Route: DOSED FEED

Species/Strain: Rat/CD

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH Date Report Requested: 10/23/2014 AVERAGE SEVERITY GRADES[b]

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

Time Report Requested: 12:00:52

First Dose M/F: NA / NA

Lab: NCTR

C Number: MG96006

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

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

Date Report Requested: 10/23/2014
Time Report Requested: 12:00:52

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

First Dose M/F: NA / NA

Time Report Requested: 12:00:52

CD Rat MALE	F2 CONTROL	F2 2.0 PPB	F2 10 PPB	F2 50 PPB
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				
Intestine Small, Ileum	(0)	(1)	(0)	(0)
Hyperplasia, Lymphoid		1 [2.0]		
Liver	(25)	(1)	(1)	(25)
Erythrophagocytosis				1 [1.0]
Hematopoietic Cell Proliferation				1 [1.0]
Hepatodiaphragmatic Nodule		1	1	1
Infiltration Cellular, Lymphocyte	3 [1.0]			1 [1.0]
Inflammation, Chronic Active	10 [1.0]			12 [1.0]
CARDIOVASCULAR SYSTEM				
None				
ENDOCRINE SYSTEM				
Adrenal Cortex	(25)	(0)	(0)	(25)
Vacuolization Cytoplasmic	1 [1.0]			
Adrenal Medulla	(24)	(0)	(0)	(25)
Pituitary Gland	(23)	(0)	(0)	(25)
Pars Distalis, Cyst, Multiple	1			
Pars Distalis, Hypertrophy				1 [2.0]
Thyroid Gland	(24)	(0)	(0)	(25)
Cyst, Squamous	4			3
Cyst, Squamous, Multiple				2

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)

Route: DOSED FEED

Species/Strain: Rat/CD

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/23/2014 Time Report Requested: 12:00:52

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

Time Report Requested: 12:00:52

First Dose M/F: NA / NA

CD Rat MALE	F2 CONTROL	F2 2.0 PPB	F2 10 PPB	F2 50 PPB
Ectopic Thymus	1			
GENERAL BODY SYSTEM None				
GENITAL SYSTEM				
Coagulating Gland	(25)	(23)	(25)	(25)
Developmental Malformation	8	5	8	8
Epididymis	(25)	(25)	(25)	(25)
Atrophy	2 [2.0]	2 [3.5]	1 [3.0]	1 [2.0]
Hypospermia	3 [4.0]	2 [4.0]	1 [4.0]	1 [4.0]
Infiltration Cellular, Lymphocyte	1 [1.0]	1 [1.0]		1 [1.0]
Preputial Gland	(0)	(2)	(0)	(0)
Duct, Dilatation		1 [3.0]		
Inflammation, Suppurative		2 [4.0]		
Prostate, Dorsal/Lateral Lobe	(12)	(11)	(17)	(13)
Infiltration Cellular, Lymphocyte	8 [1.4]	10 [1.4]	15 [1.5]	10 [1.7]
Inflammation, Suppurative	4 [1.3]	1 [2.0]	2 [1.5]	3 [1.0]
Prostate, Dorsal/lateral Lobe	(13)	(14)	(8)	(12)
Prostate, Ventral Lobe	(25)	(25)	(25)	(25)
Infiltration Cellular, Lymphocyte	9 [1.2]	8 [1.5]	8 [1.3]	11 [1.4]
Inflammation, Suppurative		4 [1.0]	1 [1.0]	4 [1.3]
Rete Testes	(24)	(24)	(23)	(25)
Dilatation	2 [2.5]		1 [2.0]	1 [3.0]
Seminal Vesicle	(25)	(25)	(25)	(25)
Depletion Secretory	1 [3.0]	1 [3.0]		1 [2.0]
Testes	(25)	(25)	(25)	(25)
Seminif Tub, Degeneration	4 [3.3]	3 [3.0]	2 [2.5]	1 [4.0]
HEMATOPOIETIC SYSTEM				
Bone Marrow	(25)	(0)	(0)	(25)
		•	•	

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)

Route: DOSED FEED

Species/Strain: Rat/CD

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/23/2014 Time Report Requested: 12:00:52

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

Time Report Requested: 12:00:52

First Dose M/F: NA / NA

CD Rat MALE	F2 CONTROL	F2 2.0 PPB	F2 10 PPB	F2 50 PPE
Erythroid Cell, Hyperplasia				1 [2.0]
Myeloid Cell, Hyperplasia	2 [2.0]			
Spleen	(25)	(0)	(0)	(25)
Hematopoietic Cell Proliferation	1 [1.0]			1 [1.0]
Pigmentation	1 [1.0]			4 [1.5]
Thymus	(25)	(1)	(0)	(25)
Hemorrhage	1 [3.0]	1 [2.0]		
INTEGUMENTARY SYSTEM				
Mammary Gland	(25)	(25)	(25)	(25)
Alveolus, Hyperplasia	3 [1.7]	3 [1.7]	7 [1.9]	13 [3.0]
Duct, Hyperplasia		5 [1.2]	8 [1.8]	12 [1.8]
MUSCULOSKELETAL SYSTEM				
Bone	(25)	(0)	(0)	(25)
NERVOUS SYSTEM				
None				
RESPIRATORY SYSTEM				
None				
SPECIAL SENSES SYSTEM				
None				
URINARY SYSTEM				
Kidney	(25)	(0)	(25)	(25)
Casts Protein	1 [2.0]	. ,	. ,	,
Cortex, Cyst	4		2	4
Hyaline Droplet	7 [1.7]		1 [1.0]	8 [1.4]
Infiltration Cellular, Lymphocyte	21 [1.2]		7 [1.3]	21 [1.0]
Inflammation, Chronic	1 [2.0]		1 [1.0]	
Interstitium, Fibrosis				1 [1.0]

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)

Route: DOSED FEED

Species/Strain: Rat/CD

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

Date Report Requested: 10/23/2014
Time Report Requested: 12:00:52

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

Time Report Requested: 12:00:52

First Dose M/F: NA / NA

CD Rat MALE	F2 CONTROL	F2 2.0 PPB F2 10 PPB	F2 50 PPB
Pelvis, Dilatation		2 [2.0]	
Renal Tubule, Degeneration		1 [2.0]	1 [1.0]
Renal Tubule, Dilatation	5 [1.8]	2 [1.5]	8 [1.5]
Renal Tubule, Mineralization	1 [1.0]		10 [1.2]
Renal Tubule, Regeneration	12 [1.3]	6 [1.3]	10 [1.1]

^{***}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)

Route: DOSED FEED

Species/Strain: Rat/CD

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

Date Report Requested: 10/23/2014
Time Report Requested: 12:00:52

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

Time Report Requested: 12:00:52

First Dose M/F: NA / NA

Lab: NCTR

CD Rat FEMALE	F2 CONTROL	F2 2.0 PPB	F2 10 PPB	F2 50 PPB
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				
Intestine Small, Ileum	(1)	(0)	(0)	(0)
Peyers Patch, Hyperplasia, Lymphoid	1 [3.0]			
Liver	(25)	(0)	(3)	(25)
Clear Cell Focus				1
Developmental Malformation	2		1	
Infiltration Cellular, Mast Cell, Focal	1 [2.0]			
Inflammation, Chronic			1 [2.0]	
Proliferation Connective Tissue, Focal	1 [2.0]		1 [2.0]	
CARDIOVASCULAR SYSTEM				
None				
ENDOCRINE SYSTEM				
Adrenal Cortex	(25)	(0)	(0)	(25)
Adrenal Medulla	(25)	(0)	(0)	(25)
Pituitary Gland	(25)	(0)	(0)	(25)
Cyst				1
Thyroid Gland	(25)	(0)	(0)	(25)
Ultimobranchial Cyst				1

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: 99920-97 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] Date Report Requested: 10/23/2014 Time Report Requested: 12:00:52

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

Time Report Requested: 12:00:52

First Dose M/F: NA / NA

CD Rat FEMALE	F2 CONTROL	F2 2.0 PPB	F2 10 PPB	F2 50 PPB
GENITAL SYSTEM				
Clitoral Gland	(1)	(2)	(1)	(0)
Abscess		1		
Distended	1	1	1	
Inflammation, Chronic		1 [3.0]		
Inflammation, Chronic Active	1 [2.0]	1 [3.0]	1 [2.0]	
Ovary	(25)	(25)	(25)	(25)
Corpus Luteum, Cyst		1		
Cyst	1		1	
Diestrus	12	14	13	8
Estrus	5	4	5	5
Metestrus	2	4	2	5
Proestrus	6	3	5	7
Oviduct	(25)	(25)	(25)	(25)
Uterus	(25)	(25)	(25)	(25)
Diestrus	10	12	11	8
Estrus	4	4	5	5
Metestrus	6	6	4	5
Proestrus	5	3	5	7
Vagina	(25)	(25)	(25)	(23)
Diestrus	11	12	10	7
Estrus	6	4	5	7
Metestrus	3	6	5	4
Mucocyte, Hyperplasia		2 [2.0]		
Proestrus	5	3	5	5
IEMATOPOIETIC SYSTEM				
Bone Marrow	(25)	(0)	(0)	(25)
Spleen	(25)	(0)	(0)	(25)

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)

Route: DOSED FEED

Species/Strain: Rat/CD

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b] Date Report Requested: 10/23/2014 Time Report Requested: 12:00:52

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

Time Report Requested: 12:00:52

First Dose M/F: NA / NA

CD Rat FEMALE	F2 CONTROL	F2 2.0 PPB	F2 10 PPB	F2 50 PPE
Pigmentation	1 [1.0]			1 [1.0]
Thymus	(25)	(0)	(0)	(25)
INTEGUMENTARY SYSTEM				
Mammary Gland	(25)	(25)	(25)	(25)
Alveolus, Hyperplasia	14 [1.8]	15 [1.5]	12 [1.5]	11 [1.5]
Lobules, Hyperplasia	7 [1.1]	10 [1.8]	13 [1.5]	13 [1.5]
MUSCULOSKELETAL SYSTEM				
Bone	(25)	(0)	(0)	(25)
NERVOUS SYSTEM				
None				
RESPIRATORY SYSTEM				
None				
SPECIAL SENSES SYSTEM				
None			,	
URINARY SYSTEM				
Kidney	(25)	(25)	(25)	(25)
Cortex, Cyst	3	1	3	2
Infarct			2	
Inflammation, Chronic Active		1 [1.0]		1 [1.0]
Nephropathy			1 [1.0]	
Renal Tubule, Mineralization	18 [1.6]	23 [1.4]	20 [1.8]	15 [1.5]

^{**} 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)