

**Experiment Number:** 99920-95  
**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(Ethinyl Estradiol)  
**CAS Number:** 57-63-6

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 12:57:57  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>C Number:</b>	MG96006
<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	F4	CONTROL	F4/2PPB TO CTRL	F4/10PPB TO CTRL	F4/50PPB TO CTRL
<b>Disposition Summary</b>					
Animals Initially In Study		25	25	26	25
Early Deaths					
Moribund Sacrifice				1	
Survivors					
Terminal Sacrifice		25	25	25	25
Animals Examined Microscopically		25	25	26	25
<b>ALIMENTARY SYSTEM</b>					
Esophagus		(0)	(0)	(1)	(0)
Liver		(25)	(1)	(2)	(25)
Bile Duct, Hyperplasia				1 [3.0]	1 [1.0]
Cyst		1			
Hepatocyte, Degeneration				1 [4.0]	
Hepatocyte, Necrosis				1 [3.0]	
Hepatodiaphragmatic Nodule				1	
Infiltration Cellular, Lymphocyte		1 [1.0]		1 [4.0]	1 [1.0]
Inflammation, Chronic Active		13 [1.0]			10 [1.1]
Vacuolization Cytoplasmic					1 [1.0]
Pancreas		(0)	(0)	(1)	(0)
Acinar Cell, Degeneration				1 [4.0]	
Infiltration Cellular, Lymphocyte				1 [4.0]	
<b>CARDIOVASCULAR SYSTEM</b>					
Blood Vessel		(0)	(0)	(1)	(0)
Heart		(0)	(0)	(1)	(0)
<b>ENDOCRINE SYSTEM</b>					
Adrenal Cortex		(25)	(0)	(1)	(25)
Accessory Adrenal Cortical Nodule		1			

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

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Date Report Requested: 10/23/2014  
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 Lab: NCTR

CD Rat MALE	F4	CONTROL	F4/2PPB TO CTRL	F4/10PPB TO CTRL	F4/50PPB TO CTRL
Vacuolization Cytoplasmic	4 [1.3]				2 [1.5]
Adrenal Medulla	(25)		(0)	(1)	(25)
Pituitary Gland	(25)		(0)	(2)	(25)
Pars Distalis, Cyst				1	2
Thyroid Gland	(25)		(0)	(0)	(25)
Cyst, Squamous	6				4

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Coagulating Gland	(25)		(25)	(26)	(24)
Bilateral, Developmental Malformation	1				1
Developmental Malformation	9		9	6	10
Hypoplasia				1 [4.0]	
Epididymis	(25)		(25)	(26)	(25)
Atrophy					1 [2.0]
Hypoplasia				1 [4.0]	
Hypospermia					1 [4.0]
Preputial Gland	(0)		(2)	(1)	(0)
Duct, Dilatation			2 [3.0]		
Inflammation, Suppurative			2 [4.0]	1 [3.0]	
Prostate, Dorsal/Lateral Lobe	(6)		(7)	(10)	(6)
Hypoplasia				1 [4.0]	
Inflammation, Suppurative	6 [1.3]		7 [1.1]	9 [1.4]	6 [1.2]
Prostate, Dorsal/lateral Lobe	(19)		(18)	(16)	(19)
Prostate, Ventral Lobe	(25)		(25)	(26)	(25)
Hypoplasia				1 [4.0]	
Infiltration Cellular, Lymphocyte	14 [1.4]		9 [1.3]	13 [1.7]	16 [1.4]
Inflammation, Suppurative	1 [1.0]		1 [2.0]		

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Rete Testes	(25)	(24)	(26)	(25)	
Dilatation					1 [2.0]
Seminal Vesicle	(25)	(25)	(26)	(25)	
Hypoplasia			1 [4.0]		
Testes	(25)	(25)	(26)	(25)	
Hypoplasia			1 [4.0]		
Seminif Tub, Degeneration	1 [1.0]	3 [1.0]			1 [4.0]
<b>HEMATOPOIETIC SYSTEM</b>					
Bone Marrow	(25)	(0)	(1)	(25)	
Spleen	(25)	(0)	(1)	(25)	
Congestion			1 [3.0]		
Hyperplasia, Lymphoid			1 [3.0]		1 [2.0]
Thymus	(25)	(0)	(1)	(25)	
Atrophy			1 [4.0]		
<b>INTEGUMENTARY SYSTEM</b>					
Mammary Gland	(25)	(25)	(25)	(25)	(25)
Alveolus, Hyperplasia	3 [1.0]	5 [2.2]	5 [2.0]	7 [1.9]	
Duct, Hyperplasia	1 [1.0]		2 [1.0]		
Skin	(0)	(0)	(1)	(0)	
<b>MUSCULOSKELETAL SYSTEM</b>					
Bone	(25)	(0)	(1)	(25)	
<b>NERVOUS SYSTEM</b>					
Brain	(0)	(0)	(1)	(0)	
Spinal Cord	(0)	(0)	(1)	(0)	
<b>RESPIRATORY SYSTEM</b>					
Lung	(0)	(0)	(1)	(0)	
Infiltration Cellular, Histiocyte			1 [2.0]		

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Peribronchiolr, Infiltration Cellular, Lymphocyte				1 [4.0]	
Trachea	(0)		(0)	(1)	(0)
SPECIAL SENSES SYSTEM					
None					
URINARY SYSTEM					
Kidney	(25)		(0)	(1)	(25)
Cortex, Cyst	1				4
Epithelium, Pelvis, Hyperplasia					1 [2.0]
Hyaline Droplet					4 [1.0]
Infiltration Cellular, Lymphocyte	14 [1.0]			1 [4.0]	13 [1.2]
Inflammation, Chronic	1 [1.0]				
Interstitialium, Fibrosis				1 [2.0]	2 [1.5]
Renal Tubule, Dilatation	2 [1.0]				5 [1.4]
Renal Tubule, Mineralization					1 [1.0]
Renal Tubule, Regeneration	8 [1.0]				11 [1.0]
Urinary Bladder	(0)		(0)	(1)	(0)

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

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CD Rat FEMALE	F4	CONTROL	F4/2PPB TO CTRL	F4/10PPB TO CTRL	F4/50PPB TO CTRL
<b>Disposition Summary</b>					
Animals Initially In Study		25	25	26	25
Early Deaths					
Natural Death				1	
Survivors					
Terminal Sacrifice		25	25	25	25
Animals Examined Microscopically		25	25	26	25
<b>ALIMENTARY SYSTEM</b>					
Esophagus		(0)	(0)	(1)	(0)
Liver		(25)	(0)	(1)	(25)
Developmental Malformation		1			
Pancreas		(0)	(0)	(1)	(0)
<b>CARDIOVASCULAR SYSTEM</b>					
Blood Vessel		(0)	(0)	(1)	(0)
Heart		(0)	(0)	(1)	(0)
<b>ENDOCRINE SYSTEM</b>					
Adrenal Cortex		(25)	(0)	(2)	(25)
Adrenal Medulla		(25)	(0)	(2)	(25)
Pituitary Gland		(25)	(0)	(1)	(25)
Thyroid Gland		(25)	(0)	(1)	(25)
Bilateral, Keratin Cyst		1			
Keratin Cyst		1			1
<b>GENERAL BODY SYSTEM</b>					
None					
<b>GENITAL SYSTEM</b>					
Clitoral Gland		(3)	(0)	(0)	(0)

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Distended	3				
Inflammation, Chronic Active	3 [3.0]				
Ovary	(25)		(25)	(26)	(25)
Corpus Luteum, Cyst					1
Cyst	2		1		
Diestrus	6		7	9	8
Estrus	7		11	2	2
Follicle, Cyst	1				1
Metestrus	4		3	3	6
Proestrus	8		4	12	9
Oviduct	(25)		(25)	(26)	(25)
Uterus	(25)		(25)	(26)	(25)
Diestrus	5		6	7	7
Estrus	7		11	2	2
Metestrus	5		4	5	7
Proestrus	8		4	12	9
Vagina	(25)		(25)	(26)	(25)
Diestrus	5		6	7	7
Estrus	8		7	4	5
Metestrus	5		8	5	5
Proestrus	7		4	10	8
<b>HEMATOPOIETIC SYSTEM</b>					
Bone Marrow	(25)		(0)	(1)	(25)
Lymph Node	(0)		(0)	(1)	(0)
Lymph Node, Mandibular	(0)		(0)	(1)	(0)
Spleen	(25)		(0)	(2)	(25)
Thymus	(25)		(0)	(1)	(25)

**INTEGUMENTARY SYSTEM**

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Mammary Gland	(25)	(25)	(25)	(26)	(25)
Alveolus, Hyperplasia	11 [1.7]	14 [1.4]	14 [1.4]	7 [1.1]	9 [1.4]
Lobules, Hyperplasia	4 [1.0]	10 [1.3]	10 [1.3]	2 [1.5]	4 [1.3]
Skin	(0)	(0)	(0)	(1)	(0)
<b>MUSCULOSKELETAL SYSTEM</b>					
Bone	(25)	(25)	(25)	(1)	(25)
<b>NERVOUS SYSTEM</b>					
Brain	(0)	(0)	(0)	(1)	(0)
<b>RESPIRATORY SYSTEM</b>					
Lung	(0)	(0)	(0)	(1)	(0)
Trachea	(0)	(0)	(0)	(1)	(0)
<b>SPECIAL SENSES SYSTEM</b>					
None					
<b>URINARY SYSTEM</b>					
Kidney	(25)	(25)	(25)	(26)	(25)
Cortex, Cyst	2				2
Cyst				1	
Nephropathy			1 [1.0]	1 [1.0]	2 [1.0]
Renal Tubule, Mineralization	24 [1.5]		19 [1.3]	19 [1.7]	19 [1.3]

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

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