

**Experiment Number:** 20105 - 13

**Test Type:** 28-DAY

**Route:** Whole Body Exposure

**Species/Strain:** RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: GSM

**CAS Number:** CELLPRADGSM

**Date Report Requested:** 08/15/2017

**Time Report Requested:** 12:10:43

**First Dose M/F:** 12/09/10 / 12/09/10

**Lab:** IIT

Final1\_Rats (GSM)

**NTP Study Number:** C20105

**Lock Date:** 11/06/2014

**Cage Range:** ALL

**Date Range:** ALL

**Reasons For Removal:** 25021 TSAC 25020 NATD

**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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Lab: IIT

HARLAN SPRAGUE DAWLEY RATS MALE 0W/kg(GSM)PreC	ANIMAL ID	DAY ON TEST	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		2	2	2	2	2	3	3	3	3	3	3
		9	9	9	9	9	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		2	2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	1	1
		1	2	3	4	5	6	7	8	9	0	0
		* TOTALS										

## ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	+	10
Extramedullary Hematopoiesis												1 1.0
Inflammation, Focal												4 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	10

## CARDIOVASCULAR SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

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		0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 3 0							
ANIMAL ID													* TOTALS
	0 0 2 0 1	0 0 2 0 2	0 0 2 0 5	0 0 2 0 6	0 0 2 0 7	0 0 2 0 8	0 0 2 0 9	0 0 2 0 0	0 0 2 0 1	0 0 2 0 0	0 0 2 0 1	0 0 2 0 0	
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy													1 1.0
<b>ENDOCRINE SYSTEM</b>													
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	10
Accessory Adrenal Cortical Nodule					X								1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	M	M	M	M	+	7
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	10
Pars Distalis, Cyst	X				X								2
Rathke's Cleft, Dilation	2	2	2	1	1	3	1	3					8 1.9
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	10
Ectopic Thymus	X												1
Ultimobranchial Cyst	X		X										2
<b>GENERAL BODY SYSTEM</b>													
NONE													
<b>GENITAL SYSTEM</b>													

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HARLAN SPRAGUE DAWLEY RATS MALE 0W/kg(GSM)PreC	DAY ON TEST												
		0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 3 0							
ANIMAL ID													* TOTALS
	0 0 2 0 1	0 0 2 0 2	0 0 2 0 5	0 0 2 0 5	0 0 2 0 6	0 0 2 0 7	0 0 2 0 8	0 0 2 0 9	0 0 2 0 0	0 0 2 0 1	0 0 2 0 0	0 0 2 0 0	
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland Inflammation, Chronic	+	+	+	+	+	+	+	+	+	+	+	+	10
	1		1	1		1							4 1.0
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	+	+	10
<b>HEMATOPOIETIC SYSTEM</b>													
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	10
							2	1					2 1.5
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	10
<b>INTEGUMENTARY SYSTEM</b>													
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	+	+	10

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HARLAN SPRAGUE DAWLEY RATS MALE 0W/kg(GSM)PreC	DAY ON TEST ANIMAL ID	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS MALE 0W/kg(GSM)PreC	ANIMAL ID	2	2	2	2	2	3	3	3	3	3
		9	9	9	9	9	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS MALE 0W/kg(GSM)PreC	ANIMAL ID	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS MALE 0W/kg(GSM)PreC	ANIMAL ID	2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	1
HARLAN SPRAGUE DAWLEY RATS MALE 0W/kg(GSM)PreC	ANIMAL ID	1	2	3	4	5	6	7	8	9	0

\* TOTALS

## MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	10
------	---	---	---	---	---	---	---	---	---	---	---	----

## NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	---	----

## RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	+	10
Hemorrhage	2											1 2.0
Inflammation	1											1 1.0
Perivascular, Infiltration Cellular, Eosinophil												1 1.0

Nose	+	+	+	+	+	+	+	+	+	+	+	10
Glands, Respiratory Epithelium, Cyst												1
Respiratory Epithelium, Hyperplasia												2 1.0

Trachea	+	+	+	+	+	+	+	+	+	+	+	10
---------	---	---	---	---	---	---	---	---	---	---	---	----

SPECIAL SENSES SYSTEM	+	+	+	+	+	+	+	+	+	+	+	10
Eye	+	+	+	+	+	+	+	+	+	+	+	10

Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	10
-----------------	---	---	---	---	---	---	---	---	---	---	---	----

URINARY SYSTEM	+	+	+	+	+	+	+	+	+	+	+	10
Kidney	1											3 1.0

Nephropathy, Chronic Progressive	1											

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HARLAN SPRAGUE DAWLEY RATS MALE 0W/kg(GSM)PreC	ANIMAL ID	DAY ON TEST												
		0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	
		2	2	2	2	2	3	3	3	3	3	3	3	
		9	9	9	9	9	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	
		2	2	2	2	2	2	2	2	2	2	2	2	
		0	0	0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0			
* TOTALS														
Pelvis, Dilation														
Renal Tubule, Casts Protein														
Urinary Bladder														
+ + + + + + + + + + + +														
2														
1														
10														

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HARLAN SPRAGUE DAWLEY RATS MALE 3W/kg(GSM)PreC	ANIMAL ID	DAY ON TEST											
		0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0
		2	2	2	2	2	3	3	3	3	3	3	3
		9	9	9	9	9	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0
		2	2	2	2	2	2	2	2	2	2	2	2
		6	6	6	6	6	6	6	6	6	6	6	7
		1	2	3	4	5	6	7	8	9	0	*	TOTALS

### ALIMENTARY SYSTEM

NONE

### CARDIOVASCULAR SYSTEM

Heart

+ + + + + + + + + + + 10

### ENDOCRINE SYSTEM

NONE

### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Preputial Gland

+ + + + + + + + + + + 10  
1 1 1 2 2 4 1.3  
Bilateral, Inflammation, Chronic 1 2.0

Inflammation, Chronic

Bilateral, Inflammation, Chronic

Testes

+ + 1 1 1 2 1 1 1 2 1 2.0  
Germinal Epithelium, Left, Degeneration 2

### HEMATOPOIETIC SYSTEM

NONE

### INTEGUMENTARY SYSTEM

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3W/kg(GSM)PreC | DAY ON TEST | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-------------|----------|---|---|---|---|---|---|---|---|---|
|  |             | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 2        | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
|  |             | 9        | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 |
|  |             | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | ANIMAL ID   | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 2        | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
|  |             | 6        | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |
|  |             | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|  |             | * TOTALS |   |   |   |   |   |   |   |   |   |

NONE

**MUSCULOSKELETAL SYSTEM**

NONE

**NERVOUS SYSTEM**

Brain

+ + + + + + + + + +

10

**RESPIRATORY SYSTEM**

NONE

**SPECIAL SENSES SYSTEM**

NONE

**URINARY SYSTEM**

Kidney

+ + + + + + + + + +

10

Nephropathy, Chronic Progressive

1 1 1 1 1 1 1 1 1 1

4 1.0

Renal Tubule, Casts Protein

1 1

2 1.0

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6W/kg(GSM)PreC | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6W/kg(GSM)PreC | ANIMAL ID   | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 |
|  |             | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 3 |
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6W/kg(GSM)PreC | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6W/kg(GSM)PreC | ANIMAL ID   | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|  |             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 |
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6W/kg(GSM)PreC | ANIMAL ID   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 4 |

\* TOTALS

## ALIMENTARY SYSTEM

NONE

## CARDIOVASCULAR SYSTEM

|                |   |   |   |   |   |   |   |   |   |   |   |       |
|----------------|---|---|---|---|---|---|---|---|---|---|---|-------|
| Heart          | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Cardiomyopathy |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |

## ENDOCRINE SYSTEM

NONE

## GENERAL BODY SYSTEM

NONE

## GENITAL SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |   |       |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|-------|
| Preputial Gland                  | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Inflammation, Chronic            | 1 | 1 |   |   |   |   |   |   |   |   |   | 3 1.0 |
| Bilateral, Inflammation, Chronic |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |
|                                  |   |   |   |   |   |   |   |   |   |   |   |       |

## HEMATOPOIETIC SYSTEM

NONE

## INTEGUMENTARY SYSTEM

NONE

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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|   |   | DAY ON TEST  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   |   | HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>6W/kg(GSM)PreC |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   | ANIMAL ID  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 2 | 2  | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| 9 | 9 | 9  | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 3 | 3  | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 2 | 2 | 2  | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| 1 | 2 | 2  | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

\* TOTALS

## MUSCULOSKELETAL SYSTEM

NONE

## NERVOUS SYSTEM

Brain

+ + + + + + + + + +

10

## RESPIRATORY SYSTEM

NONE

## SPECIAL SENSES SYSTEM

NONE

## URINARY SYSTEM

Kidney

+ + + + + + + + + +

10

1

Nephropathy, Chronic Progressive

Interstitial, Infiltration Cellular

Pelvis, Dilation

1

1 1.0

2 1.0

1 3.0

3

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First Dose M/F: 12/09/10 / 12/09/10

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>9W/kg(GSM)PreC | DAY ON TEST<br>ANIMAL ID | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|--|--------------------------|----------|---|---|---|---|---|---|---|---|---|--|
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |                          | 2        | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |  |
|  |                          | 9        | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 |  |
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |                          | 3        | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |  |
|  |                          | 8        | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |  |
|  |                          | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |  |
|  |                          | * TOTALS |   |   |   |   |   |   |   |   |   |  |

## ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |       |
|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus                               | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Cecum                  | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Colon                  | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Rectum                 | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Duodenum               | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Ileum                  | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Jejunum                | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Extramедullary Hematopoiesis            |   |   |   |   |   |   |   |   |   |   |   | 3 1.0 |
| Infiltration Cellular, Mononuclear Cell |   |   |   |   |   |   |   |   |   |   |   | 1 1.0 |
| Pancreas                                | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Salivary Glands                         | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Forestomach                    | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Glandular                      | + | + | + | + | + | + | + | + | + | + | + | 10    |

## CARDIOVASCULAR SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 13

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 08/15/2017

Time Report Requested: 12:10:43

First Dose M/F: 12/09/10 / 12/09/10

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>9W/kg(GSM)PreC | DAY ON TEST<br>ANIMAL ID |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | * TOTALS |
|--|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------|
|  |                          | 0<br>0<br>2<br>9 | 0<br>0<br>2<br>9 | 0<br>0<br>2<br>9 | 0<br>0<br>2<br>9 | 0<br>0<br>3<br>0 |          |
| Blood Vessel   |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10       |
| Heart  |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10       |
| Cardiomyopathy                                       |                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1 1.0    |
| <b>ENDOCRINE SYSTEM</b>                              |                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |
| Adrenal Cortex                                       |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10       |
| Accessory Adrenal Cortical Nodule                    |                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1        |
| X  |                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |
| Adrenal Medulla                                      |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10       |
| Islets, Pancreatic                                   |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10       |
| Parathyroid Gland                                    |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10       |
| Pituitary Gland                                      |                          |                  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 9        |
| Pars Distalis, Cyst                                  |                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1        |
| Rathke's Cleft, Dilation                             |                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 5 2.0    |
| X  |                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |
| Thyroid Gland  |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10       |
| Ectopic Thymus                                       |                          | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1        |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|            |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 13

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 08/15/2017

Time Report Requested: 12:10:43

First Dose M/F: 12/09/10 / 12/09/10

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>9W/kg(GSM)PreC | DAY ON TEST |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | * TOTALS    |
|--|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|------------------|-------------|
|  |             | 0<br>0<br>2<br>9      | 0<br>0<br>2<br>9      | 0<br>0<br>2<br>9      | 0<br>0<br>3<br>0      | 0<br>0<br>3<br>0 | 0<br>0<br>3<br>0 |             |
| ANIMAL ID  |             | 0<br>0<br>3<br>8<br>1 | 0<br>0<br>3<br>8<br>2 | 0<br>0<br>3<br>8<br>3 | 0<br>0<br>3<br>8<br>4 | 0<br>0<br>3<br>8<br>5 | 0<br>0<br>3<br>8<br>6 | 0<br>0<br>3<br>8<br>7 | 0<br>0<br>3<br>8<br>8 | 0<br>0<br>3<br>8<br>9 | 0<br>0<br>3<br>8<br>0 |                  |                  |             |
| Preputial Gland<br>Inflammation, Chronic             |             | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10<br>3 1.0 |
| Prostate   |             | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10          |
| Seminal Vesicle                                      |             | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10          |
| Testes   |             | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10          |
| <b>HEMATOPOIETIC SYSTEM</b>                          |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  |             |
| Bone Marrow  |             | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10          |
| Lymph Node, Mandibular<br>Hemorrhage                 |             | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10<br>2 1.5 |
| Lymph Node, Mesenteric<br>Hemorrhage                 |             | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10<br>1 2.0 |
| Spleen   |             | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10          |
| Thymus   |             | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10          |
| <b>INTEGUMENTARY SYSTEM</b>                          |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  |             |
| Mammary Gland  |             | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10          |
| Skin   |             | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10          |
| <b>MUSCULOSKELETAL SYSTEM</b>                        |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  |             |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 13

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/15/2017

Test Type: 28-DAY

Cell Phone Radiation: GSM

Time Report Requested: 12:10:43

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 12/09/10 / 12/09/10

Species/Strain: RATS/HSD

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>9W/kg(GSM)PreC | DAY ON TEST<br>ANIMAL ID | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |       |
|--|--------------------------|----------|---|---|---|---|---|---|---|---|---|-------|
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |       |
|  |                          | 2        | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |       |
|  |                          | 9        | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 |       |
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |       |
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |       |
|  |                          | 3        | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |       |
|  |                          | 8        | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |       |
|  |                          | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |       |
|  |                          | * TOTALS |   |   |   |   |   |   |   |   |   |       |
| Bone   |                          | +        | + | + | + | + | + | + | + | + | + | 10    |
| <b>NERVOUS SYSTEM</b>                                |                          |          |   |   |   |   |   |   |   |   |   |       |
| Brain  |                          | +        | + | + | + | + | + | + | + | + | + | 10    |
| <b>RESPIRATORY SYSTEM</b>                            |                          |          |   |   |   |   |   |   |   |   |   |       |
| Lung   |                          | +        | + | + | + | + | + | + | + | + | + | 10    |
| Hemorrhage   |                          |          |   |   |   |   |   |   |   |   |   | 1 1.0 |
| Alveolus, Infiltration Cellular, Histiocyte          |                          |          |   |   |   |   |   |   |   |   |   | 1 1.0 |
| Nose   |                          | +        | + | + | + | + | + | + | + | + | + | 10    |
| Respiratory Epithelium, Hyperplasia                  |                          |          |   |   |   |   |   |   |   |   |   | 1 1.0 |
| Trachea  |                          | +        | + | + | + | + | + | + | + | + | + | 10    |
| <b>SPECIAL SENSES SYSTEM</b>                         |                          |          |   |   |   |   |   |   |   |   |   |       |
| Eye  |                          | +        | + | + | + | + | + | + | + | + | + | 10    |
| Harderian Gland                                      |                          | +        | + | + | + | + | + | + | + | + | + | 10    |
| <b>URINARY SYSTEM</b>                                |                          |          |   |   |   |   |   |   |   |   |   |       |
| Kidney   |                          | +        | + | + | + | + | + | + | + | + | + | 10    |
| Nephropathy, Chronic Progressive                     |                          |          |   |   |   |   |   |   |   |   |   | 4 1.0 |
| Urinary Bladder                                      |                          | +        | + | + | + | + | + | + | + | + | + | 10    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

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**Experiment Number:** 20105 - 13

**Test Type:** 28-DAY

**Route:** Whole Body Exposure

**Species/Strain:** RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Cell Phone Radiation: GSM

**CAS Number:** CELLPRADGSM

**Date Report Requested:** 08/15/2017

**Time Report Requested:** 12:10:43

**First Dose M/F:** 12/09/10 / 12/09/10

**Lab:** IIT

\*\*\* END OF MALE DATA \*\*\*

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

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Species/Strain: RATS/HSD

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Date Report Requested: 08/15/2017

Time Report Requested: 12:10:43

First Dose M/F: 12/09/10 / 12/09/10

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0W/kg(GSM)PreC | DAY ON TEST<br>ANIMAL ID | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|--------------------------|-----------------|---|---|---|---|---|---|---|---|---|
|  |                          | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |                          | 2               | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
|  |                          | 9               | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 |
|  |                          | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |                          | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |                          | 2               | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
|  |                          | 3               | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
|  |                          | 1               | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|  |                          | <b>* TOTALS</b> |   |   |   |   |   |   |   |   |   |

**ALIMENTARY SYSTEM**

|                              |   |   |   |   |   |   |   |   |   |   |   |       |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus                    | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Cecum       | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Colon       | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Rectum      | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Duodenum    | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Ileum       | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Jejunum     | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Liver                        | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Extramedullary Hematopoiesis |   |   |   |   |   |   |   |   |   |   |   | 1 1.0 |
| Hepatodiaphragmatic Nodule   | X |   |   |   |   |   |   |   |   |   |   | 1     |
| Inflammation, Focal          | 1 |   |   |   |   |   |   |   |   |   |   | 4 1.0 |
| Pancreas                     | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Salivary Glands              | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Forestomach         | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Glandular           | + | + | + | + | + | + | + | + | + | + | + | 10    |

**CARDIOVASCULAR SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0W/kg(GSM)PreC | DAY ON TEST | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |
|--|-------------|----------|---|---|---|---|---|---|---|---|-----|
|  |             | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |
| ANIMAL ID  |             | 2        | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3   |
|  |             | 9        | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0   |
|  |             | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |
|  |             | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   |
|  |             | 2        | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2   |
|  |             | 3        | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4   |
|  |             | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0   |
|  |             | * TOTALS |   |   |   |   |   |   |   |   |     |
| Blood Vessel   |             | +        | + | + | + | + | + | + | + | + | 10  |
| Heart  |             | +        | + | + | + | + | + | + | + | + | 10  |
| <b>ENDOCRINE SYSTEM</b>                                |             |          |   |   |   |   |   |   |   |   |     |
| Adrenal Cortex   |             | +        | + | + | + | + | + | + | + | + | 10  |
| Accessory Adrenal Cortical Nodule                      |             | X        |   |   |   |   | X | X | X |   | 4   |
| Adrenal Medulla  |             | +        | + | + | + | + | + | + | + | + | 10  |
| Islets, Pancreatic                                     |             | +        | + | + | + | + | + | + | + | + | 10  |
| Parathyroid Gland                                      |             | +        | + | + | + | + | + | + | + | + | 10  |
| Pituitary Gland  |             | +        | + | + | + | + | + | + | + | + | 10  |
| Rathke's Cleft, Dilation                               |             | 1        | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   | 1.0 |
| Thyroid Gland  |             | +        | + | + | + | + | + | + | + | + | 10  |
| Ectopic Thymus   |             | X        |   | X |   | X | X | X |   |   | 5   |
| Ultimobranchial Cyst                                   |             | X        |   | X |   | X |   |   |   |   | 3   |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|                       |   |   |   |   |   |   |   |   |   |   |       |
|-----------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Clitoral Gland        | + | + | + | + | + | + | + | + | + | + | 10    |
| Inflammation, Chronic | 1 | 1 | 1 | 1 | 1 | 1 |   |   |   |   | 5 1.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0W/kg(GSM)PreC | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  |          |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|------------------|------------------|------------------|----------|
|  |                       | 0<br>0<br>2<br>9      | 0<br>0<br>2<br>9      | 0<br>0<br>2<br>9      | 0<br>0<br>2<br>9      | 0<br>0<br>3<br>0      | 0<br>0<br>3<br>0      | 0<br>0<br>3<br>0      | 0<br>0<br>3<br>0 | 0<br>0<br>3<br>0 | 0<br>0<br>3<br>0 | 0<br>0<br>3<br>0 |          |
| ANIMAL ID  |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  | * TOTALS |
|  | 0<br>0<br>2<br>3<br>1 | 0<br>0<br>2<br>3<br>2 | 0<br>0<br>2<br>3<br>5 | 0<br>0<br>2<br>3<br>6 | 0<br>0<br>2<br>3<br>7 | 0<br>0<br>2<br>3<br>8 | 0<br>0<br>2<br>3<br>9 | 0<br>0<br>2<br>3<br>0 |                  |                  |                  |                  |          |
| Bilateral, Inflammation, Chronic                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  | 1 1.0    |
| Ovary<br>Mineral                                       | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  | 10 1 1.0 |
| Uterus   | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  | 10       |
| <b>HEMATOPOIETIC SYSTEM</b>                            |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  |          |
| Bone Marrow  | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  | 10       |
| Lymph Node, Mandibular                                 | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  | 10       |
| Lymph Node, Mesenteric                                 | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  | 10       |
| Spleen   | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  | 10       |
| Thymus   | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  | 10       |
| <b>INTEGUMENTARY SYSTEM</b>                            |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  |          |
| Mammary Gland  | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  | 10       |
| Skin   | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  | 10       |
| <b>MUSCULOSKELETAL SYSTEM</b>                          |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  |          |
| Bone   | + + + + + + + + + +   |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  | 10       |
| <b>NERVOUS SYSTEM</b>                                  |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  |                  |                  |          |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 13

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 08/15/2017

Time Report Requested: 12:10:43

First Dose M/F: 12/09/10 / 12/09/10

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0W/kg(GSM)PreC | DAY ON TEST<br>ANIMAL ID |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |       | * TOTALS |
|--|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------|----------|
|  |                          | 0<br>0<br>2<br>9 | 0<br>0<br>2<br>9 | 0<br>0<br>2<br>9 | 0<br>0<br>3<br>0 | 0<br>0<br>3<br>0 | 0<br>0<br>3<br>0 | 0<br>0<br>3<br>0 | 0<br>0<br>2<br>2 | 0<br>0<br>2<br>2 | 0<br>0<br>3<br>3 | 0<br>0<br>4<br>0 |       |          |
| Brain  |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10    |          |
| <b>RESPIRATORY SYSTEM</b>                              |                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |       |          |
| Lung   |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10    |          |
| Hemorrhage   |                          |                  | 1                |                  |                  | 1                |                  |                  |                  |                  |                  |                  | 2 1.0 |          |
| Metaplasia, Osseous                                    |                          |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  | 1 1.0 |          |
| Mineral  |                          |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  | 1 1.0 |          |
| Alveolus, Inflammation, Chronic Active                 |                          |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  | 1 1.0 |          |
| Subpleura, Inflammation, Chronic                       |                          |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  | 2 1.0 |          |
| Nose   |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10    |          |
| Respiratory Epithelium, Hyperplasia                    |                          |                  | 1                |                  |                  | 1                |                  |                  |                  |                  |                  |                  | 2 1.0 |          |
| Trachea  |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10    |          |
| <b>SPECIAL SENSES SYSTEM</b>                           |                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |       |          |
| Eye  |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10    |          |
| Harderian Gland  |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10    |          |
| <b>URINARY SYSTEM</b>                                  |                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |       |          |
| Kidney   |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10    |          |
| Renal Tubule, Casts Protein                            |                          |                  | 1                |                  |                  | 1                |                  |                  |                  |                  |                  |                  | 2 1.0 |          |
| Urinary Bladder  |                          | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 10    |          |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 13

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 08/15/2017

Time Report Requested: 12:10:43

First Dose M/F: 12/09/10 / 12/09/10

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3W/kg(GSM)PreC | ANIMAL ID | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |
|--|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|----------|
|  |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          |
|  |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          |
|  |           | 2           | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |          |
|  |           | 9           | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          |
|  |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          |
|  |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          |
|  |           | 2           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |          |
|  |           | 9           | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |          |
|  |           | 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 0 | 0 |          |

## ALIMENTARY SYSTEM

|                            |   |   |
|----------------------------|---|---|
| Liver                      | + | 1 |
| Hepatodiaphragmatic Nodule | X | 1 |

## CARDIOVASCULAR SYSTEM

|       |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|----|

## ENDOCRINE SYSTEM

NONE

## GENERAL BODY SYSTEM

NONE

## GENITAL SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |       |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Clitoral Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Inflammation, Chronic            | 1 |   | 1 |   | 2 | 1 | 1 |   |   |   |   |   | 5 1.2 |
| Bilateral, Inflammation, Chronic |   | 1 | 1 |   |   |   |   | 1 |   |   |   |   | 3 1.0 |

## HEMATOPOIETIC SYSTEM

NONE

## INTEGUMENTARY SYSTEM

NONE

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 13

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 08/15/2017

Time Report Requested: 12:10:43

First Dose M/F: 12/09/10 / 12/09/10

Lab: IIT

DAY ON TEST  
**HARLAN SPRAGUE DAWLEY RATS  
FEMALE**

**3W/kg(GSM)PreC**

ANIMAL ID

|   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 0 | 0 |

\* TOTALS

### MUSCULOSKELETAL SYSTEM

NONE

### NERVOUS SYSTEM

Brain

++ + + + + + + + +

10

### RESPIRATORY SYSTEM

NONE

### SPECIAL SENSES SYSTEM

NONE

### URINARY SYSTEM

Kidney

Nephropathy, Chronic Progressive

++ + + + + + + + +  
1 1 1 1 1 1

10

4 1.0

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 13

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/15/2017

Test Type: 28-DAY

Cell Phone Radiation: GSM

Time Report Requested: 12:10:43

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 12/09/10 / 12/09/10

Species/Strain: RATS/HSD

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>6W/kg(GSM)PreC | ANIMAL ID | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|--|-----------|-------------|---|---|---|---|---|---|---|---|---|---|--|
|  |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |           | 2           | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |  |
|  |           | 9           | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |           | 3           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |  |
|  |           | 5           | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |  |
|  |           | 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |   |  |
|  |           | * TOTALS    |   |   |   |   |   |   |   |   |   |   |  |

## ALIMENTARY SYSTEM

NONE

## CARDIOVASCULAR SYSTEM

|                |   |   |   |   |   |   |   |   |   |   |   |       |
|----------------|---|---|---|---|---|---|---|---|---|---|---|-------|
| Heart          | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Cardiomyopathy |   |   |   | 1 | 1 |   |   |   |   |   |   | 2 1.0 |

## ENDOCRINE SYSTEM

NONE

## GENERAL BODY SYSTEM

NONE

## GENITAL SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |   |       |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|-------|
| Clitoral Gland                   | M | + | + | + | + | + | + | + | + | + | + | 9     |
| Inflammation, Chronic            |   |   |   | 2 |   | 1 | 1 | 1 | 1 |   |   | 5 1.2 |
| Bilateral, Inflammation, Chronic |   |   |   |   | 2 |   |   |   |   |   |   | 1 2.0 |

## HEMATOPOIETIC SYSTEM

NONE

## INTEGUMENTARY SYSTEM

NONE

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 13

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 08/15/2017

Time Report Requested: 12:10:43

First Dose M/F: 12/09/10 / 12/09/10

Lab: IIT

DAY ON TEST  
**HARLAN SPRAGUE DAWLEY RATS  
FEMALE**

**6W/kg(GSM)PreC**

ANIMAL ID

|   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

|   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0 |

\* TOTALS

### MUSCULOSKELETAL SYSTEM

NONE

### NERVOUS SYSTEM

Brain

++ + + + + + + + +

10

### RESPIRATORY SYSTEM

NONE

### SPECIAL SENSES SYSTEM

NONE

### URINARY SYSTEM

Kidney

Nephropathy, Chronic Progressive

++ + + + + + + + +

10

3 1.0

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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Experiment Number: 20105 - 13

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 08/15/2017

Time Report Requested: 12:10:43

First Dose M/F: 12/09/10 / 12/09/10

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>9W/kg(GSM)PreC | DAY ON TEST<br>ANIMAL ID | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|--|--------------------------|----------|---|---|---|---|---|---|---|---|---|--|
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |                          | 2        | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |  |
|  |                          | 9        | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 |  |
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |                          | 4        | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |  |
|  |                          | 1        | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |  |
|  |                          | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |  |
|  |                          | * TOTALS |   |   |   |   |   |   |   |   |   |  |

## ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |       |
|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus                               | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Cecum                  | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Colon                  | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Large, Rectum                 | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Duodenum               | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Ileum                  | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Intestine Small, Jejunum                | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Infiltration Cellular, Mononuclear Cell |   |   |   |   |   |   |   |   |   |   |   | 1 1.0 |
| Pancreas                                | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Salivary Glands                         | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Forestomach                    | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Stomach, Glandular                      | + | + | + | + | + | + | + | + | + | + | + | 10    |

## CARDIOVASCULAR SYSTEM

|              |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | 10 |
|--------------|---|---|---|---|---|---|---|---|---|---|---|----|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

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## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/15/2017

Test Type: 28-DAY

Cell Phone Radiation: GSM

Time Report Requested: 12:10:43

Route: Whole Body Exposure

CAS Number: CELLPRADGSM

First Dose M/F: 12/09/10 / 12/09/10

Species/Strain: RATS/HSD

Lab: IIT

|  | DAY ON TEST |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | * TOTALS |
|--|-------------|-------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|------------------|----------|
|  |             | 0<br>0<br>2<br>9              | 0<br>0<br>2<br>9      | 0<br>0<br>2<br>9      | 0<br>0<br>3<br>0      | 0<br>0<br>3<br>0 | 0<br>0<br>3<br>0 |          |
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>9W/kg(GSM)PreC | ANIMAL ID   | 0<br>0<br>4<br>1<br>1         | 0<br>0<br>4<br>1<br>2 | 0<br>0<br>4<br>1<br>3 | 0<br>0<br>4<br>1<br>4 | 0<br>0<br>4<br>1<br>5 | 0<br>0<br>4<br>1<br>6 | 0<br>0<br>4<br>1<br>7 | 0<br>0<br>4<br>1<br>8 | 0<br>0<br>4<br>1<br>9 | 0<br>0<br>4<br>1<br>0 |                  |                  |          |
|  |             | + + + + + + + + + +           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10       |
| <b>ENDOCRINE SYSTEM</b>                                |             |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  |          |
| Adrenal Cortex   |             | + + + + + + + + + +           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10       |
| Accessory Adrenal Cortical Nodule                      |             |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 1        |
| Hypertrophy, Focal                                     |             |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 1 1.0    |
| Adrenal Medulla  |             | + + + + + + + + + +           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10       |
| Islets, Pancreatic                                     |             | + + + + + + + + + +           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10       |
| Parathyroid Gland                                      |             | + + + + + + + + + +           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10       |
| Pituitary Gland  |             | + + + + + + + + + +           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10       |
| Rathke's Cleft, Dilation                               |             | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 4 1.0    |
| Thyroid Gland  |             | + + + + + + + + + +           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 10       |
| Ectopic Thymus   |             | X X X X X X X X X X           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 4        |
| Ultimobranchial Cyst                                   |             |                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                  |                  | 1        |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|                       |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Clitoral Gland        | + | + | + | + | + | + | + | + | + | + | + | + | + | 10    |
| Inflammation, Chronic | 1 | 1 | 1 |   |   |   | 1 | 1 | 1 |   |   |   |   | 6 1.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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2) Mild 4) Marked

Experiment Number: 20105 - 13

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: GSM

CAS Number: CELLPRADGSM

Date Report Requested: 08/15/2017

Time Report Requested: 12:10:43

First Dose M/F: 12/09/10 / 12/09/10

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>9W/kg(GSM)PreC | DAY ON TEST<br>ANIMAL ID | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |    |  |
|--|--------------------------|----------|---|---|---|---|---|---|---|---|---|----|--|
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |    |  |
|  |                          | 2        | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |    |  |
|  |                          | 9        | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 |    |  |
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |    |  |
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |    |  |
|  |                          | 4        | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |    |  |
|  |                          | 1        | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |    |  |
|  |                          | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |    |  |
|  |                          | * TOTALS |   |   |   |   |   |   |   |   |   |    |  |
| Ovary  |                          | +        | + | + | + | + | + | + | + | + | + | 10 |  |
| Uterus   |                          | +        | + | + | + | + | + | + | + | + | + | 10 |  |
| <b>HEMATOPOIETIC SYSTEM</b>                            |                          |          |   |   |   |   |   |   |   |   |   |    |  |
| Bone Marrow  |                          | +        | + | + | + | + | + | + | + | + | + | 10 |  |
| Lymph Node, Mandibular                                 |                          | +        | + | + | + | + | + | + | + | + | + | 10 |  |
| Lymph Node, Mesenteric                                 |                          | +        | + | + | + | + | + | + | + | + | + | 10 |  |
| Spleen   |                          | +        | + | + | + | + | + | + | + | + | + | 10 |  |
| Thymus   |                          | +        | + | + | + | + | + | + | + | + | + | 10 |  |
| <b>INTEGUMENTARY SYSTEM</b>                            |                          |          |   |   |   |   |   |   |   |   |   |    |  |
| Mammary Gland  |                          | +        | + | + | + | + | + | + | + | + | + | 10 |  |
| Skin   |                          | +        | + | + | + | + | + | + | + | + | + | 10 |  |
| <b>MUSCULOSKELETAL SYSTEM</b>                          |                          |          |   |   |   |   |   |   |   |   |   |    |  |
| Bone   |                          | +        | + | + | + | + | + | + | + | + | + | 10 |  |
| <b>NERVOUS SYSTEM</b>                                  |                          |          |   |   |   |   |   |   |   |   |   |    |  |
| Brain  |                          | +        | + | + | + | + | + | + | + | + | + | 10 |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 13

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

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| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>9W/kg(GSM)PreC | DAY ON TEST<br>ANIMAL ID | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|--------------------------|----------|---|---|---|---|---|---|---|---|---|
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |                          | 2        | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
|  |                          | 9        | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 |
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |                          | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |                          | 4        | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|  |                          | 1        | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
|  |                          | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
|  |                          | * TOTALS |   |   |   |   |   |   |   |   |   |

## RESPIRATORY SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |       |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Lung                             | + | + | + | + | + | + | + | + | + | + | 10    |
| Subpleura, Inflammation, Chronic | 1 | 1 | 1 | 1 |   |   |   |   |   | 1 | 5 1.0 |
| Nose                             | + | + | + | + | + | + | + | + | + | + | 10    |
| Trachea                          | + | + | + | + | + | + | + | + | + | + | 10    |

## SPECIAL SENSES SYSTEM

|                   |   |   |   |   |   |   |   |   |   |   |       |
|-------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Eye               | + | + | + | + | + | + | + | + | + | + | 10    |
| Retina, Dysplasia |   |   |   |   | 2 |   |   |   |   |   | 1 2.0 |
| Harderian Gland   | + | + | + | + | + | + | + | + | + | + | 10    |

## URINARY SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |       |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Kidney                           | + | + | + | + | + | + | + | + | + | + | 10    |
| Nephropathy, Chronic Progressive | 1 | 1 | 1 | 1 |   |   |   |   |   |   | 4 1.0 |
| Urinary Bladder                  | + | + | + | + | + | + | + | + | + | + | 10    |

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

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked