: 06/18/12 / 06/18/12
Lab: IIT

Final 1 GSM Mice 14-Week Special Study

NTP Study Number: C20105
Lock Date: 04/07/2016
Cage Range: ALL
Date Range: ALL
Reasons For Removal: 25017 SSAC
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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| | | | | |
|-------------------------|---------------|-----------------|---------------|----------------|
| 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 |
| Scheduled Sacrifice | 15 | 15 | 15 | 15 |
| Early Deaths | | | | |
| Survivors | | | | |
| Animals Examined Microscopically | 10 | 10 | 10 | 10 |

ALIMENTARY SYSTEM

| | | | | |
|-----------------------------------|------|---------|---------|------|
| Esophagus | (10) | (10) | (10) | (10) |
| Gallbladder | (8) | (9) | (9) | (10) |
| Intestine Large, Cecum | (10) | (10) | (10) | (10) |
| Intestine Large, Colon | (10) | (10) | (10) | (10) |
| Intestine Large, Rectum | (10) | (10) | (10) | (10) |
| Intestine Small, Duodenum | (10) | (10) | (10) | (10) |
| Intestine Small, Ileum | (10) | (10) | (10) | (10) |
| Intestine Small, Jejunum | (10) | (10) | (10) | (10) |
| Liver | (10) | (10) | (10) | (10) |
| Inflammation, Focal | | 2 (20%) | 4 (40%) | |
| Pancreas | (10) | (10) | (10) | (10) |
| Infiltration Cellular, Lymphocyte | | 1 (10%) | | |
| Inflammation, Chronic | | 1 (10%) | | |
| Salivary Glands | (10) | (10) | (10) | (10) |
| Stomach, Forestomach | (10) | (10) | (10) | (10) |
| Stomach, Glandular | (10) | (10) | (10) | (10) |

CARDIOVASCULAR SYSTEM

| | | | | |
|--------------|------|------|------|------|
| Aorta | (10) | (10) | (10) | (10) |
| Blood Vessel | (1) | (1) | (2) | (0) |
| Heart | (10) | (10) | (10) | (10) |

ENDOCRINE SYSTEM

a - Number of animals examined microscopically at site and number of animals with lesion

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| B6C3F1 MICE MALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|--------------------|--------|----------|--------|---------|
| Adrenal Cortex | (10) | (10) | (10) | (10) |
| Adrenal Medulla | (10) | (10) | (10) | (10) |
| Islets, Pancreatic | (10) | (10) | (10) | (10) |
| Parathyroid Gland | (2) | (6) | (4) | (5) |
| Pituitary Gland | (9) | (10) | (10) | (10) |
| Thyroid Gland | (10) | (10) | (10) | (10) |

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

| | | | | |
|-----------------------------------|------|------|---------|---------|
| Epididymis | (10) | (10) | (10) | (10) |
| Preputial Gland | (10) | (10) | (10) | (10) |
| Prostate | (10) | (10) | (10) | (10) |
| Infiltration Cellular, Lymphocyte | | | 2 (20%) | 1 (10%) |
| Seminal Vesicle | (10) | (10) | (10) | (10) |
| Testis | (10) | (10) | (10) | (10) |

HEMATOPOIETIC SYSTEM

| | | | | |
|------------------------|------|------|---------|------|
| Bone Marrow | (10) | (10) | (10) | (10) |
| Lymph Node, Mandibular | (5) | (7) | (10) | (8) |
| Hemorrhage | | | 2 (20%) | |
| Lymph Node, Mesenteric | (10) | (10) | (10) | (10) |
| Spleen | (10) | (10) | (10) | (10) |
| Thymus | (10) | (10) | (10) | (10) |

INTEGUMENTARY SYSTEM

| | | | | |
|---------------|------|------|------|------|
| Mammary Gland | (1) | (0) | (0) | (0) |
| Skin | (10) | (10) | (10) | (10) |

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Lab: IIT

B6C3F1 MICE MALE

0 W/kg

2.5 W/kg

5 W/kg

10 W/kg

MUSCULOSKELETAL SYSTEM

| | | | | |
|-----------------|------|------|------|------|
| Bone | (10) | (10) | (10) | (10) |
| Skeletal Muscle | (10) | (10) | (10) | (10) |

NERVOUS SYSTEM

| | | | | |
|---------------------------|---------|---------|------|------|
| Brain | (10) | (10) | (10) | (10) |
| Hemorrhage | 1 (10%) | 1 (10%) | | |
| Brain Trigeminal Ganglion | (9) | (9) | (8) | (10) |
| Nerve Trigeminal | (8) | (10) | (10) | (10) |
| Peripheral Nerve, Sciatic | (10) | (10) | (10) | (10) |
| Spinal Cord | (10) | (10) | (10) | (10) |

RESPIRATORY SYSTEM

| | | | | |
|-------------------------------------|---------|---------|---------|---------|
| Lung | (10) | (10) | (10) | (10) |
| Congestion | 1 (10%) | | | 1 (10%) |
| Hemorrhage | 2 (20%) | 3 (30%) | 2 (20%) | 2 (20%) |
| Nose | (10) | (10) | (10) | (10) |
| Respiratory Epithelium, Hyperplasia | | 2 (20%) | 1 (10%) | |
| Trachea | (10) | (10) | (10) | (10) |

SPECIAL SENSES SYSTEM

| | | | | |
|-----------------|------|------|------|------|
| Eye | (10) | (10) | (10) | (10) |
| Harderian Gland | (10) | (10) | (10) | (10) |

URINARY SYSTEM

| | | | | |
|----------------------------------|---------|---------|---------|------|
| Kidney | (10) | (10) | (10) | (10) |
| Nephropathy, Chronic Progressive | 1 (10%) | 2 (20%) | 1 (10%) | |

a - Number of animals examined microscopically at site and number of animals with lesion

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Route: Whole Body Exposure

Species/Strain: MICE/B6C3F1

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Time Report Requested: 17:23:19

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 |
|---|---------|----------|---------|---------|
| Interstitial, Infiltration Cellular, Lymphocyte | 2 (20%) | 1 (10%) | 1 (10%) | 1 (10%) |
| Urinary Bladder | (10) | (10) | (10) | (10) |

*** END OF MALE ***

a - Number of animals examined microscopically at site and number of animals with lesion

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Species/Strain: MICE/B6C3F1

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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 |
| Scheduled Sacrifice | 15 | 15 | 15 | 15 |
| Early Deaths | | | | |
| Survivors | | | | |
| Animals Examined Microscopically | 10 | 10 | 10 | 10 |

ALIMENTARY SYSTEM

| | | | | |
|-----------------------------------|---------|---------|---------|---------|
| Esophagus | (10) | (10) | (10) | (9) |
| Gallbladder | (9) | (10) | (9) | (9) |
| Intestine Large, Cecum | (10) | (10) | (10) | (9) |
| Intestine Large, Colon | (10) | (10) | (10) | (9) |
| Intestine Large, Rectum | (10) | (10) | (10) | (9) |
| Intestine Small, Duodenum | (10) | (10) | (10) | (9) |
| Intestine Small, Ileum | (10) | (10) | (10) | (9) |
| Intestine Small, Jejunum | (10) | (10) | (10) | (9) |
| Liver | (10) | (10) | (10) | (9) |
| Inflammation, Focal | 1 (10%) | 2 (20%) | 4 (40%) | 3 (33%) |
| Necrosis | | 1 (10%) | | |
| Pancreas | (10) | (10) | (10) | (9) |
| Salivary Glands | (10) | (10) | (10) | (9) |
| Infiltration Cellular, Lymphocyte | | | 3 (30%) | |
| Stomach, Forestomach | (10) | (10) | (10) | (9) |
| Stomach, Glandular | (10) | (10) | (10) | (9) |
| Infiltration Cellular, Mixed Cell | | 1 (10%) | | |

CARDIOVASCULAR SYSTEM

| | | | | |
|-------|------|------|------|------|
| Aorta | (10) | (10) | (10) | (9) |
| Heart | (10) | (10) | (10) | (10) |

ENDOCRINE SYSTEM

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| B6C3F1 MICE FEMALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|-----------------------------------|---------|----------|--------|---------|
| Adrenal Cortex | (10) | (10) | (10) | (9) |
| Adrenal Medulla | (10) | (10) | (10) | (9) |
| Islets, Pancreatic | (10) | (10) | (10) | (9) |
| Parathyroid Gland | (7) | (7) | (4) | (3) |
| Pituitary Gland | (9) | (10) | (10) | (9) |
| Thyroid Gland | (10) | (10) | (10) | (9) |
| Infiltration Cellular, Lymphocyte | 1 (10%) | | | |

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

| | | | | |
|----------------|------|------|------|-----|
| Clitoral Gland | (6) | (6) | (6) | (5) |
| Ovary | (10) | (10) | (10) | (9) |
| Uterus | (10) | (10) | (10) | (9) |

HEMATOPOIETIC SYSTEM

| | | | | |
|------------------------|------|---------|---------|-----|
| Bone Marrow | (10) | (10) | (10) | (9) |
| Lymph Node, Mandibular | (8) | (10) | (9) | (8) |
| Lymph Node, Mesenteric | (10) | (10) | (10) | (9) |
| Spleen | (10) | (10) | (10) | (8) |
| Thymus | (10) | (10) | (10) | (9) |
| Hemorrhage | | 2 (20%) | 3 (30%) | |

INTEGUMENTARY SYSTEM

| | | | | |
|---|------|------|------|---------|
| Mammary Gland | (10) | (10) | (10) | (9) |
| Skin | (10) | (10) | (10) | (9) |
| Hair Follicle, Inflammation, Chronic Active | | | | 1 (11%) |

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|---|--------|----------|---------|---------|
| MUSCULOSKELETAL SYSTEM | | | | |
| Bone | (10) | (10) | (10) | (9) |
| Skeletal Muscle | (10) | (10) | (10) | (9) |
| NERVOUS SYSTEM | | | | |
| Brain | (10) | (10) | (10) | (10) |
| Brain Trigeminal Ganglion | (10) | (8) | (10) | (9) |
| Nerve Trigeminal | (9) | (9) | (10) | (9) |
| Peripheral Nerve | (1) | (0) | (0) | (0) |
| Peripheral Nerve, Sciatic | (10) | (10) | (10) | (8) |
| Spinal Cord | (10) | (10) | (10) | (10) |
| Cyst, Squamous, Multiple | | | | 1 (10%) |
| RESPIRATORY SYSTEM | | | | |
| Lung | (10) | (10) | (10) | (9) |
| Hemorrhage | | 1 (10%) | | |
| Nose | (10) | (10) | (10) | (9) |
| Trachea | (10) | (10) | (10) | (9) |
| SPECIAL SENSES SYSTEM | | | | |
| Eye | (10) | (10) | (10) | (9) |
| Harderian Gland | (10) | (10) | (10) | (9) |
| Infiltration Cellular, Lymphocyte | | | | 1 (11%) |
| URINARY SYSTEM | | | | |
| Kidney | (10) | (10) | (10) | (10) |
| Nephropathy, Chronic Progressive | | 1 (10%) | | |
| Interstitial, Infiltration Cellular, Lymphocyte | | | 3 (30%) | |

a - Number of animals examined microscopically at site and number of animals with lesion

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| B6C3F1 MICE FEMALE | 0 W/kg | 2.5 W/kg | 5 W/kg | 10 W/kg |
|-----------------------------------|--------|----------|--------|---------|
| Urinary Bladder | (10) | (10) | (10) | (9) |
| Infiltration Cellular, Lymphocyte | | | | 1 (11%) |

*** END OF REPORT ***

a - Number of animals examined microscopically at site and number of animals with lesion