

**Experiment Number:** 99930-98  
**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:** 23:41:10  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

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

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CD Rat MALE	F1 0 PPM	F1 5 PPM	F1 100 PPM	F1 500 PPM
<b>Disposition Summary</b>				
Animals Initially In Study	26	25	25	25
Early Deaths				
Survivors				
Terminal Sacrifice	26	25	25	25
Animals Examined Microscopically	26	25	25	25
<b>ALIMENTARY SYSTEM</b>				
Liver	(26)	(0)	(0)	(25)
Hemorrhage	1 [1.0]			
Hepatodiaphragmatic Nodule	1			
Inflammation, Chronic	22 [1.0]			22 [1.0]
Necrosis	5 [1.2]			2 [1.0]
Vacuolization Cytoplasmic	8 [1.0]			3 [1.0]
<b>CARDIOVASCULAR SYSTEM</b>				
None				
<b>ENDOCRINE SYSTEM</b>				
Adrenal Cortex	(26)	(0)	(0)	(24)
Accessory Adrenal Cortical Nodule	2			
Vacuolization Cytoplasmic				1 [2.0]
Adrenal Medulla	(26)	(0)	(0)	(24)
Pituitary Gland	(26)	(0)	(0)	(25)
Mineralization	1 [1.0]			
Pars Distalis, Cyst, Multiple				1
Thyroid Gland	(26)	(0)	(0)	(25)
Inflammation, Chronic				1 [1.0]
<b>GENERAL BODY SYSTEM</b>				
None				

a - Number of animals examined microscopically at site and number of animals with lesion  
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<b>GENITAL SYSTEM</b>				
Coagulating Gland	(26)	(25)	(25)	(25)
Epididymis	(26)	(25)	(25)	(25)
Hypospermia	1 [4.0]	1 [4.0]		
Infiltration Cellular, Lymphocyte	2 [1.0]	1 [1.0]	1 [1.0]	2 [1.0]
Preputial Gland	(0)	(0)	(0)	(1)
Inflammation, Chronic				1 [2.0]
Prostate	(3)	(8)	(5)	(3)
Prostate, Dorsal Lobe	(26)	(25)	(25)	(24)
Epithelium, Hyperplasia			1 [1.0]	
Inflammation, Chronic	8 [1.3]	4 [1.0]	5 [1.0]	9 [1.3]
Inflammation, Suppurative	8 [2.0]	7 [1.3]	12 [1.5]	13 [1.8]
Prostate, Ventral Lobe	(26)	(25)	(25)	(24)
Inflammation, Chronic	20 [1.6]	15 [1.3]	18 [1.5]	13 [1.2]
Inflammation, Suppurative		5 [1.4]	2 [1.5]	3 [1.3]
Rete Testes	(26)	(25)	(23)	(25)
Seminal Vesicle	(26)	(25)	(25)	(25)
Dilatation		2 [2.0]		3 [2.0]
Testes	(26)	(25)	(25)	(25)
Seminif Tub, Degeneration	1 [4.0]	2 [2.5]	1 [1.0]	2 [1.0]
<b>HEMATOPOIETIC SYSTEM</b>				
Bone Marrow	(26)	(0)	(0)	(25)
Spleen	(26)	(0)	(0)	(25)
Adventitia, Inflammation, Chronic	1 [2.0]			
Hyperplasia, Stromal				2 [1.0]
Pigmentation	6 [1.0]			5 [1.0]
Red Pulp, Fibrosis	1 [2.0]			
Thymus	(26)	(0)	(0)	(25)

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Hemorrhage	1 [3.0]			1 [2.0]
<b>INTEGUMENTARY SYSTEM</b>				
Mammary Gland	(26)	(24)	(25)	(25)
Alveolus, Hyperplasia	1 [1.0]		3 [1.0]	10 [1.9]
Duct, Hyperplasia		1 [1.0]	2 [1.0]	8 [1.6]
Skin	(26)	(0)	(0)	(25)
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone, Femur	(26)	(0)	(0)	(25)
<b>NERVOUS SYSTEM</b>				
None				
<b>RESPIRATORY SYSTEM</b>				
None				
<b>SPECIAL SENSES SYSTEM</b>				
None				
<b>URINARY SYSTEM</b>				
Kidney	(26)	(25)	(25)	(25)
Capsule, Fat, Cyst		1		1
Casts Protein	1 [1.0]			1 [1.0]
Cortex, Cyst		2		1
Cortex, Cyst, Multiple				1
Epithelium, Hyperplasia				1 [1.0]
Epithelium, Pelvis, Hyperplasia		1 [1.0]		
Infiltration Cellular, Lymphocyte			1 [1.0]	
Inflammation, Chronic	16 [1.0]	16 [1.1]	19 [1.0]	22 [1.1]
Pelvis, Dilatation			1 [2.0]	
Renal Tubule, Dilatation	5 [1.2]	6 [1.7]	2 [2.5]	8 [1.8]
Renal Tubule, Mineralization	1 [1.0]	3 [2.0]	8 [1.0]	15 [1.7]

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<b>CD Rat MALE</b>	<b>F1 0 PPM</b>	<b>F1 5 PPM</b>	<b>F1 100 PPM</b>	<b>F1 500 PPM</b>
Renal Tubule, Regeneration	6 [1.0]	6 [1.0]	8 [1.0]	19 [1.2]
Renal Tubule, Vacuolization Cytoplasmic				1 [1.0]

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\*\*\*END OF MALE DATA\*\*\*

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<b>Disposition Summary</b>				
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
<b>ALIMENTARY SYSTEM</b>				
Liver	(25)	(1)	(0)	(25)
Autolysis	1 [2.0]			
Developmental Malformation				1
Inflammation, Chronic Active, Focal	4 [1.3]			5 [1.0]
Necrosis, Focal				1 [1.0]
Salivary Glands	(1)	(0)	(0)	(0)
Autolysis	1 [3.0]			
Stomach, Forestomach	(1)	(0)	(0)	(0)
Autolysis	1 [4.0]			
<b>CARDIOVASCULAR SYSTEM</b>				
Heart	(1)	(0)	(0)	(0)
Cardiomyopathy, Focal	1 [2.0]			
<b>ENDOCRINE SYSTEM</b>				
Adrenal Cortex	(25)	(0)	(0)	(25)
Autolysis	1 [2.0]			
Hyperplasia, Focal				1 [1.0]
Adrenal Medulla	(25)	(0)	(0)	(25)
Autolysis	1 [2.0]			
Pituitary Gland	(25)	(0)	(0)	(25)

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Autolysis		1 [2.0]						
Rathkes Cleft, Cyst		1						2
Thyroid Gland		(25)		(0)		(0)		(25)
Autolysis		1 [2.0]						
Bilateral, Infiltration Cellular, Lymphocyte, Focal								1 [1.0]
Bilateral, Ultimobranchial Cyst		1						
Ultimobranchial Cyst								1
GENERAL BODY SYSTEM								
None								
GENITAL SYSTEM								
Ovary		(25)		(25)		(25)		(25)
Autolysis		1 [1.0]						
Cyst				1				1
Diestrus		8		2		4		8
Estrus		7		8		6		5
Metestrus		1		6		7		5
Proestrus		8		9		7		7
Oviduct		(25)		(25)		(25)		(25)
Uterus		(25)		(25)		(25)		(25)
Angiectasis, Focal				1 [3.0]				
Autolysis		1 [2.0]						
Decidual Reaction		22		20		21		20
Diestrus		8		2		4		7
Endometrium, Dilatation								1 [1.0]
Endometrium, Inflammation, Diffuse				1 [2.0]				
Estrus		6		8		7		5
Inflammation, Chronic Active, Focal				1 [3.0]				
Metestrus		2		5		7		5

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Proestrus		8		9		7		8
Vagina		(25)		(25)		(25)		(25)
Autolysis		1 [2.0]						
Diestrus		8		1		4		7
Estrus		9		10		7		5
Infiltration Cellular, Polymorphnuclr				1 [2.0]				
Metestrus		2		6		7		6
Proestrus		5		7		7		7
<b>HEMATOPOIETIC SYSTEM</b>								
Bone Marrow		(25)		(0)		(0)		(25)
Lymph Node, Mandibular		(1)		(0)		(0)		(0)
Autolysis		1 [3.0]						
Lymph Node, Mesenteric		(1)		(0)		(0)		(0)
Autolysis		1 [2.0]						
Spleen		(25)		(0)		(0)		(25)
Autolysis		1 [2.0]						
Thymus		(25)		(0)		(0)		(25)
<b>INTEGUMENTARY SYSTEM</b>								
Mammary Gland		(24)		(23)		(25)		(25)
Alveolus, Hyperplasia		8 [1.9]		6 [2.2]		14 [1.7]		8 [1.4]
Galactocele		1				1		
Lobules, Hyperplasia		1 [4.0]		2 [4.0]		2 [1.5]		
Skin		(25)		(0)		(1)		(25)
Lip, Abscess						1		
<b>MUSCULOSKELETAL SYSTEM</b>								
Bone, Femur		(25)		(0)		(0)		(25)
<b>NERVOUS SYSTEM</b>								

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First Dose M/F: NA / NA

Lab: NCTR

CD Rat FEMALE	F1	0 PPM	F1	5 PPM	F1	100 PPM	F1	500 PPM
Brain, Brain Stem		(1)		(0)		(0)		(0)
Autolysis	1	[2.0]						
Brain, Cerebellum		(1)		(0)		(0)		(0)
Autolysis	1	[2.0]						
Brain, Cerebrum		(1)		(0)		(0)		(0)
Autolysis	1	[2.0]						
RESPIRATORY SYSTEM								
Lung		(1)		(0)		(0)		(0)
Congestion, Diffuse	1	[4.0]						
Nose		(1)		(0)		(0)		(0)
Congestion, Diffuse	1	[4.0]						
SPECIAL SENSES SYSTEM								
None								
URINARY SYSTEM								
Kidney		(25)		(25)		(24)		(25)
Autolysis	1	[3.0]						
Bilateral, Nephropathy	2	[1.0]						
Cyst	1							
Cyst, Multiple			1				1	
Infarct	1							
Inflammation, Chronic Active					1	[1.0]		
Mineralization	21	[1.9]	23	[1.9]	22	[1.8]	24	[1.9]
Nephropathy							2	[1.5]
Pelvis, Dilatation			1	[1.0]			1	[3.0]

**\*\* END OF REPORT \*\***

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