

Experiment Number: 99930-95
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**

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

Date Report Requested: 10/18/2014
Time Report Requested: 15:39:41
First Dose M/F: NA / NA
Lab: NCTR

C Number: MG96005
Lock Date: Not Entered.
Cage Range: All
Date Range: All
Reasons For Removal: All
Removal Date Range: All
Treatment Groups: All
Study Gender: Both
PWG Approval Date: NONE

Experiment Number: 99930-95
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
 AVERAGE SEVERITY GRADES[b]**
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/18/2014
 Time Report Requested: 15:39:41
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat MALE	F4	0 PPM	F4/5PPM TO CTL	F4/100PPM TO CTL	F4/500PPM TO CTL
Disposition Summary					
Animals Initially In Study		25	25	25	25
Early Deaths					
Survivors					
Terminal Sacrifice		25	25	25	25
Animals Examined Microscopically		25	25	25	25
ALIMENTARY SYSTEM					
Liver		(25)	(0)	(0)	(25)
Inflammation, Chronic		18 [1.0]			18 [1.1]
Malformation					1
Necrosis		3 [1.0]			2 [1.5]
Vacuolization Cytoplasmic		3 [1.3]			1 [1.0]
Mesentery		(0)	(1)	(0)	(0)
Inflammation, Chronic Active			1 [4.0]		
CARDIOVASCULAR SYSTEM					
None					
ENDOCRINE SYSTEM					
Adrenal Cortex		(25)	(0)	(0)	(25)
Accessory Adrenal Cortical Nodule		1			2
Adrenal Medulla		(25)	(0)	(0)	(25)
Pituitary Gland		(25)	(0)	(0)	(25)
Pars Distalis, Cyst					1
Pars Distalis, Cyst, Multiple					1
Thyroid Gland		(25)	(0)	(0)	(25)
GENERAL BODY SYSTEM					
None					

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: 99930-95
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
 AVERAGE SEVERITY GRADES[b]**
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/18/2014
Time Report Requested: 15:39:41
First Dose M/F: NA / NA
Lab: NCTR

CD Rat MALE	F4	0 PPM	F4/5PPM TO CTL	F4/100PPM TO CTL	F4/500PPM TO CTL
GENITAL SYSTEM					
Coagulating Gland	(25)		(25)	(25)	(25)
Epididymis	(25)		(25)	(25)	(25)
Hypospermia	1 [4.0]				
Infiltration Cellular, Lymphocyte	1 [1.0]		2 [1.0]	1 [1.0]	1 [1.0]
Penis	(0)		(0)	(1)	(0)
Prostate	(3)		(7)	(1)	(1)
Prostate, Dorsal Lobe	(25)		(25)	(25)	(25)
Inflammation, Chronic	8 [1.3]		5 [1.2]	6 [1.2]	6 [1.0]
Inflammation, Suppurative	4 [1.5]		6 [1.5]	5 [1.4]	6 [1.3]
Prostate, Ventral Lobe	(25)		(25)	(25)	(25)
Inflammation, Chronic	18 [1.4]		17 [1.5]	23 [1.3]	23 [1.4]
Inflammation, Suppurative	4 [1.5]		3 [1.3]	5 [1.4]	2 [1.5]
Rete Testes	(25)		(20)	(24)	(22)
Dilatation	1 [3.0]				
Seminal Vesicle	(25)		(25)	(24)	(25)
Dilatation					1 [2.0]
Testes	(25)		(25)	(25)	(25)
Seminif Tub, Degeneration	3 [2.0]		1 [1.0]	4 [1.0]	3 [1.0]
HEMATOPOIETIC SYSTEM					
Bone Marrow	(25)		(0)	(0)	(25)
Spleen	(25)		(0)	(0)	(25)
Adventitia, Inflammation, Chronic	2 [1.0]				
Pigmentation	6 [1.0]				10 [1.0]
Thymus	(25)		(0)	(0)	(25)
INTEGUMENTARY SYSTEM					
Mammary Gland	(25)		(25)	(25)	(24)
Alveolus, Hyperplasia	4 [1.5]		4 [1.3]	6 [1.5]	6 [1.7]

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: 99930-95
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/18/2014
Time Report Requested: 15:39:41
First Dose M/F: NA / NA
Lab: NCTR

CD Rat MALE	F4	0 PPM	F4/5PPM TO CTL	F4/100PPM TO CTL	F4/500PPM TO CTL
Skin	(25)	(0)	(0)	(23)	
MUSCULOSKELETAL SYSTEM					
Bone, Femur	(25)	(0)	(0)	(25)	
NERVOUS SYSTEM					
None					
RESPIRATORY SYSTEM					
Nose	(0)	(0)	(0)	(1)	
SPECIAL SENSES SYSTEM					
None					
URINARY SYSTEM					
Kidney	(25)	(0)	(0)	(25)	
Casts Protein				1 [1.0]	
Cortex, Cyst				2	
Inflammation, Chronic	18 [1.1]			15 [1.0]	
Pelvis, Dilatation	1 [2.0]			2 [2.5]	
Renal Tubule, Dilatation	13 [1.4]			3 [1.0]	
Renal Tubule, Mineralization	1 [1.0]				
Renal Tubule, Regeneration	6 [1.2]			10 [1.0]	

END OF MALE DATA

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: 99930-95
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
 AVERAGE SEVERITY GRADES[b]**
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/18/2014
 Time Report Requested: 15:39:41
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat FEMALE	F4	0 PPM	F4/5PPM TO CTL	F4/100PPM TO CTL	F4/500PPM TO CTL
Disposition Summary					
Animals Initially In Study	26		25	25	25
Early Deaths					
Survivors					
Natural Death	1				
Terminal Sacrifice	25		25	25	25
Animals Examined Microscopically	26		25	25	25
ALIMENTARY SYSTEM					
Intestine Large, Cecum	(1)		(0)	(0)	(0)
Epithelium, Autolysis	1 [2.0]				
Intestine Large, Colon	(1)		(0)	(0)	(0)
Intestine Small, Duodenum	(1)		(0)	(0)	(0)
Epithelium, Autolysis	1 [3.0]				
Hyperplasia	1 [2.0]				
Intestine Small, Ileum	(1)		(0)	(0)	(0)
Epithelium, Autolysis	1 [3.0]				
Intestine Small, Jejunum	(1)		(0)	(0)	(0)
Epithelium, Autolysis	1 [3.0]				
Liver	(26)		(0)	(1)	(25)
Congestion				1 [3.0]	
Developmental Malformation				1	
Pancreas	(1)		(0)	(0)	(0)
Autolysis	1 [3.0]				
Salivary Glands	(1)		(0)	(0)	(0)
Autolysis	1 [2.0]				
CARDIOVASCULAR SYSTEM					
Blood Vessel	(1)		(0)	(0)	(0)
Heart	(1)		(0)	(0)	(0)

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: 99930-95
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
 AVERAGE SEVERITY GRADES[b]**
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/18/2014
Time Report Requested: 15:39:41
First Dose M/F: NA / NA
Lab: NCTR

CD Rat FEMALE	F4	0 PPM	F4/5PPM TO CTL	F4/100PPM TO CTL	F4/500PPM TO CTL
ENDOCRINE SYSTEM					
Adrenal Cortex	(26)	(0)	(0)	(0)	(25)
Hyperplasia, Multifocal, Focal	1 [2.0]				
Adrenal Medulla	(26)	(0)	(0)	(0)	(25)
Pituitary Gland	(26)	(0)	(0)	(0)	(25)
Thyroid Gland	(26)	(0)	(0)	(0)	(25)
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
Ovary	(25)	(24)	(24)	(24)	(25)
Diestrus	6	8	7	7	8
Estrus	3	4	4	9	2
Metestrus	2	2	2		4
Proestrus	14	10	10	8	11
Oviduct	(25)	(24)	(24)	(24)	(25)
Estrus	2				3
Uterus	(26)	(25)	(25)	(25)	(25)
Autolysis	1 [2.0]				
Decidual Reaction	25	24	24	23	23
Diestrus	6	9	9	8	8
Estrus	3	4	4	9	2
Metestrus	3	2	2		5
Proestrus	14	10	10	8	10
Vagina	(26)	(25)	(25)	(25)	(25)
Autolysis	1 [2.0]				
Diestrus	6	9	9	8	8
Estrus	9	6	6	14	4
Metestrus	3	2	2		5

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: 99930-95
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
 AVERAGE SEVERITY GRADES[b]**
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/18/2014
Time Report Requested: 15:39:41
First Dose M/F: NA / NA
Lab: NCTR

CD Rat FEMALE	F4	0 PPM	F4/5PPM TO CTL	F4/100PPM TO CTL	F4/500PPM TO CTL
Proestrus	8		8	3	8
HEMATOPOIETIC SYSTEM					
Bone Marrow	(26)		(0)	(0)	(25)
Autolysis	1 [2.0]				
Lymph Node, Mandibular	(1)		(0)	(0)	(0)
Autolysis	1 [2.0]				
Lymph Node, Mesenteric	(1)		(0)	(0)	(0)
Hyperplasia, Reticulum Cell	1 [2.0]				
Spleen	(26)		(0)	(0)	(25)
Thymus	(26)		(0)	(0)	(25)
INTEGUMENTARY SYSTEM					
Mammary Gland	(26)		(25)	(25)	(25)
Alveolus, Hyperplasia	14 [2.4]		15 [2.1]	11 [2.6]	11 [2.3]
Lobules, Hyperplasia	7 [1.7]		6 [2.0]	6 [2.0]	4 [2.3]
Skin	(26)		(0)	(0)	(25)
MUSCULOSKELETAL SYSTEM					
Bone, Femur	(26)		(0)	(0)	(25)
NERVOUS SYSTEM					
Brain	(1)		(0)	(0)	(0)
Brain, Cerebrum	(1)		(0)	(0)	(0)
Unilateral, Hydrocephalus	1 [3.0]				
RESPIRATORY SYSTEM					
Lung	(1)		(0)	(0)	(0)
Autolysis	1 [2.0]				
Congestion	1 [4.0]				
Infiltration Cellular, Macrophage	1 [3.0]				
Nose	(1)		(0)	(0)	(0)

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: 99930-95
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/18/2014
Time Report Requested: 15:39:41
First Dose M/F: NA / NA
Lab: NCTR

CD Rat FEMALE	F4	0 PPM	F4/5PPM TO CTL	F4/100PPM TO CTL	F4/500PPM TO CTL
Autolysis		1 [2.0]			
<hr/>					
SPECIAL SENSES SYSTEM					
None					
<hr/>					
URINARY SYSTEM					
Kidney		(26)	(25)	(25)	(25)
Cyst			2	1	
Mineralization		23 [1.4]	23 [1.5]	22 [1.9]	16 [1.1]
Pelvis, Unilateral, Dilatation					1 [3.0]
Urinary Bladder		(1)	(0)	(0)	(0)

**** 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)