Experiment Number: 20105 - 59	P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]	Date Report Requested: 01/02/2018
Test Type: CHRONIC	Cell Phone Radiation: GSM	Time Report Requested: 12:00:01
Route: Whole Body Exposure	CAS Number: CELLPRADGSM	First Dose M/F: 09/16/12 / 09/16/12
Species/Strain: RATS/HSD		Lab: IIT
	Final 2 - Data Changes through 12-15-17 GSM Rats SSAC Only	
NTP Study Number:	C20105	
Lock Date:	12/29/2015	
Cage Range:	ALL	
Date Range:	ALL	
Reasons For Removal:	25017 SSAC	
Removal Date Range:	ALL	
Treatment Groups:	Include ALL	
Study Gender:	Both	
TDMSE Version:	3.0.2.3_002	
PWG Approval Date:	NONE	

Experiment Number: 20105 - 59	P18: INCIDENCE RATI	P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]				
Test Type: CHRONIC		Time Report Requested: 12:00:01				
Route: Whole Body Exposure		CAS Number: (CELLPRADGSM		First Dose M/F: 09/16/12 / 09/16/12	
Species/Strain: RATS/HSD					Lab: IIT	
Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr		
Disposition Summary						
Animals Initially In Study	105	105	105	105		
Scheduled Sacrifice	15	15	15	15		
Early Deaths						
Survivors						
Animals Examined Microscopically	10	10	10	10		
ALIMENTARY SYSTEM						
Esophagus	(10)	(10)	(10)	(10)		
Intestine Large, Cecum	(10)	(10)	(10)	(10)		
Intestine Large, Colon	(10)	(10)	(10)	(10)		
Intestine Large, Rectum	(10)	(10)	(10)	(10)		
Lymphoid Tissue, Hyperplasia	1 [1.0]	1 [4.0]	(()		
Intestine Small, Duodenum	(10)	(10)	(10)	(10)		
Intestine Small, Ileum	(10)	(10)	(10)	(10)		
Intestine Small, Jejunum	(10)	(10)	(10)	(10)		
Liver	(10)	(10)	(10)	(10)		
Infiltration Cellular, Mixed Cell	1 [1.0]		3 [1.0]	3 [1.0]		
Pancreas	(10)	(10)	(10)	(10)		
Salivary Glands	(10)	(10)	(10)	(10)		
Stomach, Forestomach	(10)	(10)	(10)	(10)		
Stomach, Glandular	(10)	(10)	(10)	(10)		
CARDIOVASCULAR SYSTEM						
Aorta	(10)	(10)	(10)	(10)		
Heart	(10)	(10)	(10)	(10)		
Cardiomyopathy	2 [1.5]	4 [1.0]	3 [1.0]	4 [1.0]		
Ventricle Right, Cardiomyopathy	1 [1.0]	1 [2.0]	5 [1.2]	5 [1.0]		
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(10)	(10)	(10)		
	opically at site and number			(13)		

Experiment Number: 20105 - 59	P18: INCIDENCE RATE	P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Cell Phone Radiation: GSM				
Fest Type: CHRONIC						
Route: Whole Body Exposure		CAS Number: (CELLPRADGSM		First Dose M/F: 09/16/12 / 09/16/12	
Species/Strain: RATS/HSD					Lab: IIT	
Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr		
Adrenal Medulla	(10)	(10)	(10)	(10)		
Islets, Pancreatic	(10)	(10)	(10)	(10)		
Parathyroid Gland	(9)	(10)	(10)	(8)		
Pituitary Gland	(10)	(10)	(10)	(10)		
Pars Distalis, Cyst		1	2	2		
Rathke's Cleft, Cyst		1	3	3		
Thyroid Gland	(10)	(10)	(10)	(10)		
Ectopic Thymus		1	1	2		
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Epididymis	(10)	(10)	(10)	(10)		
Preputial Gland	(10)	(10)	(10)	(10)		
Inflammation, Chronic Active	7 [1.7]	3 [1.0]	1 [1.0]	4 [1.3]		
Prostate	(10)	(10)	(10)	(10)		
Inflammation, Chronic Active		1 [1.0]	1 [1.0]			
Seminal Vesicle	(10)	(10)	(10)	(10)		
Testis	(10)	(10)	(10)	(10)		
Germ Cell, Degeneration				1 [2.0]		
HEMATOPOIETIC SYSTEM						
Bone Marrow	(10)	(10)	(10)	(10)		
Lymph Node, Mandibular	(10)	(10)	(10)	(10)		
Hemorrhage	2 [1.0]	2 [1.5]	2 [1.0]	1 [3.0]		
Hyperplasia, Lymphocyte				4 [1.0]		
Proliferation, Plasma Cell				2 [1.0]		
Lymph Node, Mesenteric	(10)	(10)	(10)	(10)		
		2 [1.5]				
Hemorrhage		<u> </u>				

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

Experiment Number: 20105 - 59	P18: INCIDENCE RATE	P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]				
Test Type: CHRONIC		Time Report Requested: 12:00:01				
Route: Whole Body Exposure		CAS Number: (CELLPRADGSM		First Dose M/F: 09/16/12 / 09/16/12	
Species/Strain: RATS/HSD					Lab: IIT	
Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr		
Thymus Hemorrhage	(10) 5 [1.0]	(10) 1 [2.0]	(10) 2 [2.0]	(10)		
INTEGUMENTARY SYSTEM						
Mammary Gland	(10)	(10)	(10)	(8)		
Skin	(10)	(10)	(10)	(10)		
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(10)	(10)	(10)		
Tibia, Fracture, Chronic	(10)	(10)	(10)	1 [4.0]		
Skeletal Muscle	(10)	(10)	(10)	(10)		
NERVOUS SYSTEM						
Brain	(10)	(10)	(10)	(10)		
Nerve Trigeminal	(10)	(10)	(10)	(10)		
Peripheral Nerve, Sciatic	(10)	(10)	(10)	(10)		
Peripheral Nerve, Tibial	(10)	(10)	(10)	(10)		
Spinal Cord, Cervical	(10)	(10)	(10)	(10)		
Spinal Cord, Lumbar	(10)	(10)	(10)	(10)		
Spinal Cord, Thoracic	(10)	(10)	(10)	(10)		
Trigeminal Ganglion	(10)	(10)	(10)	(10)		
RESPIRATORY SYSTEM						
Lung	(10)	(10)	(10)	(10)		
Congestion	× /	. /	1 [2.0]	. ,		
Inflammation, Chronic Active	1 [1.0]	1 [1.0]	- •			
Nose	(10)	(10)	(10)	(10)		
Trachea	(10)	(10)	(10)	(10)		

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

Experiment Number: 20105 - 59	P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]			Date Report Requested: 01/02/2018		
Test Type: CHRONIC		Cell Phone Radiation: GSM				
Route: Whole Body Exposure		CAS Number: (CELLPRADGSM		First Dose M/F: 09/16/12 / 09/16/12 Lab: IIT	
Species/Strain: RATS/HSD						
Harlan Sprague Dawley RATS MALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr		
SPECIAL SENSES SYSTEM						
Eye	(10)	(10)	(10)	(10)		
Retina, Developmental Malformation				1		
Harderian Gland	(10)	(10)	(10)	(10)		
Inflammation, Chronic Active		3 [1.3]	2 [1.5]	2 [2.0]		
URINARY SYSTEM						
Kidney	(10)	(10)	(10)	(10)		
Congestion		·	1 [2.0]			
Nephropathy, Chronic Progressive	9 [1.1]	8 [1.0]	8 [1.1]	7 [1.1]		
Pelvis, Dilation			1 [1.0]			
Renal Tubule, Dilation		1 [1.0]				
Urinary Bladder	(10)	(10)	(10)	(10)		

*** END OF MALE ***

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

Experiment Number: 20105 - 59	P18: INCIDENCE RATE	P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]				
Test Type: CHRONIC		Cell Phone Radiation: GSM				
Route: Whole Body Exposure		CAS Number:	CELLPRADGSM		First Dose M/F: 09/16/12 / 09/16/12	
Species/Strain: RATS/HSD					Lab: IIT	
Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr		
Disposition Summary						
Animals Initially In Study	105	105	105	105		
Scheduled Sacrifice	15	15	15	15		
Early Deaths						
Survivors						
Animals Examined Microscopically	10	10	10	10		
ALIMENTARY SYSTEM						
Esophagus	(10)	(10)	(10)	(10)		
Intestine Large, Cecum	(10)	(10)	(10)	(10)		
Intestine Large, Colon	(10)	(10)	(10)	(10)		
Intestine Large, Rectum	(10)	(10)	(10)	(10)		
Lymphoid Tissue, Hyperplasia	1 [2.0]	1 [3.0]				
Intestine Small, Duodenum	(10)	(10)	(10)	(10)		
Intestine Small, Ileum	(10)	(10)	(10)	(10)		
Intestine Small, Jejunum	(10)	(10)	(10)	(10)		
Liver	(10)	(10)	(10)	(10)		
Infiltration Cellular, Mixed Cell	1 [1.0]	1 [1.0]	2 [1.0]	1 [1.0]		
Pancreas	(10)	(10)	(10)	(10)		
Salivary Glands	(10)	(10)	(10)	(10)		
Degeneration, Cystic				1 [3.0]		
Stomach, Forestomach	(10)	(10)	(10)	(10)		
Stomach, Glandular	(10)	(10)	(10)	(10)		
CARDIOVASCULAR SYSTEM						
Aorta	(10)	(10)	(10)	(10)		
Heart	(10)	(10)	(10)	(10)		
Cardiomyopathy Ventricle Right, Cardiomyopathy		2 [1.0]	1 [1.0] 1 [1.0]	2 [1.0]		

ENDOCRINE SYSTEM

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

Experiment Number: 20105 - 59	P18: INCIDENCE RATE	Date Report Requested: 01/02/2018			
Test Type: CHRONIC		Time Report Requested: 12:00:01			
Route: Whole Body Exposure		CAS Number: (CELLPRADGSM		First Dose M/F: 09/16/12 / 09/16/12
Species/Strain: RATS/HSD					Lab: IIT
Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr	
Adrenal Cortex	(10)	(10)	(10)	(10)	
Adrenal Medulla	(10)	(10)	(10)	(10)	
Islets, Pancreatic	(10)	(10)	(10)	(10)	
Parathyroid Gland	(10)	(8)	(9)	(9)	
Pituitary Gland	(10)	(10)	(10)	(10)	
Pars Distalis, Cyst	2	· · /	· · /		
Pars Intermedia, Cyst	1	1			
Thyroid Gland	(10)	(10)	(10)	(10)	
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
Clitoral Gland	(10)	(10)	(10)	(10)	
Inflammation, Chronic Active	4 [1.0]	5 [1.4]	6 [1.3]	4 [1.5]	
Ovary	(10)	(10)	(10)	(10)	
Cyst	(10)	()	()	1	
Follicle, Cyst	1			·	
Uterus	(10)	(10)	(10)	(10)	
	(10)	(10)	(10)	(10)	
HEMATOPOIETIC SYSTEM					
Bone Marrow	(10)	(10)	(10)	(10)	
Lymph Node, Mandibular	(10)	(10)	(10)	(10)	
Hemorrhage		2 [2.0]			
Hyperplasia, Lymphocyte		-		2 [1.0]	
Proliferation, Plasma Cell				3 [1.0]	
	(10)	(10)	(10)	(10)	
	(10)				
Lymph Node, Mesenteric			(10)	(10)	
	(10) (10)	(10) (10)	(10) (10)	(10) (10)	

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

Experiment Number: 20105 - 59	P18: INCIDENCE RATE	P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]				
Test Type: CHRONIC		Time Report Requested: 12:00:01 First Dose M/F: 09/16/12 / 09/16/12 Lab: IIT				
Route: Whole Body Exposure Species/Strain: RATS/HSD						
Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr		
INTEGUMENTARY SYSTEM						
Mammary Gland	(10)	(10)	(10)	(10)		
Skin	(10)	(10)	(10)	(10)		
MUSCULOSKELETAL SYSTEM				·		
Bone	(10)	(10)	(10)	(10)		
Skeletal Muscle	(10)	(10)	(10)	(10)		
Infiltration Cellular, Histiocyte			1 [1.0]			
NERVOUS SYSTEM						
Brain	(10)	(10)	(10)	(10)		
Nerve Trigeminal	(10)	(10)	(10)	(10)		
Peripheral Nerve, Sciatic	(10)	(10)	(10)	(10)		
Peripheral Nerve, Tibial	(10)	(10)	(10)	(10)		
Spinal Cord, Cervical	(10)	(10)	(10)	(10)		
Spinal Cord, Lumbar	(10)	(10)	(10)	(10)		
Spinal Cord, Thoracic	(10)	(10)	(10)	(10)		
Trigeminal Ganglion	(9)	(10)	(10)	(10)		
RESPIRATORY SYSTEM						
Lung	(10)	(10)	(10)	(10)		
Congestion	、 <i>,</i>	. ,	1 [2.0]			
Inflammation, Chronic Active			1 [1.0]			
Alveolus, Infiltration Cellular, Histiocyte	2 [1.0]					
Epithelium Alveolus, Hyperplasia			1 [1.0]			
Nose	(10)	(10)	(10)	(10)		
Trachea	(10)	(10)	(10)	(10)		

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

Experiment Number: 20105 - 59	P18: INCIDENCE RATE	ES OF NON-NEOPLAS AVERAGE SEVE	Date Report Requested: 01/02/2018			
Test Type: CHRONIC		Cell Phone Radiation: GSM				
Route: Whole Body Exposure Species/Strain: RATS/HSD		First Dose M/F: 09/16/12 / 09/16/12 Lab: IIT				
Harlan Sprague Dawley RATS FEMALE	0.0W/kg(GSM)chr	1.5W/kg(GSM)chr	3.0W/kg(GSM)chr	6.0W/kg(GSM)chr		
SPECIAL SENSES SYSTEM						
Eye	(10)	(10)	(10)	(10)		
Harderian Gland	(10)	(10)	(10)	(10)		
Infiltration Cellular, Lymphocyte	1 [1.0]					
URINARY SYSTEM						
Kidney	(10)	(10)	(10)	(10)		
Nephropathy, Chronic Progressive	3 [1.0]	4 [1.0]	3 [1.0]	2 [1.0]		
Urinary Bladder	(10)	(10)	(10)	(10)		

*** END OF REPORT ***

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