

Experiment Number: 20105 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

Final1_ Rats (CDMA)

NTP Study Number: C20105B

Lock Date: 11/06/2014

Cage Range: ALL

Date Range: ALL

Reasons For Removal: 25021 TSAC

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(CDMA)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 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 2	0 0 2 0 1	0 0 2 0 0	

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:

1) Minimal 3) Moderate

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Lab: IIT

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		0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 3 0								
Blood Vessel		+	+	+	+	+	+	+	+	+	+	+	+	10
Heart		+	+	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy														1 1.0
ENDOCRINE SYSTEM														
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
GENERAL BODY SYSTEM														
NONE														
GENITAL SYSTEM														

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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 2 2	0 0 2 2 5	0 0 2 2 5	0 0 2 2 6	0 0 2 2 7	0 0 2 2 8	0 0 2 2 9	0 0 2 2 0	0 0 2 2 1	0 0 2 2 0	0 0 2 2 0	
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland Inflammation, Chronic	+	+	+	+	+	+	+	+	+	+	+	+	10
	1				1	1		1					4 1.0
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	+	+	10
HEMATOPOIETIC SYSTEM													
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	10
							2	1					2 1.5
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	10
INTEGUMENTARY SYSTEM													
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	+	+	10

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	DAY ON TEST	0 0 2 9	0 0 2 9	0 0 2 9	0 0 2 9	0 0 3 0	0 0 3 0	0 0 3 0	0 0 3 0	0 0 3 0		
	ANIMAL ID	0 0 2 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												
Eye		+ + +	10									
Harderian Gland		+ + +	10									
URINARY SYSTEM												
Kidney		+ + +	10									
Nephropathy, Chronic Progressive		1										3 1.0

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HARLAN SPRAGUE DAWLEY RATS MALE 0W/kg(CDMA)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	1	0	
		1	2	3	4	5	6	7	8	9	0			
* TOTALS												1	2.0	
Pelvis, Dilation												1	1.0	
Renal Tubule, Casts Protein												1	1.0	
Urinary Bladder												10		
+ + + + + + + + + + +														

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DAY ON TEST		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 3W/kg(CDMA)PreC	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
		4	4	4	4	4	4	4	4	4	4
		4	4	4	4	4	4	4	4	4	5
		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

Inflammation, Chronic

4 1.0

Bilateral, Inflammation, Chronic

3 1.3

1 1 1 1 1 1 1 1 1 2

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

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| HARLAN SPRAGUE DAWLEY RATS
MALE
3W/kg(CDMA)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 |
| | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 0 |
| | | * TOTALS | | | | | | | | | | |

NONE

NERVOUS SYSTEM

Brain

+ + + + + + + + + + 10

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney

Nephropathy, Chronic Progressive
Renal Tubule, Casts Protein

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|-------|
| + | + | + | + | + | + | + | + | + | + | + | 10 |
| 1 | 1 | | 1 | | | 1 | 1 | 1 | | | 6 1.0 |
| | | | | | | 1 | | | | | 1 1.0 |

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| | DAY ON TEST | 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
6W/kg(CDMA)PreC | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| | | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | | 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

Inflammation, Chronic

3 1.0

Bilateral, Inflammation, Chronic

3 1.3

2 1 1

HEMATOPOIETIC SYSTEM

Thymus

+ 1

Congestion

2 1 2.0

INTEGUMENTARY SYSTEM

NONE

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| HARLAN SPRAGUE DAWLEY RATS
MALE
6W/kg(CDMA)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 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | | 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
1 1 1 1 1 1 1 1 1 1 1 4 1.0

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| HARLAN SPRAGUE DAWLEY RATS
MALE
9W/kg(CDMA)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 | |
| | | 0 0 0 0 0 0 0 0 0 0 | |
| | | 5 5 5 5 5 5 5 5 5 5 | |
| | | 6 6 6 6 6 6 6 6 6 7 | |
| | | 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 | | | | | | | | | | | 1 1.0 |
| Inflammation, Focal | 1 | 1 | | 1 | 1 | | | | | | 4 1.0 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular Erosion | + | + | + | + | + | + | + | + | + | + | 10 |
| | | | | 1 | | | | | | | 1 1.0 |

CARDIOVASCULAR SYSTEM

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Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS
MALE
9W/kg(CDMA)PreC | DAY ON TEST
ANIMAL ID | | | | | | | | | | | | | * TOTALS |
|---|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------|
| | | 0
0
2
9 | 0
0
2
9 | 0
0
2
9 | 0
0
2
9 | 0
0
3
0 | |
| Blood Vessel | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Pituitary Gland
Rathke's Cleft, Dilation | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| | 1 | 1 | 2 | 1 | | | 2 | | | | | | | 5 1.4 |
| Thyroid Gland
Ectopic Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| | | X | | | | | | | | | | | | 1 |
| GENERAL BODY SYSTEM | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | |
| GENITAL SYSTEM | | | | | | | | | | | | | | |
| Epididymis
Infiltration Cellular, Mixed Cell | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| | 1 | | 1 | | | | | | | | | | | 2 1.0 |
| Preputial Gland
Inflammation, Chronic | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| | 2 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | | | | | 8 1.1 |

* .. 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

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

- 1) Minimal
- 3) Moderate
- 2) Mild
- 4) Marked

Experiment Number: 20105 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

| | DAY ON TEST | | | | | | | | | | | | | * TOTALS |
|---|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|------------------|----------|
| | | 0
0
2
9 | 0
0
2
9 | 0
0
2
9 | 0
0
2
9 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | |
| HARLAN SPRAGUE DAWLEY RATS
MALE
9W/kg(CDMA)PreC | ANIMAL ID | 0
0
5
6
1 | 0
0
5
6
2 | 0
0
5
6
3 | 0
0
5
6
4 | 0
0
5
6
5 | 0
0
5
6
6 | 0
0
5
6
7 | 0
0
5
6
8 | 0
0
5
6
9 | 0
0
5
6
0 | | | |
| Bilateral, Inflammation, Chronic | | | | | | | | | | | | | | 1 1.0 |
| Prostate | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Seminal Vesicle | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Testes | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | |
| Bone | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| NERVOUS 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 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS
MALE
9W/kg(CDMA)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 | |
| | | 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 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | * TOTALS | | | | | | | | | | |
| Brain | | + | + | + | + | + | + | + | + | + | + | 10 |
| RESPIRATORY SYSTEM | | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | + | 10 |
| Perivascular, Infiltration Cellular, Eosinophil | | | | | | | | | | | | 1 1.0 |
| Nose | | + | + | + | + | + | + | + | + | + | + | 10 |
| Olfactory Epithelium, Cyst | | | | | | | | | | | | 1 |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | 2 1.0 |
| Trachea | | + | + | + | + | + | + | + | + | + | + | 10 |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | + | + | + | 10 |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | 10 |
| URINARY SYSTEM | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | 10 |
| Nephropathy, Chronic Progressive | | | | | | | | | | | | 2 1.0 |
| Renal Tubule, Casts Protein | | | | | | | | | | | | 2 1.0 |
| Renal Tubule, Degeneration | | | | | | | | | | | | 1 1.0 |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | 10 |

*** END OF MALE DATA ***

* .. 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 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
0W/kg(CDMA)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 | |
| | | 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 | | | | | | | | | | |

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

+ .. 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 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
0W/kg(CDMA)PreC | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|-------------|----------|---|---|---|---|---|---|---|---|-----|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HARLAN SPRAGUE DAWLEY RATS
FEMALE
0W/kg(CDMA)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
FEMALE
0W/kg(CDMA)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
FEMALE
0W/kg(CDMA)PreC | ANIMAL ID | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| HARLAN SPRAGUE DAWLEY RATS
FEMALE
0W/kg(CDMA)PreC | ANIMAL ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | * TOTALS | | | | | | | | | |
| Blood Vessel | | + | + | + | + | + | + | + | + | + | 10 |
| Heart | | + | + | + | + | + | + | + | + | + | 10 |
| ENDOCRINE SYSTEM | | | | | | | | | | | |
| 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

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 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
0W/kg(CDMA)PreC | DAY ON TEST | | | | | | | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|------------------|------------------|------------------|----------|
| | | 0
0
2
9 | 0
0
2
9 | 0
0
2
9 | 0
0
2
9 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | |
| ANIMAL ID | | | | | | | | | | | | | * TOTALS |
| | 0
0
2
3
1 | 0
0
2
3
2 | 0
0
2
3
5 | 0
0
2
3
6 | 0
0
2
3
7 | 0
0
2
3
8 | 0
0
2
3
9 | 0
0
2
3
0 | | | | | |
| Bilateral, Inflammation, Chronic | | | | | | | | | | | | | 1 1.0 |
| Ovary
Mineral | + + + + + + + + + + | | | | | | | | | | | | 10 1 1.0 |
| Uterus | + + + + + + + + + + | | | | | | | | | | | | 10 |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | |
| Bone Marrow | + + + + + + + + + + | | | | | | | | | | | | 10 |
| Lymph Node, Mandibular | + + + + + + + + + + | | | | | | | | | | | | 10 |
| Lymph Node, Mesenteric | + + + + + + + + + + | | | | | | | | | | | | 10 |
| Spleen | + + + + + + + + + + | | | | | | | | | | | | 10 |
| Thymus | + + + + + + + + + + | | | | | | | | | | | | 10 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | |
| Mammary Gland | + + + + + + + + + + | | | | | | | | | | | | 10 |
| Skin | + + + + + + + + + + | | | | | | | | | | | | 10 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | |
| Bone | + + + + + + + + + + | | | | | | | | | | | | 10 |
| NERVOUS 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 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
0W/kg(CDMA)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 |
| | | 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 | | | | | | | | | |
| Brain | | + | + | + | + | + | + | + | + | + | 10 |
| RESPIRATORY SYSTEM | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | 10 |
| Hemorrhage | | 1 | | | | | | | | | 2 1.0 |
| Metaplasia, Osseous | | | | | | | | | | | 1 1.0 |
| Mineral | | | | | | | | | | | 1 1.0 |
| Alveolus, Inflammation, Chronic Active | | | | | | | | | | | 1 1.0 |
| Subpleura, Inflammation, Chronic | | | | | | | | | | | 2 1.0 |
| Nose | | + | + | + | + | + | + | + | + | + | 10 |
| Respiratory Epithelium, Hyperplasia | | 1 | | | | | | | | | 2 1.0 |
| Trachea | | + | + | + | + | + | + | + | + | + | 10 |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | + | + | 10 |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | 10 |
| URINARY SYSTEM | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | 10 |
| Renal Tubule, Casts Protein | | 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

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 - 14

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/16/2017

Test Type: 28-DAY

Cell Phone Radiation: CDMA

Time Report Requested: 11:38:27

Route: Whole Body Exposure

CAS Number: CELLPRADCDMA

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

Species/Strain: RATS/HSD

Lab: IIT

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

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

Heart

 + + + + + + + + + +

10

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland

 + + + + + + + + + +

10

Inflammation, Chronic

 1 1 1 1 1 1 1 1 1 1

6 1.0

Bilateral, Inflammation, Chronic

1

1 1.0

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL 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

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Experiment Number: 20105 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
3W/kg(CDMA)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 |
| | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | |

* TOTALS

NONE

NERVOUS SYSTEM

Brain

+ + + + + + + + + +

10

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney

Nephropathy, Chronic Progressive

+ + + + + + + + + +

10

1 1 2 1.0

* .. 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

I .. Insufficient tissue

BLANK .. Not examined microscopically

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Experiment Number: 20105 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
6W/kg(CDMA)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 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| | | 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

Clitoral Gland

+ + + + + + + + + + 10

Inflammation, Chronic

7 1.0

Bilateral, Inflammation, Chronic

3 1.3

1 1 1 1 1 1 1 1 1 1 1

HEMATOPOIETIC SYSTEM

Thymus

+

1

Hemorrhage

2

1 2.0

INTEGUMENTARY SYSTEM

NONE

* .. 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

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20105 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
6W/kg(CDMA)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 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | * TOTALS | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

Brain

+ + + + + + + + + + 10

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney

Nephropathy, Chronic Progressive

+ + + + + + + + + + 10
1 1 1 1 1 1 1 1 1 1 4 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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Experiment Number: 20105 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

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Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
9W/kg(CDMA)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 | |
| | | 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 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | | 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 |
| Inflammation, Focal | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 1.0 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | 10 |

CARDIOVASCULAR SYSTEM

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

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Experiment Number: 20105 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

| | DAY ON TEST | | | | | | | | | | | | | * TOTALS |
|---|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|------------------|----------|
| | | 0
0
2
9 | 0
0
2
9 | 0
0
2
9 | 0
0
2
9 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | 0
0
3
0 | |
| HARLAN SPRAGUE DAWLEY RATS
FEMALE
9W/kg(CDMA)PreC | ANIMAL ID | 0
0
5
9
1 | 0
0
5
9
2 | 0
0
5
9
3 | 0
0
5
9
4 | 0
0
5
9
5 | 0
0
5
9
6 | 0
0
5
9
7 | 0
0
5
9
8 | 0
0
5
9
9 | 0
0
5
0
0 | | | |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Parathyroid Gland | | + | M | + | + | + | + | + | + | + | + | + | + | 9 |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Pars Distalis, Cyst | X | | | | | | | | | | | | | 1 |
| Rathke's Cleft, Dilation | | | | | | | | | | | | | | 2 1.0 |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| GENERAL BODY SYSTEM | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | |
| GENITAL SYSTEM | | | | | | | | | | | | | | |
| Clitoral Gland | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Inflammation, Chronic | 1 | 1 | | | | | | 1 | 1 | | | | | 4 1.0 |
| Bilateral, Inflammation, Chronic | | | 1 | 1 | 1 | 2 | | | | | | | | 5 1.2 |
| Ovary | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Hemorrhage | | | | | | | | | | | | | | 1 2.0 |

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Experiment Number: 20105 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

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Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
9W/kg(CDMA)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 | |
| | | 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 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | * TOTALS | | | | | | | | | | |
| Uterus | | + | + | + | + | + | + | + | + | + | + | 10 |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | 10 |
| Lymph Node, Mesenteric
Hemorrhage | | + | + | + | + | + | + | + | + | + | + | 10 |
| | | | | | | | | | | | | 1 1.0 |
| Spleen | | + | + | + | + | + | + | + | + | + | + | 10 |
| Thymus | | + | + | + | + | + | + | + | + | + | + | 10 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | 10 |
| Skin | | + | + | + | + | + | + | + | + | + | + | 10 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | |
| Bone | | + | + | + | + | + | + | + | + | + | + | 10 |
| NERVOUS SYSTEM | | | | | | | | | | | | |
| Brain | | + | + | + | + | + | + | + | + | + | + | 10 |
| RESPIRATORY SYSTEM | | | | | | | | | | | | |

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Experiment Number: 20105 - 14

Test Type: 28-DAY

Route: Whole Body Exposure

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Cell Phone Radiation: CDMA

CAS Number: CELLPRADCDMA

Date Report Requested: 08/16/2017

Time Report Requested: 11:38:27

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

Lab: IIT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
9W/kg(CDMA)PreC | DAY ON TEST
ANIMAL ID | | | | | | | | | | | | | * TOTALS |
|---|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------|
| | | 0
0
2
9 | 0
0
2
9 | 0
0
2
9 | 0
0
2
9 | 0
0
3
0 | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Congestion | 2 | | | | | | | | | | | | | 1 2.0 |
| Perivascular, Infiltration Cellular, Eosinophil | | | | | | | | | | | | | | 3 1.0 |
| Subpleura, Inflammation, Chronic | 1 | 1 | | | 1 | | 1 | | | | | | | 5 1.0 |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Retina, Dysplasia | | | | | | | | | | | | | | 1 1.0 |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| URINARY SYSTEM | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |
| Nephropathy, Chronic Progressive | | | | | | | | | | | | | | 3 1.0 |
| Renal Tubule, Degeneration | | | | | | | | | | | | | | 1 1.0 |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | 10 |

*** END OF REPORT ***

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+ .. Tissue examined microscopically

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