Experiment Number: 99930-98 Test Type: SPECIAL STUDY Route: DOSED FEED

Species/Strain: Rat/CD

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/18/2014 Time Report Requested: 23:41:54

First Dose M/F: NA / NA

Lab: NCTR

C Number: MG96005

Lock Date: Not Entered.

Cage Range: ΑII

Date Range: ΑII

Reasons For Removal: ΑII

Removal Date Range: ΑII

Treatment Groups: ΑII

Study Gender: Both

PWG Approval Date NONE

Route: DOSED FEED

Species/Strain: Rat/CD

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

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/18/2014 Time Report Requested: 23:41:54

First Dose M/F: NA / NA

Lab: NCTR

CD Rat MALE	F1 0 PPM	F1 5 PPM	F1 100 PPM	F1 500 PPM
Disposition Summary				
Animals Initially In Study	26	25	25	25
Early Deaths				
Survivors				
Terminal Sacrifice	26	25	25	25
Animals Examined Microscopically	26	25	25	25
ALIMENTARY SYSTEM				
Liver	(26)	(0)	(0)	(25)
Hemorrhage	1 (4%)			
Hepatodiaphragmatic Nodule	1 (4%)			
Inflammation, Chronic	22 (85%)			22 (88%)
Necrosis	5 (19%)			2 (8%)
Vacuolization Cytoplasmic	8 (31%)			3 (12%)
CARDIOVASCULAR SYSTEM				
None				
ENDOCRINE SYSTEM				
Adrenal Cortex	(26)	(0)	(0)	(24)
Accessory Adrenal Cortical Nodule	2 (8%)			
Vacuolization Cytoplasmic				1 (4%)
Adrenal Medulla	(26)	(0)	(0)	(24)
Pituitary Gland	(26)	(0)	(0)	(25)
Mineralization	1 (4%)			
Pars Distalis, Cyst, Multiple				1 (4%)
Thyroid Gland	(26)	(0)	(0)	(25)
Inflammation, Chronic				1 (4%)

GENERAL BODY SYSTEM

None

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

Route: DOSED FEED

Species/Strain: Rat/CD

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First Dose M/F: NA / NA

CD Rat MALE	F1 0 PPM	F1 5 PPM	F1 100 PPM	F1 500 PPM
GENITAL SYSTEM				
Coagulating Gland	(26)	(25)	(25)	(25)
Epididymis	(26)	(25)	(25)	(25)
Hypospermia	1 (4%)	1 (4%)		
Infiltration Cellular, Lymphocyte	2 (8%)	1 (4%)	1 (4%)	2 (8%)
Preputial Gland	(0)	(0)	(0)	(1)
Inflammation, Chronic				1 (100%)
Prostate	(3)	(8)	(5)	(3)
Prostate, Dorsal Lobe	(26)	(25)	(25)	(24)
Epithelium, Hyperplasia			1 (4%)	
Inflammation, Chronic	8 (31%)	4 (16%)	5 (20%)	9 (38%)
Inflammation, Suppurative	8 (31%)	7 (28%)	12 (48%)	13 (54%)
Prostate, Ventral Lobe	(26)	(25)	(25)	(24)
Inflammation, Chronic	20 (77%)	15 (60%)	18 (72%)	13 (54%)
Inflammation, Suppurative		5 (20%)	2 (8%)	3 (13%)
Rete Testes	(26)	(25)	(23)	(25)
Seminal Vesicle	(26)	(25)	(25)	(25)
Dilatation		2 (8%)		3 (12%)
Testes	(26)	(25)	(25)	(25)
Seminif Tub, Degeneration	1 (4%)	2 (8%)	1 (4%)	2 (8%)
HEMATOPOIETIC SYSTEM				
Bone Marrow	(26)	(0)	(0)	(25)
Spleen	(26)	(0)	(0)	(25)
Adventitia, Inflammation, Chronic	1 (4%)			
Hyperplasia, Stromal				2 (8%)
Pigmentation	6 (23%)			5 (20%)
Red Pulp, Fibrosis	1 (4%)			
Thymus	(26)	(0)	(0)	(25)
Hemorrhage	1 (4%)			1 (4%)

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

Experiment Number: 99930-98

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

Date Report Requested: 10/18/2014
Time Report Requested: 23:41:54

Test Type: SPECIAL STUDY
Route: DOSED FEED

Test Compound: Endocrine disruptor (Genistein) **CAS Number:** 446-72-0

First Dose M/F: NA / NA

Species/Strain: Rat/CD

CD Rat MALE	F1 0 PPM	F1 5 PPM	F1 100 PPM	F1 500 PPN
INTEGUMENTARY SYSTEM				
Mammary Gland	(26)	(24)	(25)	(25)
Alveolus, Hyperplasia	1 (4%)		3 (12%)	10 (40%)
Duct, Hyperplasia		1 (4%)	2 (8%)	8 (32%)
Skin	(26)	(0)	(0)	(25)
MUSCULOSKELETAL SYSTEM				
Bone, Femur	(26)	(0)	(0)	(25)
NERVOUS SYSTEM None				
RESPIRATORY SYSTEM None				
SPECIAL SENSES SYSTEM None				
URINARY SYSTEM				
Kidney	(26)	(25)	(25)	(25)
Capsule, Fat, Cyst		1 (4%)		1 (4%)
Casts Protein	1 (4%)			1 (4%)
Cortex, Cyst		2 (8%)		1 (4%)
Cortex, Cyst, Multiple				1 (4%)
Epithelium, Hyperplasia				1 (4%)
Epithelium, Pelvis, Hyperplasia		1 (4%)		
Infiltration Cellular, Lymphocyte			1 (4%)	
Inflammation, Chronic	16 (62%)	16 (64%)	19 (76%)	22 (88%)
Pelvis, Dilatation			1 (4%)	
Renal Tubule, Dilatation	5 (19%)	6 (24%)	2 (8%)	8 (32%)
Renal Tubule, Mineralization	1 (4%)	3 (12%)	8 (32%)	15 (60%)
Renal Tubule, Regeneration	6 (23%)	6 (24%)	8 (32%)	19 (76%)

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

Route: DOSED FEED

Species/Strain: Rat/CD

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

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/18/2014
Time Report Requested: 23:41:55

First Dose M/F: NA / NA

Lab: NCTR

CD Rat MALE	F1	0 PPM	F1	5 PPM	F1	100 PPM	F1	500 PPM
Renal Tubule, Vacuolization Cytoplasmic								1 (4%)

END OF MALE DATA

Route: DOSED FEED

Species/Strain: Rat/CD

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

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/18/2014
Time Report Requested: 23:41:55

First Dose M/F: NA / NA

CD Rat FEMALE	F1 0 PPM	F1 5 PPM	F1 100 PPM	F1 500 PPN
Disposition Summary				
Animals Initially In Study	25	25	25	25
Early Deaths				
Natural Death	1			
Survivors				
Terminal Sacrifice	24	25	25	25
Animals Examined Microscopically	25	25	25	25
ALIMENTARY SYSTEM				
Liver	(25)	(1)	(0)	(25)
Autolysis	1 (4%)			
Developmental Malformation				1 (4%)
Inflammation, Chronic Active, Focal	4 (16%)			5 (20%)
Necrosis, Focal				1 (4%)
Salivary Glands	(1)	(0)	(0)	(0)
Autolysis	1 (100%)			
Stomach, Forestomach	(1)	(0)	(0)	(0)
Autolysis	1 (100%)			
CARDIOVASCULAR SYSTEM				
Heart	(1)	(0)	(0)	(0)
Cardiomyopathy, Focal	1 (100%)			
ENDOCRINE SYSTEM				
Adrenal Cortex	(25)	(0)	(0)	(25)
Autolysis	1 (4%)	•		
Hyperplasia, Focal				1 (4%)
Adrenal Medulla	(25)	(0)	(0)	(25)
Autolysis	1 (4%)			
Pituitary Gland	(25)	(0)	(0)	(25)
Autolysis	1 (4%)			

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

Route: DOSED FEED Species/Strain: Rat/CD

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

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/18/2014 Time Report Requested: 23:41:55

First Dose M/F: NA / NA

CD Rat FEMALE	F1 0 PPM	F1 5 PPM	F1 100 PPM	F1 500 PPN
Rathkes Cleft, Cyst	1 (4%)			2 (8%)
Thyroid Gland	(25)	(0)	(0)	(25)
Autolysis	1 (4%)			
Bilateral, Infiltration Cellular, Lymphocyte, Focal				1 (4%)
Bilateral, Ultimobranchial Cyst	1 (4%)			
Ultimobranchial Cyst	·			1 (4%)
GENERAL BODY SYSTEM				
None		,		,
GENITAL SYSTEM				
Ovary	(25)	(25)	(25)	(25)
Autolysis	1 (4%)			
Cyst		1 (4%)		1 (4%)
Diestrus	8 (32%)	2 (8%)	4 (16%)	8 (32%)
Estrus	7 (28%)	8 (32%)	6 (24%)	5 (20%)
Metestrus	1 (4%)	6 (24%)	7 (28%)	5 (20%)
Proestrus	8 (32%)	9 (36%)	7 (28%)	7 (28%)
Oviduct	(25)	(25)	(25)	(25)
Uterus	(25)	(25)	(25)	(25)
Angiectasis, Focal		1 (4%)		
Autolysis	1 (4%)			
Decidual Reaction	22 (88%)	20 (80%)	21 (84%)	20 (80%)
Diestrus	8 (32%)	2 (8%)	4 (16%)	7 (28%)
Endometrium, Dilatation				1 (4%)
Endometrium, Inflammation, Diffuse		1 (4%)		
Estrus	6 (24%)	8 (32%)	7 (28%)	5 (20%)
Inflammation, Chronic Active, Focal		1 (4%)		
Metestrus	2 (8%)	5 (20%)	7 (28%)	5 (20%)
Proestrus	8 (32%)	9 (36%)	7 (28%)	8 (32%)
Vagina	(25)	(25)	(25)	(25)

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Experiment Number: 99930-98

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Test Compound: Endocrine disruptor (Genistein)

Test Type: SPECIAL STUDY **Route:** DOSED FEED

CAS Number: 446-72-0

Species/Strain: Rat/CD

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CD Rat FEMALE	F1 0 PPM	F1 5 PPM	F1 100 PPM	F1 500 PPM
Autolysis	1 (4%)			
Diestrus	8 (32%)	1 (4%)	4 (16%)	7 (28%)
Estrus	9 (36%)	10 (40%)	7 (28%)	5 (20%)
Infiltration Cellular, Polymorphnuclr		1 (4%)		
Metestrus	2 (8%)	6 (24%)	7 (28%)	6 (24%)
Proestrus	5 (20%)	7 (28%)	7 (28%)	7 (28%)
HEMATOPOIETIC SYSTEM				
Bone Marrow	(25)	(0)	(0)	(25)
Lymph Node, Mandibular	(1)	(0)	(0)	(0)
Autolysis	1 (100%)			
Lymph Node, Mesenteric	(1)	(0)	(0)	(0)
Autolysis	1 (100%)			
Spleen	(25)	(0)	(0)	(25)
Autolysis	1 (4%)			
Thymus	(25)	(0)	(0)	(25)
NTEGUMENTARY SYSTEM				
Mammary Gland	(24)	(23)	(25)	(25)
Alveolus, Hyperplasia	8 (33%)	6 (26%)	14 (56%)	8 (32%)
Galactocele	1 (4%)		1 (4%)	
Lobules, Hyperplasia	1 (4%)	2 (9%)	2 (8%)	
Skin	(25)	(0)	(1)	(25)
Lip, Abscess			1 (100%)	
MUSCULOSKELETAL SYSTEM				
Bone, Femur	(25)	(0)	(0)	(25)
NERVOUS SYSTEM				
Brain, Brain Stem	(1)	(0)	(0)	(0)
Autolysis	1 (100%)			
Brain, Cerebellum	(1)	(0)	(0)	(0)

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Route: DOSED FEED

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First Dose M/F: NA / NA

CD Rat FEMALE	F1 0 PPM	F1 5 PPM	F1 100 PPM	F1 500 PPN
Autolysis	1 (100%)			
Brain, Cerebrum	(1)	(0)	(0)	(0)
Autolysis	1 (100%)			
RESPIRATORY SYSTEM				
Lung	(1)	(0)	(0)	(0)
Congestion, Diffuse	1 (100%)			
Nose	(1)	(0)	(0)	(0)
Congestion, Diffuse	1 (100%)		_	
None URINARY SYSTEM				
Kidney	(25)	(25)	(24)	(25)
Autolysis	1 (4%)			
Bilateral, Nephropathy	2 (8%)			
Cyst	1 (4%)			
Cyst, Multiple		1 (4%)		1 (4%)
Infarct	1 (4%)			
Inflammation, Chronic Active			1 (4%)	
Mineralization	21 (84%)	23 (92%)	22 (92%)	24 (96%)
Nephropathy				2 (8%)
Pelvis, Dilatation		1 (4%)		1 (4%)

^{**} END OF REPORT **