

Experiment Number: 20105 - 56

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS
ABRIDGED) (a)**

Date Report Requested: 01/02/2018

Test Type: CHRONIC

Cell Phone Radiation: CDMA

Time Report Requested: 13:31:21

Route: Whole Body Exposure

CAS Number: CELLPRADCDMA

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Final 2 - Data Changes through 12-15-17 CDMA Core Rats Only

NTP Study Number:

C20105B

Lock Date:

12/29/2015

Cage Range:

ALL

Date Range:

ALL

Reasons For Removal:

25022 ACCK

25021 TSAC

25020 NATD

25019 MSAC

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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Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
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Disposition Summary

Animals Initially In Study	105	105	105	105
Early Deaths				
Accidentally Killed	1			
Moribund Sacrifice	44	24	13	6
Natural Death	20	23	21	41
Survivors				
Natural Death			1	
Terminal Sacrifice	25	43	55	43
Animals Examined Microscopically	90	90	90	90

ALIMENTARY SYSTEM

Esophagus	(90)	(90)	(90)	(90)
Intestine Large, Cecum	(75)	(76)	(74)	(68)
Intestine Large, Colon	(81)	(83)	(82)	(76)
Intestine Large, Rectum	(83)	(81)	(80)	(76)
Serosa, Sarcoma, Metastatic, Skeletal Muscle				1 (1%)
Intestine Small, Duodenum	(81)	(84)	(83)	(66)
Adenocarcinoma			1 (1%)	
Osteosarcoma			1 (1%)	
Serosa, Sarcoma, Metastatic, Skeletal Muscle				1 (2%)
Intestine Small, Ileum	(78)	(76)	(77)	(63)
Intestine Small, Jejunum	(73)	(73)	(75)	(62)
Adenocarcinoma	2 (3%)	1 (1%)		
Liver	(90)	(90)	(89)	(88)
Hepatocellular Adenoma		2 (2%)	4 (4%)	
Hepatocellular Carcinoma			1 (1%)	1 (1%)
Sarcoma, Metastatic, Skeletal Muscle				1 (1%)
Mesentery	(39)	(19)	(17)	(6)
Oral Mucosa	(0)	(1)	(1)	(0)
Squamous Cell Carcinoma			1 (100%)	
Pancreas	(90)	(88)	(87)	(78)
Adenoma	13 (14%)	16 (18%)	19 (22%)	5 (6%)
Adenoma, Multiple	5 (6%)	6 (7%)	7 (8%)	2 (3%)

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

Test Type: CHRONIC

Cell Phone Radiation: CDMA

Time Report Requested: 13:31:21

Route: Whole Body Exposure

CAS Number: CELLPRADCDMA

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Carcinoma	1 (1%)	1 (1%)	2 (2%)	
Pheochromocytoma Malignant, Metastatic, Adrenal Medulla		1 (1%)		
Salivary Glands	(90)	(90)	(90)	(86)
Parotid Gland, Adenoma			1 (1%)	
Sublingual Gland, Schwannoma Malignant, Metastatic, Uncertain Primary Site	1 (1%)			
Stomach, Forestomach	(90)	(90)	(89)	(90)
Squamous Cell Carcinoma			1 (1%)	
Squamous Cell Papilloma	1 (1%)			
Stomach, Glandular	(86)	(86)	(85)	(78)

CARDIOVASCULAR SYSTEM

Aorta	(90)	(90)	(90)	(90)
Sarcoma, Metastatic, Skeletal Muscle				1 (1%)
Blood Vessel	(1)	(2)	(1)	(0)
Heart	(90)	(90)	(90)	(90)
Atrium, Schwannoma Malignant				1 (1%)
Endocardium, Schwannoma Malignant		1 (1%)		4 (4%)
Myocardium, Schwannoma Malignant		1 (1%)	3 (3%)	1 (1%)
Pericardium, Schwannoma Malignant, Metastatic, Thymus			1 (1%)	

ENDOCRINE SYSTEM

Adrenal Cortex	(90)	(90)	(90)	(89)
Adenoma	1 (1%)	3 (3%)		
Carcinoma		3 (3%)		2 (2%)
Adrenal Medulla	(88)	(90)	(90)	(90)
Pheochromocytoma Benign	8 (9%)	17 (19%)	19 (21%)	12 (13%)
Pheochromocytoma Benign, Multiple	1 (1%)	1 (1%)	2 (2%)	
Pheochromocytoma Complex	1 (1%)			
Pheochromocytoma Malignant	1 (1%)	3 (3%)	3 (3%)	1 (1%)
Bilateral, Pheochromocytoma Benign	1 (1%)	1 (1%)	1 (1%)	1 (1%)

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Route: Whole Body Exposure

CAS Number: CELLPRADCDMA

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Islets, Pancreatic	(90)	(88)	(87)	(79)
Adenoma	5 (6%)	11 (13%)	7 (8%)	7 (9%)
Adenoma, Multiple			1 (1%)	
Carcinoma	8 (9%)	6 (7%)	13 (15%)	5 (6%)
Carcinoma, Multiple				1 (1%)
Parathyroid Gland	(83)	(83)	(83)	(82)
Adenoma	1 (1%)	1 (1%)	2 (2%)	1 (1%)
Pituitary Gland	(89)	(90)	(90)	(90)
Schwannoma Malignant, Metastatic, Tissue Nos		1 (1%)		1 (1%)
Schwannoma Malignant, Metastatic, Uncertain Primary Site		1 (1%)		
Pars Distalis, Adenoma	17 (19%)	25 (28%)	33 (37%)	11 (12%)
Pars Distalis, Adenoma, Multiple			1 (1%)	2 (2%)
Thyroid Gland	(89)	(87)	(86)	(85)
Bilateral, C-cell, Adenoma		2 (2%)		
Bilateral, C-cell, Carcinoma			1 (1%)	
C-cell, Adenoma	8 (9%)	12 (14%)	14 (16%)	11 (13%)
C-cell, Carcinoma	2 (2%)		1 (1%)	4 (5%)
Follicular Cell, Adenoma				1 (1%)

GENERAL BODY SYSTEM

Tissue NOS	(3)	(1)	(3)	(3)
Schwannoma Malignant		1 (100%)		1 (33%)
Fat, Schwannoma Malignant				1 (33%)
Mediastinum, Chemodectoma Benign			1 (33%)	
Mediastinum, Schwannoma Malignant	1 (33%)			

GENITAL SYSTEM

Bulbourethral Gland	(1)	(1)	(0)	(0)
Coagulating Gland	(0)	(2)	(3)	(0)
Ductus Deferens	(1)	(0)	(1)	(0)
Leiomyoma			1 (100%)	

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Lab: IIT

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Epididymis	(90)	(90)	(90)	(90)
Penis	(0)	(4)	(2)	(1)
Preputial Gland	(88)	(88)	(89)	(89)
Sarcoma, Metastatic, Skeletal Muscle				1 (1%)
Prostate	(90)	(90)	(90)	(85)
Adenoma	2 (2%)		2 (2%)	1 (1%)
Sarcoma, Metastatic, Skeletal Muscle				1 (1%)
Seminal Vesicle	(90)	(90)	(90)	(90)
Sarcoma, Metastatic, Skeletal Muscle				1 (1%)
Testis	(90)	(89)	(90)	(90)
Hemangioma			1 (1%)	
Interstitial Cell, Adenoma	2 (2%)	2 (2%)	1 (1%)	1 (1%)

HEMATOPOIETIC SYSTEM

Bone Marrow	(90)	(90)	(90)	(90)
Pheochromocytoma Malignant, Metastatic, Adrenal Medulla			1 (1%)	
Sarcoma, Metastatic, Skeletal Muscle				1 (1%)
Lymph Node	(25)	(23)	(24)	(16)
Iliac, Sarcoma, Metastatic, Skeletal Muscle				1 (6%)
Lumbar, Sarcoma, Metastatic, Skeletal Muscle				1 (6%)
Lymph Node, Mandibular	(89)	(90)	(90)	(88)
Lymph Node, Mesenteric	(90)	(89)	(88)	(88)
Sarcoma, Metastatic, Skeletal Muscle				1 (1%)
Spleen	(90)	(90)	(90)	(85)
Hemangiosarcoma	3 (3%)			
Thymus	(88)	(85)	(87)	(82)
Sarcoma, Metastatic, Skeletal Muscle				1 (1%)
Schwannoma Malignant			1 (1%)	

INTEGUMENTARY SYSTEM

Mammary Gland	(82)	(77)	(80)	(80)
Fibroadenoma	2 (2%)	5 (6%)	2 (3%)	1 (1%)

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Skin	(90)	(90)	(90)	(90)
Basal Cell Adenoma	1 (1%)	1 (1%)		
Keratoacanthoma	5 (6%)	4 (4%)	5 (6%)	4 (4%)
Sarcoma, Metastatic, Skeletal Muscle				1 (1%)
Squamous Cell Carcinoma			3 (3%)	
Squamous Cell Papilloma	2 (2%)	1 (1%)	3 (3%)	1 (1%)
Trichoepithelioma				1 (1%)
Conjunctiva, Sarcoma			1 (1%)	
Sebaceous Gland, Adenoma	1 (1%)			1 (1%)
Subcutaneous Tissue, Fibroma	2 (2%)	11 (12%)	6 (7%)	4 (4%)
Subcutaneous Tissue, Fibroma, Multiple			1 (1%)	
Subcutaneous Tissue, Fibrosarcoma	1 (1%)		1 (1%)	
Subcutaneous Tissue, Hemangiosarcoma		1 (1%)		
Subcutaneous Tissue, Hibernoma			1 (1%)	
Subcutaneous Tissue, Lipoma	2 (2%)	5 (6%)	4 (4%)	1 (1%)
Subcutaneous Tissue, Malignant Fibrous Histiocytoma				1 (1%)
Subcutaneous Tissue, Myxosarcoma		2 (2%)		
Subcutaneous Tissue, Myxosarcoma, Multiple			1 (1%)	
Subcutaneous Tissue, Neural Crest Tumor		1 (1%)		
Subcutaneous Tissue, Sarcoma	2 (2%)			

MUSCULOSKELETAL SYSTEM

Bone	(90)	(90)	(90)	(90)
Bone, Vertebra	(0)	(0)	(1)	(0)
Skeletal Muscle	(90)	(90)	(90)	(90)
Hemangioma		1 (1%)		
Hemangiosarcoma			1 (1%)	
Sarcoma				1 (1%)

NERVOUS SYSTEM

Brain	(90)	(90)	(90)	(90)
Glioma Malignant				3 (3%)

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Meningioma Benign			1 (1%)	
Schwannoma Malignant, Metastatic, Tissue Nos		1 (1%)		1 (1%)
Schwannoma Malignant, Metastatic, Uncertain Primary Site		1 (1%)		
Choroid Plexus, Granular Cell Tumor Benign				1 (1%)
Meninges, Granular Cell Tumor Benign	1 (1%)		1 (1%)	1 (1%)
Meninges, Granular Cell Tumor Malignant		1 (1%)	1 (1%)	
Nerve Trigeminal	(84)	(90)	(88)	(90)
Peripheral Nerve, Sciatic	(90)	(90)	(90)	(90)
Peripheral Nerve, Tibial	(88)	(90)	(90)	(89)
Spinal Cord, Cervical	(90)	(90)	(90)	(90)
Spinal Cord, Lumbar	(90)	(90)	(90)	(90)
Spinal Cord, Thoracic	(90)	(90)	(90)	(90)
Trigeminal Ganglion	(75)	(77)	(79)	(83)
Schwannoma Malignant, Metastatic, Tissue Nos		1 (1%)		

RESPIRATORY SYSTEM

Lung	(90)	(90)	(90)	(90)
Alveolar/Bronchiolar Adenoma	1 (1%)	2 (2%)	1 (1%)	
Alveolar/Bronchiolar Carcinoma			1 (1%)	
Carcinoma, Metastatic, Kidney				1 (1%)
Carcinoma, Metastatic, Thyroid Gland			1 (1%)	
Hepatocellular Carcinoma, Metastatic, Liver				1 (1%)
Pheochromocytoma Malignant, Metastatic, Adrenal Medulla			2 (2%)	
Sarcoma, Metastatic, Skeletal Muscle				1 (1%)
Schwannoma Malignant, Metastatic, Thymus			1 (1%)	
Nose	(89)	(90)	(90)	(87)
Schwannoma Malignant, Metastatic, Tissue Nos				1 (1%)
Schwannoma Malignant, Metastatic, Uncertain Primary Site	1 (1%)	1 (1%)		
Trachea	(90)	(88)	(88)	(72)

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SPECIAL SENSES SYSTEM

Eye	(85)	(83)	(81)	(72)
Schwannoma Malignant, Metastatic, Uncertain Primary Site		1 (1%)		
Retrobulbar, Schwannoma Malignant, Metastatic, Uncertain Primary Site	2 (2%)			
Harderian Gland	(90)	(90)	(90)	(89)
Schwannoma Malignant, Metastatic, Tissue Nos		1 (1%)		1 (1%)
Schwannoma Malignant, Metastatic, Uncertain Primary Site	2 (2%)	1 (1%)		
Lacrimal Gland	(2)	(1)	(1)	(1)
Zymbal's Gland	(0)	(0)	(1)	(1)
Adenoma			1 (100%)	1 (100%)

URINARY SYSTEM

Kidney	(90)	(90)	(90)	(87)
Lipoma	1 (1%)	2 (2%)	1 (1%)	
Liposarcoma			1 (1%)	
Nephroblastoma				1 (1%)
Oncocytoma Benign	1 (1%)			
Bilateral, Renal Tubule, Adenoma			1 (1%)	
Bilateral, Renal Tubule, Adenoma, Multiple	1 (1%)			
Bilateral, Renal Tubule, Carcinoma	1 (1%)		1 (1%)	
Pelvis, Urothelium, Carcinoma				1 (1%)
Perirenal Tissue, Sarcoma, Metastatic, Skeletal Muscle				1 (1%)
Renal Tubule, Adenoma	1 (1%)	1 (1%)		
Renal Tubule, Adenoma, Multiple	1 (1%)			
Renal Tubule, Carcinoma				1 (1%)
Urinary Bladder	(89)	(83)	(83)	(78)
Serosa, Sarcoma, Metastatic, Skeletal Muscle				1 (1%)

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Experiment Number: 20105 - 56

P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)

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SYSTEMIC LESIONS

Multiple Organ	*(90)	*(90)	*(90)	*(90)
Histiocytic Sarcoma				1 (1%)
Leukemia Mononuclear		2 (2%)	4 (4%)	1 (1%)
Lymphoma Malignant	2 (2%)	2 (2%)	1 (1%)	4 (4%)
Mesothelioma Malignant	2 (2%)	2 (2%)	3 (3%)	1 (1%)

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* Number of animals with any tissue examined microscopically

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Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
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Tumor Summary for Males

Total Animals with Primary Neoplasms (b)	56	74	76	63
Total Primary Neoplasms	114	160	193	108
Total Animals with Benign Neoplasms	49	66	69	49
Total Benign Neoplasms	87	132	145	71
Total Animals with Malignant Neoplasms	23	25	41	34
Total Malignant Neoplasms	27	27	48	37
Total Animals with Metastatic Neoplasms	2	3	5	4
Total Metastatic Neoplasms	6	10	6	22
Total Animals with Malignant Neoplasms Uncertain Primary Site	2	1		
Total Animals with Neoplasms Uncertain- Benign or Malignant		1		
Total Uncertain Neoplasms		1		

*** END OF MALE ***

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b - Primary tumors: all tumors except metastatic tumors

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Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
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Disposition Summary

	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Animals Initially In Study	105	105	105	105
Early Deaths				
Accidentally Killed	1			
Moribund Sacrifice	30	29	28	16
Natural Death	11	15	12	13
Survivors				
Moribund Sacrifice	1	2		
Terminal Sacrifice	47	44	50	61
Animals Examined Microscopically	90	90	90	90

ALIMENTARY SYSTEM

	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Esophagus	(90)	(90)	(90)	(90)
Intestine Large, Cecum	(84)	(82)	(86)	(80)
Intestine Large, Colon	(89)	(89)	(88)	(88)
Intestine Large, Rectum	(90)	(88)	(87)	(88)
Granular Cell Tumor Benign	1 (1%)			
Intestine Small, Duodenum	(88)	(86)	(87)	(85)
Intestine Small, Ileum	(86)	(83)	(84)	(83)
Intestine Small, Jejunum	(83)	(81)	(84)	(79)
Leiomyosarcoma	1 (1%)			
Liver	(90)	(90)	(90)	(90)
Carcinoma, Metastatic, Adrenal Cortex			1 (1%)	
Hepatocellular Adenoma	7 (8%)	2 (2%)	2 (2%)	1 (1%)
Hepatocellular Carcinoma				1 (1%)
Mesentery	(4)	(3)	(11)	(4)
Adenocarcinoma, Metastatic, Uterus	1 (25%)			
Oral Mucosa	(1)	(1)	(0)	(0)
Squamous Cell Carcinoma	1 (100%)			
Pancreas	(90)	(90)	(90)	(89)
Salivary Glands	(90)	(90)	(90)	(90)
Parotid Gland, Squamous Cell Carcinoma				1 (1%)
Stomach, Forestomach	(90)	(90)	(90)	(90)
Sarcoma	1 (1%)			1 (1%)

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Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Squamous Cell Papilloma				1 (1%)
Stomach, Glandular	(90)	(90)	(89)	(88)
Sarcoma, Metastatic, Stomach, Forestomach	1 (1%)			
Tongue	(1)	(0)	(0)	(0)
Squamous Cell Carcinoma	1 (100%)			

CARDIOVASCULAR SYSTEM

Aorta	(90)	(90)	(90)	(90)
Blood Vessel	(0)	(0)	(0)	(1)
Heart	(90)	(90)	(90)	(90)
Adenocarcinoma, Metastatic, Mammary Gland			1 (1%)	
Endocardium, Schwannoma Malignant		1 (1%)		2 (2%)
Myocardium, Schwannoma Malignant		1 (1%)		

ENDOCRINE SYSTEM

Adrenal Cortex	(90)	(90)	(90)	(90)
Adenoma	1 (1%)	2 (2%)	2 (2%)	1 (1%)
Carcinoma	1 (1%)		1 (1%)	
Adrenal Medulla	(86)	(89)	(87)	(88)
Pheochromocytoma Benign	1 (1%)	7 (8%)	3 (3%)	4 (5%)
Pheochromocytoma Complex			1 (1%)	
Pheochromocytoma Malignant		2 (2%)	1 (1%)	
Islets, Pancreatic	(90)	(89)	(90)	(88)
Adenoma	5 (6%)	4 (4%)	5 (6%)	4 (5%)
Carcinoma	2 (2%)	2 (2%)		2 (2%)
Parathyroid Gland	(87)	(80)	(85)	(85)
Pituitary Gland	(90)	(89)	(89)	(90)
Pars Distalis, Adenoma	42 (47%)	40 (45%)	30 (34%)	40 (44%)
Pars Distalis, Adenoma, Multiple	1 (1%)	1 (1%)		
Pars Distalis, Carcinoma	1 (1%)	1 (1%)	1 (1%)	
Thyroid Gland	(90)	(90)	(90)	(89)
Bilateral, C-cell, Adenoma				1 (1%)
Bilateral, C-cell, Carcinoma			1 (1%)	

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Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
C-cell, Adenoma	6 (7%)	9 (10%)	3 (3%)	7 (8%)
C-cell, Carcinoma		3 (3%)	2 (2%)	2 (2%)
Follicular Cell, Adenoma			1 (1%)	
Follicular Cell, Carcinoma	1 (1%)	1 (1%)		

GENERAL BODY SYSTEM

Tissue NOS	(8)	(11)	(8)	(6)
Abdominal, Schwannoma Malignant	1 (13%)			
Abdominal, Fat, Lipoma			1 (13%)	

GENITAL SYSTEM

Clitoral Gland	(87)	(88)	(89)	(86)
Carcinoma			1 (1%)	
Schwannoma Malignant				1 (1%)
Ovary	(90)	(90)	(89)	(90)
Cystadenocarcinoma		1 (1%)		
Cystadenoma	1 (1%)			
Granulosa Cell Tumor Benign	1 (1%)			
Granulosa Cell Tumor Malignant	2 (2%)			
Sertoli Cell Tumor Benign	1 (1%)			
Periovarian Tissue, Schwannoma Malignant				1 (1%)
Rete Ovarii, Adenoma			1 (1%)	1 (1%)
Oviduct	(1)	(0)	(0)	(0)
Uterus	(90)	(90)	(90)	(90)
Adenocarcinoma	3 (3%)			3 (3%)
Adenoma			1 (1%)	1 (1%)
Carcinoma		1 (1%)		
Hemangiosarcoma	2 (2%)			
Leiomyosarcoma			2 (2%)	
Polyp, Glandular		2 (2%)	2 (2%)	
Polyp Stromal	15 (17%)	11 (12%)	9 (10%)	12 (13%)
Polyp Stromal, Multiple	1 (1%)	4 (4%)	4 (4%)	5 (6%)
Schwannoma Malignant	1 (1%)			

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

Test Type: CHRONIC

Cell Phone Radiation: CDMA

Time Report Requested: 13:31:21

Route: Whole Body Exposure

CAS Number: CELLPRADCDMA

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Squamous Cell Carcinoma			1 (1%)	
Cervix, Leiomyosarcoma	1 (1%)			
Cervix, Polyp Stromal			1 (1%)	
Cervix, Schwannoma Malignant	1 (1%)		2 (2%)	
Vagina	(2)	(1)	(0)	(1)
Polyp, Stromal		1 (100%)		
Schwannoma Malignant	1 (50%)			
Schwannoma Malignant, Metastatic, Uterus	1 (50%)			

HEMATOPOIETIC SYSTEM

Bone Marrow	(90)	(90)	(90)	(90)
Lymph Node	(13)	(8)	(11)	(20)
Iliac, Adenocarcinoma, Metastatic, Mammary Gland				1 (5%)
Lymph Node, Mandibular	(90)	(90)	(89)	(90)
Lymph Node, Mesenteric	(90)	(90)	(90)	(89)
Spleen	(90)	(90)	(90)	(90)
Hemangiosarcoma	1 (1%)			
Thymus	(87)	(83)	(87)	(87)
Thymoma Benign	1 (1%)		1 (1%)	
Thymoma Malignant	1 (1%)			

INTEGUMENTARY SYSTEM

Mammary Gland	(90)	(90)	(90)	(90)
Adenocarcinoma	9 (10%)	7 (8%)	6 (7%)	3 (3%)
Adenocarcinoma, Multiple	1 (1%)	1 (1%)		1 (1%)
Adenoma	4 (4%)	4 (4%)	1 (1%)	2 (2%)
Adenoma, Multiple	4 (4%)			
Fibroadenoma	34 (38%)	40 (44%)	34 (38%)	32 (36%)
Fibroadenoma, Multiple	29 (32%)	21 (23%)	29 (32%)	30 (33%)
Skin	(90)	(90)	(90)	(90)
Keratoacanthoma		1 (1%)	2 (2%)	1 (1%)

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Test Type: CHRONIC

Cell Phone Radiation: CDMA

Time Report Requested: 13:31:21

Route: Whole Body Exposure

CAS Number: CELLPRADCDMA

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Squamous Cell Carcinoma, Metastatic, Salivary Glands				1 (1%)
Subcutaneous Tissue, Fibroma	2 (2%)		1 (1%)	3 (3%)
Subcutaneous Tissue, Lipoma			1 (1%)	2 (2%)
Subcutaneous Tissue, Malignant Fibrous Histiocytoma	1 (1%)			
Subcutaneous Tissue, Sarcoma	2 (2%)			
Subcutaneous Tissue, Squamous Cell Carcinoma		2 (2%)		
Vulva, Squamous Cell Carcinoma				1 (1%)

MUSCULOSKELETAL SYSTEM

Bone	(90)	(90)	(90)	(90)
Vertebra, Chondroma			1 (1%)	
Skeletal Muscle	(90)	(90)	(90)	(90)

NERVOUS SYSTEM

Brain	(90)	(90)	(90)	(90)
Carcinoma, Metastatic, Pituitary Gland	1 (1%)			
Glioma Malignant		3 (3%)		
Meningioma Malignant				1 (1%)
Neuroblastoma		1 (1%)		
Sarcoma		1 (1%)		
Meninges, Granular Cell Tumor Benign	1 (1%)	1 (1%)		2 (2%)
Pineal Gland, Pinealoma		1 (1%)		
Nerve Trigeminal	(84)	(84)	(85)	(84)
Squamous Cell Carcinoma, Metastatic, Salivary Glands				1 (1%)
Peripheral Nerve, Sciatic	(90)	(90)	(90)	(90)
Peripheral Nerve, Tibial	(90)	(90)	(89)	(89)
Spinal Cord, Cervical	(90)	(90)	(90)	(90)
Spinal Cord, Lumbar	(90)	(90)	(89)	(90)
Spinal Cord, Thoracic	(90)	(90)	(90)	(90)
Trigeminal Ganglion	(81)	(77)	(81)	(75)

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

Test Type: CHRONIC

Cell Phone Radiation: CDMA

Time Report Requested: 13:31:21

Route: Whole Body Exposure

CAS Number: CELLPRADCDMA

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
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Carcinoma, Metastatic, Pituitary Gland			1 (1%)	
Squamous Cell Carcinoma, Metastatic, Salivary Glands				1 (1%)

RESPIRATORY SYSTEM

Lung	(90)	(90)	(90)	(90)
Adenocarcinoma, Metastatic, Mammary Gland		2 (2%)	1 (1%)	1 (1%)
Carcinoma, Metastatic, Adrenal Cortex			1 (1%)	
Carcinoma, Metastatic, Thyroid Gland		1 (1%)	1 (1%)	
Carcinoma, Metastatic, Uncertain Primary Site		1 (1%)		
Nose	(90)	(89)	(90)	(89)
Trachea	(89)	(88)	(89)	(89)
Carcinoma, Metastatic, Thyroid Gland			1 (1%)	

SPECIAL SENSES SYSTEM

Ear	(0)	(0)	(1)	(1)
Neural Crest Tumor			1 (100%)	1 (100%)
Eye	(88)	(86)	(88)	(86)
Sarcoma		1 (1%)		
Harderian Gland	(90)	(90)	(90)	(90)

URINARY SYSTEM

Kidney	(90)	(90)	(90)	(89)
Bilateral, Renal Tubule, Carcinoma	1 (1%)		2 (2%)	
Renal Tubule, Adenoma	1 (1%)		1 (1%)	
Urinary Bladder	(88)	(88)	(90)	(90)
Leiomyosarcoma	1 (1%)			
Schwannoma Malignant, Metastatic, Tissue Nos	1 (1%)			

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

* Number of animals with any tissue examined microscopically

Experiment Number: 20105 - 56

P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)

Date Report Requested: 01/02/2018

Test Type: CHRONIC

Cell Phone Radiation: CDMA

Time Report Requested: 13:31:21

Route: Whole Body Exposure

CAS Number: CELLPRADCDMA

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE

0.0W/kg(CDMA)chr

1.5W/kg(CDMA)chr

3.0W/kg(CDMA)chr

6.0W/kg(CDMA)chr

SYSTEMIC LESIONS

Multiple Organ	*(90)	*(90)	*(90)	*(90)
Histiocytic Sarcoma			2 (2%)	
Leukemia Mononuclear		3 (3%)		
Lymphoma Malignant	5 (6%)	2 (2%)	4 (4%)	3 (3%)

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

* Number of animals with any tissue examined microscopically

Test Type: CHRONIC

Cell Phone Radiation: CDMA

Time Report Requested: 13:31:21

Route: Whole Body Exposure

CAS Number: CELLPRADCDMA

First Dose M/F: 09/16/12 / 09/16/12

Species/Strain: RATS/HSD

Lab: IIT

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
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Tumor Summary for Females

Total Animals with Primary Neoplasms (b)	89	88	82	85
Total Primary Neoplasms	202	185	164	174
Total Animals with Benign Neoplasms	82	84	78	79
Total Benign Neoplasms	159	151	136	150
Total Animals with Malignant Neoplasms	37	27	24	22
Total Malignant Neoplasms	43	34	27	23
Total Animals with Metastatic Neoplasms	5	4	6	2
Total Metastatic Neoplasms	5	4	11	5
Total Animals with Malignant Neoplasms Uncertain Primary Site		1		
Total Animals with Neoplasms Uncertain- Benign or Malignant			1	1
Total Uncertain Neoplasms			1	1

*** END OF REPORT ***

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

b - Primary tumors: all tumors except metastatic tumors