

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethiny Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:33

First Dose M/F: NA / NA

Lab: NCTR

C Number: MG96006
Lock Date: 12/02/2008
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: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:33
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male F3 0PPB	DAY ON TEST																					
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	4	4	5	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7
		5	2	2	2	2	6	8	9	9	0	3	4	4	6	7	0	0	4	4	4	4
		4	2	9	1	7	2	5	0	9	1	0	6	9	0	3	0	2	3	1	3	5
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	1	1	2	2	3	3	3	4	4	8	8	8	8	8	8	9	9	9	9	9
		2	1	1	4	5	2	7	8	0	5	1	2	3	3	4	6	7	6	0	1	2
		1	4	9	6	8	5	5	5	3	2	4	0	0	2	5	6	0	7	9	0	1

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	A	+	+	A	+	+	+	+	+	+	A	A	+	+	+	+	A	+	+	+	+	+
Intestine Large, Colon	A	+	+	A	+	+	+	+	+	+	A	A	+	+	+	+	A	+	+	+	+	+
Adenoma	X																					X
Intestine Large, Rectum	A	+	+	A	+	+	+	+	+	+	A	A	+	+	+	+	A	+	+	+	+	+
Intestine Small, Duodenum	A	+	A	A	+	+	+	+	+	+	A	A	+	+	+	+	A	+	+	+	+	+
Adenocarcinoma	X																					X
Intestine Small, Ileum	A	+	A	A	+	+	+	+	+	+	A	A	+	+	+	+	A	+	+	+	+	+
Intestine Small, Jejunum	A	+	+	A	+	+	+	+	+	+	A	A	+	+	+	+	A	+	+	+	+	+
Liver	A	+	+	+	+	+	+	+	+	+	A	A	+	+	+	+	A	+	+	+	+	+
Cholangiocarcinoma	X																					X
Cholangioma	X																					X
Hepatocellular Adenoma																						X
Mesentery																						
Oral Mucosa																						
Squamous Cell Carcinoma																						
Pancreas	A	+	A	A	+	+	+	+	+	+	A	A	+	+	+	+	A	+	+	+	+	+
Salivary Glands	A	+	+	+	+	+	+	+	+	+	A	A	+	+	+	+	A	+	+	+	+	+
Stomach, Forestomach	A	+	A	A	+	+	+	+	+	I	A	A	+	+	+	+	A	+	+	+	+	+
Stomach, Glandular	A	+	A	A	+	+	+	+	+	A	A	+	+	+	+	A	+	+	+	+	+	+

Cardiovascular System

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:33
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male F3 0PPB	DAY ON TEST	ANIMAL ID																				
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	4	4	5	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7
		5	2	2	2	2	6	8	9	9	0	3	4	4	6	7	0	0	4	4	4	4
		4	2	9	1	7	2	5	0	9	1	0	6	9	0	3	0	2	3	1	3	5
Blood Vessel		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Endocrine System																						
Adrenal Cortex		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenoma																						
Adrenal Medulla		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pheochromocytoma Benign																			X			
Pheochromocytoma Malignant																			X			
Islets, Pancreatic		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenoma																			X			
Parathyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+
Adenoma																X						
Pituitary Gland		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pars Distalis, Adenoma															X	X	X	X	X	X	X	X
Thyroid Gland		A	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+
C Cell, Carcinoma																		X				
General Body System																						
NONE																						
Genital System																						
Coagulating Gland		A	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	A	+	+	+	+
Epididymis		A	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:34
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male F3 0PPB	DAY ON TEST	ANIMAL ID																						
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	4	4	5	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7
		5	2	2	2	2	6	8	9	9	0	3	4	4	6	7	0	0	4	4	4	4	4	4
		4	2	9	1	7	2	5	0	9	1	0	6	9	0	3	0	2	3	1	3	5	9	9
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Preputial Gland	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Squamous Cell Carcinoma														X			X							
Prostate, Dorsal/Lateral Lobe		+	+	+	+	+								+										
Prostate, Ventral Lobe	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Rete Testes		+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	M	M	+	+	+	M	+	
Seminal Vesicle	A	+	A	A	+	+	+	+	+	A	A	+	+	+	+	A	+	+	+	+	+	+	+	
Testes		+	+	+	+	+	+	+	+	2	4	0	0	2	5	6	0	7	9	0	1	2	1	
Hematopoietic System																								
Bone Marrow	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node																								
Lymph Node, Mandibular	A	+	+	+	+	+	+	+	+	A	+	+	+	M	+	+	+	+	+	+	+	+	+	
Lymph Node, Mesenteric	A	+	+	A	+	+	+	+	+	A	A	+	M	+	+	A	+	+	+	+	+	+	+	
Spleen	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Thymus	A	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	
Integumentary System																								
Mammary Gland	A	M	A	+	+	M	+	M	+	+	A	+	M	+	M	+	+	+	+	+	+	+	+	
Fibroma																								
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Basal Cell Adenoma																								
Sarcoma																	X							
Musculoskeletal System																								

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:34

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male F3 0PPB	DAY ON TEST	ANIMAL ID																						
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		1	4	4	5	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	
		5	2	2	2	2	6	8	9	9	0	3	4	4	6	7	0	0	4	4	4	4	4	
		4	2	9	1	7	2	5	0	9	1	0	6	9	0	3	0	2	3	1	3	5	9	
Bone, Femur		+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	+	+	
Skeletal Muscle			+												+	+								
Nervous System																								
Brain, Brain Stem		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Brain, Cerebellum		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Brain, Cerebrum		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Osteoma														X										
Peripheral Nerve															+	+								
Spinal Cord															A	A								
Respiratory System																								
Lung		A	+	A	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	
Nose		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Trachea		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Special Senses System																								
Eye		A	+	A	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	
Retrobulbar, Squamous Cell Carcinoma, Deep Invasion																	X							
Harderian Gland		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lacrimal Gland															+									
Zymbal's Gland																								
Carcinoma																X								

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

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Experiment Number: 99920-93

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/23/2014

Test Type: SPECIAL STUDY

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

Time Report Requested: 11:55:34

Route: DOSED FEED

CAS Number: 57-63-6

First Dose M/F: NA / NA

Species/Strain: Rat/CD

Lab: NCTR

CD Rat Male F3 OPPB	DAY ON TEST																										
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	4	4	5	5	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
	5	2	2	2	2	6	8	9	9	0	3	4	4	6	7	0	0	4	4	4	4	4	4	4	4	4	4
	4	2	9	1	7	2	5	0	9	1	0	6	9	0	3	0	2	3	1	3	5	9	9	9	9	9	9
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	1	1	2	2	3	3	3	4	4	8	8	8	8	8	8	8	9	9	9	1	1	1	1	1	1	
	2	1	1	4	5	5	2	7	8	0	5	1	2	3	3	4	6	7	6	7	9	1	2	1	1	2	
	1	4	9	6	8	5	5	5	3	2	4	0	3	2	5	6	6	7	9	9	1	1	1	2	0	2	

Urinary System

Kidney

Urethra

+ +

Urinary Bladder

† † † † † † †

SYSTEMIC LESIONS

Multiple Organ

Lymphoma Malignant

* ..Total animals with tissue examined microscopically: Total animals with tumor

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CD Rat Male F3 0PPB	DAY ON TEST	0 0																		
		7 7																		
		4 4 5																		
		9 9 0 0 0 0 0 0 2 2 3 3 4 4 5 5 5 5 5 5 5 5																		
		0 0																		
ANIMAL ID		1 1 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1																		
		0 0 9 9 9 9 9 9 0 1 0 1 0 1 0 1 0 1 1 1 1 1																		
		0 1 4 4 5 9 9 4 2 3 1 5 0 9 0 0 0 0 0 0 0 0																		
		9 0 4 9 0 4 5 9 0 7 9 3 9 9 9 2 5 6 7 8																		
*TOTALS																				

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Adenoma																				2
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
Adenocarcinoma																				2
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Cholangiocarcinoma																				2
Cholangioma																				1
Hepatocellular Adenoma																				1
Mesentery																				4
Oral Mucosa																				3
Squamous Cell Carcinoma																				3
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45

Cardiovascular System

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

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Lab: NCTR

CD Rat Male F3 0PPB	DAY ON TEST																			
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blood Vessel		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Heart		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Endocrine System																				
Adrenal Cortex		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Adenoma													X							1
Adrenal Medulla		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Pheochromocytoma Benign			X										X							4
Pheochromocytoma Malignant				X																1
Islets, Pancreatic		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Adenoma																				2
Parathyroid Gland		+	+	+	+	M	+	I	+	+	+	+	+	+	+	+	+	+	+	47
Adenoma																				1
Pituitary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Pars Distalis, Adenoma							X	X			X	X		X	X	X	X	X	X	24
Thyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
C Cell, Carcinoma					X		X													3
General Body System																				
NONE																				
Genital System																				
Coagulating Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Epididymis		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49

* ..Total animals with tissue examined microscopically; Total animals with tumor

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Experiment Number: 99920-93

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Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:34

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male F3 0PPB	DAY ON TEST	ANIMAL ID																		*TOTALS	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7		
		4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5		
		9	9	0	0	0	0	0	0	2	2	3	3	4	4	5	5	5	5		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		1	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1		
		0	0	9	9	9	9	9	0	1	0	1	0	1	0	1	1	1	1		
		0	1	4	4	5	9	9	4	2	3	1	5	0	9	0	0	0	0		
		9	0	4	9	0	4	5	9	0	7	9	3	9	9	2	5	6	7	8	
Preputial Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Squamous Cell Carcinoma																				2	
Prostate, Dorsal/Lateral Lobe																				50	
Prostate, Ventral Lobe		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Rete Testes		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46	
Seminal Vesicle		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44	
Testes		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hematopoietic System																					
Bone Marrow		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Lymph Node		+																M		14	
Lymph Node, Mandibular		M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46	
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44	
Spleen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Thymus		+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	47	
Integumentary System																					
Mammary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	42	
Fibroma																		X		1	
Skin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Basal Cell Adenoma																				2	
Sarcoma																				1	
Musculoskeletal System																					

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:35

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male F3 0PPB	DAY ON TEST	ANIMAL ID																		*TOTALS
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bone, Femur		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Skeletal Muscle																				3
Nervous System																				
Brain, Brain Stem		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Brain, Cerebellum		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Brain, Cerebrum		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Osteoma																				1
Peripheral Nerve																				2
Spinal Cord																				0
Respiratory System																				
Lung		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Nose		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Trachea		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Special Senses System																				
Eye		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Retrobulbar, Squamous Cell Carcinoma, Deep Invasion																				1
Harderian Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Lacrimal Gland																				1
Zymbal's Gland																				1
Carcinoma																				1

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:35

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male
F3 0PPB

DAY ON TEST	0 0																	
	7 7																	
4 4 5	0 0																	
9 9 0 0 0 0 0 0 0 2 2 3 3 4 4 5 5 5 5 5 5 5	0 0																	
0 0	0 0																	
1 1 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0																	
0 0 9 9 9 9 9 9 0 1 0 1 0 1 0 1 0 1 1 1 1	0 0																	
0 1 4 4 5 9 9 4 2 3 1 5 0 9 0 0 0 0 0 0 0	0 0																	
9 0 4 9 0 4 5 9 0 7 9 3 9 9 2 5 6 7 8	0 0																	

TOTALS*Urinary System**

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Urethra																			3
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
SYSTEMIC LESIONS																			
Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymphoma Malignant																			2

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:35
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male F3/2PPB TO CTL	DAY ON TEST																								
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		3	3	4	5	5	5	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7
		3	4	3	2	8	9	1	2	3	3	4	5	6	6	6	7	7	8	2	2	3	3	4	4
		1	7	4	7	6	6	8	8	0	8	6	3	0	6	6	3	4	0	0	4	4	7	9	9
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	1	2	3	4	8	8	8	8	8	8	8	8	8	8	8	8	9	9	1	9	9	9
		5	6	2	5	7	0	0	1	1	1	2	2	3	3	3	4	4	4	8	9	0	0	1	1
		6	3	8	7	4	1	6	2	3	6	1	6	3	4	5	1	3	9	6	3	2	4	6	7

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	A	+	+	A	+	A	+	A	+	+	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	A	+	+	A	+	A	+	A	+	+	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	A	+	+	A	+	A	+	A	+	+	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	A	+	+	A	+	A	+	A	+	+	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	A	+	+	A	+	A	+	A	+	+	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	A	+	+	A	+	A	+	A	+	+	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	+	A	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+

Squamous Cell Carcinoma, Metastatic,
Stomach, Forestomach

X

Oral Mucosa

+

+

Squamous Cell Carcinoma

X

X

Pancreas

+

Squamous Cell Carcinoma, Metastatic,
Stomach, Forestomach

X

Salivary Glands

+

Stomach, Forestomach

+

Squamous Cell Carcinoma

X

Stomach, Glandular

+

Cardiovascular System

Blood Vessel

+

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:35

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male F3/2PPB TO CTL	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		3	3	4	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	
		3	4	3	2	8	9	1	2	3	3	4	5	6	6	6	7	7	8	2	2	3	3	4	4	4	4	4	4	
		1	7	4	7	6	6	8	8	0	8	6	3	0	6	6	3	4	0	0	4	4	7	9	9	9	9	9	9	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
		0	0	1	2	3	4	8	8	8	8	8	8	8	8	8	8	8	8	8	9	1	9	9	9	9	9	0	0	0
		5	6	2	5	7	0	0	1	1	1	2	2	3	3	3	4	4	4	8	9	0	1	1	2	5	9	9	0	0
		6	3	8	7	4	1	6	2	3	6	1	6	3	4	5	1	3	9	6	3	2	4	6	7	8	1	6	6	7

Heart

+ +

X

X

Endocrine System

Adrenal Cortex

+ +

X

Adenoma

Adrenal Medulla

+ +

X

Pheochromocytoma Benign

+ +

X

Islets, Pancreatic

+ +

X

Adenoma

+ +

X

Parathyroid Gland

+ +

X

Adenoma

Pituitary Gland

+ +

X

Pars Distalis, Adenoma

X X

X

Pars Intermed, Adenoma

X X

X

Thyroid Gland

+ +

X

Follicular Cel, Adenoma

+ +

X

General Body System

NONE

Genital System

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
Time Report Requested: 11:55:36
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Male
F3/2PPB TO CTL | DAY ON TEST | Day On Test | | | | | | | | | | | | | | | | | | | | |
|--|-------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 3 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 3 | 4 | 3 | 2 | 8 | 9 | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 7 | 8 | 2 | 2 | 3 | 3 |
| | 1 | 7 | 4 | 7 | 6 | 6 | 8 | 8 | 0 | 8 | 6 | 3 | 0 | 6 | 6 | 3 | 4 | 0 | 0 | 4 | 7 | 9 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| | 0 | 0 | 1 | 2 | 3 | 4 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 1 | 9 | 9 |
| | 5 | 6 | 2 | 5 | 7 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 8 | 9 | 0 | 1 |
| | 6 | 3 | 8 | 7 | 4 | 1 | 6 | 2 | 3 | 6 | 1 | 6 | 3 | 4 | 5 | 1 | 3 | 9 | 6 | 3 | 2 | 4 |
| | 6 | 3 | 8 | 7 | 4 | 1 | 6 | 2 | 3 | 6 | 1 | 6 | 3 | 4 | 5 | 1 | 3 | 9 | 6 | 3 | 2 | 4 |
| Coagulating Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Squamous Cell Carcinoma, Metastatic,
Stomach, Forestomach | | | | | | | | | | | | | | | X | | | | | | | |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | X | | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | X | | | | | X | | |
| Prostate, Dorsal/Lateral Lobe | + | + | | + | | + | | | | | | | | | + | | | | | + | + | + |
| Squamous Cell Carcinoma, Metastatic,
Stomach, Forestomach | | | | | | | | | | | | | | | X | | | | | | | |
| Prostate, Ventral Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Rete Testes | + | + | + | + | + | + | M | + | + | + | + | + | M | + | + | + | + | + | M | + | + | |
| Seminal Vesicle | A | + | + | A | + | A | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Interstit Cell, Adenoma | | | | | | | | | | | X | | | | | | | | | | | |
| Squamous Cell Carcinoma, Metastatic,
Stomach, Forestomach | | | | | | | | | | | | X | | | | | | | | | | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | | | | | | | | | | | | | | | + | | | | | + | + | + |
| Lymph Node, Mandibular | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node, Mesenteric | A | + | + | A | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:36

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3/2PPB TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 3 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |
| | 3 | 4 | 3 | 2 | 8 | 9 | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 1 | 7 | 4 | 7 | 6 | 6 | 8 | 8 | 0 | 8 | 6 | 3 | 0 | 6 | 6 | 3 | 4 | 0 | 4 | 7 | 9 |
| Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach | | | | | | | | | | | | | | | | | X | | | | |
| Spleen | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach | | | | | | | | | | | | | | | | | X | | | | |
| Thymus | A | + | + | + | + | + | + | A | + | + | + | M | + | + | + | + | + | + | + | + | + |
| Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach | | | | | | | | | | | | | | | | | X | | | | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | A | + | + | + | + | M | + | + | + | M | M | M | + | + | + | + | M | + | + | M | + |
| Fibroadenoma | | | | | | | | | | | | | | | | | | X | | | |
| Fibroma | | | | | | | | | | | | | | | | | | | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | X | | | |
| Lipoma | | | | | | | | | | | | | | | | | | | | | X |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | + | | | | |
| Cranium, Squamous Cell Carcinoma, Deep Invasion | | | | | | | | | | | | | | | | | X | | | | |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle | | + | | | | | | | | | | | | | | | | + | | | |
| Diaphragm, Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach | | | | | | | | | | | | | | | | | X | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**Test Compound:** ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)**CAS Number:** 57-63-6**Date Report Requested:** 10/23/2014**Time Report Requested:** 11:55:36**First Dose M/F:** NA / NA**Lab:** NCTR
CD Rat Male
F3/2PPB TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 3 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 3 | 4 | 3 | 2 | 8 | 9 | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 7 | 8 | 2 | 2 | 3 | 3 |
| | 1 | 7 | 4 | 7 | 6 | 6 | 8 | 8 | 0 | 8 | 6 | 3 | 0 | 6 | 6 | 3 | 4 | 0 | 0 | 4 | 7 | 9 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| | 0 | 0 | 1 | 2 | 3 | 4 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 1 | 9 | 9 |
| | 5 | 6 | 2 | 5 | 7 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 8 | 9 | 0 |
| | 6 | 3 | 8 | 7 | 4 | 1 | 6 | 2 | 3 | 6 | 1 | 6 | 3 | 4 | 5 | 1 | 3 | 9 | 6 | 3 | 2 | 4 |
| | | | | | | | | | | | | | | | | | | | | 6 | 7 | 8 |

Nervous System

| | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Peripheral Nerve | + | | | | | | | | | | | | | | | | | | | | | | |
| Spinal Cord | A | | | | | | | | | | | | | | | | | | | | | | |

Respiratory System

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach | | | | | | | | | | | | | | | | X | | | | | | | |
| Nose | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Special Senses System

| | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Harderian Gland | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lacrimal Gland | | | | | | | | | | | | | | | | | | | | | | | |

Urinary System

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Sarcoma | | | | | | | | | | | | | | | | X | | | | | | | |
| Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach | | | | | | | | | | | | | | | | X | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:36

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3/2PPB TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 3 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
| 3 | 4 | 3 | 2 | 8 | 9 | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 7 | 8 | 2 | 2 | 3 |
| 1 | 7 | 4 | 7 | 6 | 6 | 8 | 8 | 0 | 8 | 6 | 3 | 0 | 6 | 6 | 3 | 4 | 0 | 0 | 4 | 7 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 0 | 0 | 1 | 2 | 3 | 4 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 1 | 9 |
| 5 | 6 | 2 | 5 | 7 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 8 | 9 | 0 |
| 6 | 3 | 8 | 7 | 4 | 1 | 6 | 2 | 3 | 6 | 1 | 6 | 3 | 4 | 5 | 1 | 3 | 9 | 6 | 3 | 2 |
| | | | | | | | | | | | | | | | | | | 4 | 6 | 7 |
| | | | | | | | | | | | | | | | | | | 8 | 1 | 6 |
| | | | | | | | | | | | | | | | | | | 6 | 6 | 7 |
| | | | | | | | | | | | | | | | | | | 7 | 7 | 8 |

Urethra

+

Urinary Bladder

+ + + A +

SYSTEMIC LESIONS

Multiple Organ

+ +

Leukemia Mononuclear

X

Lymphoma Malignant

X

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:36
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F3/2PPB TO CTL

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 9 | 0 | 0 | 0 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1 | 4 | 4 | 8 | 8 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 0 |
| 5 | 6 | 7 | 8 | 4 | 7 | 8 | 3 | 4 | 5 | 5 | 6 | 7 | 8 | 6 | 7 | 9 | 3 |
| | | | | | | | | | | | | | | | | | *TOTALS |

Alimentary System

| | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 48 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Small, Ileum | + | + | + | + | A | + | A | A | + | + | + | A | + | + | + | + | + | 38 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | 41 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Squamous Cell Carcinoma, Metastatic,
Stomach, Forestomach | | | | | | | | | | | | | | | | | | 1 |
| Oral Mucosa | | | | | | | | | | | | | | | | | | 8 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | 4 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Squamous Cell Carcinoma, Metastatic,
Stomach, Forestomach | | | | | | | | | | | | | | | | | | 1 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | 1 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Cardiovascular System | | | | | | | | | | | | | | | | | | |
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
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Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
Time Report Requested: 11:55:37
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Male
F3/2PPB TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | |
| | 9 | 0 | 0 | 0 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Endocardium, Schwannoma Malignant | | | | | | | | | | | | | | | | | | 1 | |
| Squamous Cell Carcinoma, Metastatic,
Stomach, Forestomach | | | | | | | | | | | | | | | | | | 1 | |
| Endocrine System | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Adenoma | | | | | | | | | | | | | | | | | | 1 | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | 48 | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | X | | | 4 | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Adenoma | | | | | | | | | | | | | | | | | | 1 | |
| Parathyroid Gland | + | + | + | + | + | + | M | + | M | + | M | + | + | + | + | + | + | 44 | |
| Adenoma | | | | | | | | | | | | | | | | | | 1 | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Pars Distalis, Adenoma | X | X | | X | X | X | X | | | X | | | | X | X | X | | 20 | |
| Pars Intermed, Adenoma | | | | | | | | | | | | | | | | | | 1 | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Follicular Cel, Adenoma | | | | | | | | | | | | | | X | | | | 1 | |
| General Body System | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

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I ..Insufficient tissue

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First Dose M/F: NA / NA
Lab: NCTR

CD Rat Male
F3/2PPB TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| 9 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 1 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | |
| 1 | 4 | 4 | 4 | 8 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 0 | 0 | |
| 5 | 6 | 7 | 8 | 4 | 7 | 8 | 3 | 4 | 5 | 6 | 7 | 8 | 6 | 7 | 9 | 3 | 4 | | |
| Coagulating Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Squamous Cell Carcinoma, Metastatic,
Stomach, Forestomach | | | | | | | | | | | | | | | | | | X | 1 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Carcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | 3 |
| Prostate, Dorsal/Lateral Lobe | + | | M | | | | | | | | | | | | | | | + | 48 |
| Squamous Cell Carcinoma, Metastatic,
Stomach, Forestomach | | | | | | | | | | | | | | | | | | | 1 |
| Prostate, Ventral Lobe | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Rete Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | 45 | |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Interstit Cell, Adenoma | | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Carcinoma, Metastatic,
Stomach, Forestomach | | | | | | | | | | | | | | | | | | | 1 |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Lymph Node | + | | + | | + | | | | | | | | | | | | | 16 | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

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CAS Number: 57-63-6

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First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3/2PPB TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 9 | 0 | 0 | 0 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | |
| Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach | | | | | | | | | | | | | | | | | | | 1 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach | | | | | | | | | | | | | | | | | | | 1 |
| Thymus | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | 45 | |
| Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach | | | | | | | | | | | | | | | | | | | 1 |
| Integumentary System | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 42 | |
| Fibroadenoma | | | | | | | | | | | | | | | | X | | 2 | |
| Fibroma | | | | | | X | | | | | | | | | | | | 1 | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Keratoacanthoma | | | | | | X | | | | | | | | | | | | 2 | |
| Lipoma | | | | | | | | | | | | | | | | | | 2 | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | 1 | |
| Cranium, Squamous Cell Carcinoma, Deep Invasion | | | | | | | | | | | | | | | | | | 1 | |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | 4 | |
| Diaphragm, Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach | | | | | | | | | | | | | | | | | | 1 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

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I ..Insufficient tissue

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 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F3/2PPB TO CTL

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 9 | 0 | 0 | 0 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1 | 4 | 4 | 8 | 8 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 0 |
| 5 | 6 | 7 | 8 | 4 | 7 | 8 | 3 | 4 | 5 | 6 | 7 | 8 | 6 | 7 | 9 | 3 | 4 |

*TOTALS

Nervous System

| | | | | | | | | | | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Peripheral Nerve | | | | | | | | | | | | | | | | | | 4 |
| Spinal Cord | | | | | | | | | | | | | | | | | | 0 |

Respiratory System

| | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Squamous Cell Carcinoma, Metastatic,
Stomach, Forestomach | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

Special Senses System

| | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Lacrimal Gland | | | | | | | | | | | | | | | | | | 1 |

Urinary System

| | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Sarcoma | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Carcinoma, Metastatic,
Stomach, Forestomach | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

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I ..Insufficient tissue

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Date Report Requested: 10/23/2014

Time Report Requested: 11:55:37

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3/2PPB TO CTL**

| DAY ON TEST | | | | | | | | | | | | | | | | | | |
|-------------------------|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 9 | 0 | 0 | 0 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | 1 | 4 | 4 | 8 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 0 | 0 |
| | 5 | 6 | 7 | 8 | 4 | 7 | 8 | 3 | 4 | 5 | 6 | 7 | 8 | 6 | 7 | 9 | 3 | 4 |
| | *TOTALS | | | | | | | | | | | | | | | | | |
| Urethra | | | | | | | | | | | | | | | | | | 1 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
Time Report Requested: 11:55:37
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Male
F3/10PPBTO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 3 | 3 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 9 | 0 | 8 | 2 | 3 | 6 | 6 | 8 | 5 | 7 | 7 | 8 | 9 | 0 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 5 |
| | | 8 | 2 | 9 | 4 | 9 | 5 | 8 | 2 | 6 | 4 | 4 | 6 | 9 | 9 | 0 | 1 | 3 | 4 | 7 | 8 | 8 | 9 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 3 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | | 2 | 4 | 8 | 1 | 8 | 3 | 3 | 6 | 3 | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 5 | 5 | 1 | 4 |
| | | 4 | 7 | 5 | 6 | 1 | 1 | 4 | 8 | 1 | 2 | 6 | 0 | 9 | 7 | 8 | 7 | 7 | 6 | 7 | 7 | 8 | 3 | 4 |
| | | 4 | 7 | 5 | 6 | 1 | 1 | 4 | 8 | 1 | 2 | 6 | 0 | 9 | 7 | 8 | 7 | 7 | 6 | 7 | 7 | 8 | 3 | 5 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | + | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | X | | | | | | | |
| Intestine Large, Rectum | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Anus, Sarcoma | | | | | | | | | | | | | | | | X | | | | | | | | |
| Intestine Small, Duodenum | + | + | + | A | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Ileum | + | + | + | A | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Jejunum | + | + | A | A | A | + | A | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cholangioma | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | + | | | | | | | | | |
| Squamous Cell Carcinoma, Metastatic,
Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | | | |
| Oral Mucosa | | | | | | | | | | | | | | | + | | | | + | | | | | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | X | | | | | | | | |
| Pancreas | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Glandular | + | + | + | A | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | |
| Cardiovascular System | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:38
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male
F3/10PPBTO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 3 | 3 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 9 | 0 | 8 | 2 | 3 | 6 | 6 | 8 | 5 | 7 | 7 | 8 | 9 | 0 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 8 | 2 | 9 | 4 | 9 | 5 | 8 | 2 | 6 | 4 | 4 | 6 | 9 | 9 | 0 | 1 | 3 | 4 | 7 | 8 | 8 | 9 | 9 | 9 | 9 | 0 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 3 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | | 2 | 4 | 8 | 1 | 8 | 3 | 3 | 6 | 3 | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 9 | 0 | 5 | 5 | 1 | 1 | 4 | 8 | 8 |
| | | 4 | 7 | 5 | 6 | 1 | 1 | 4 | 8 | 1 | 2 | 6 | 0 | 9 | 7 | 8 | 7 | 7 | 6 | 7 | 7 | 8 | 3 | 4 | 5 | 8 |
| Blood Vessel | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Endocrine System | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Bilateral, Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pars Distalis, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | + | + |
| Pars Intermed, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:38
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male
F3/10PPBTO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ANIMAL ID | 1 | 3 | 3 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 9 | 0 | 8 | 2 | 3 | 6 | 6 | 8 | 5 | 7 | 7 | 8 | 9 | 0 | 2 | 2 | 2 | 3 | 4 | 4 | 4 |
| | | 8 | 2 | 9 | 4 | 9 | 5 | 8 | 2 | 6 | 4 | 4 | 6 | 9 | 9 | 0 | 1 | 3 | 4 | 7 | 8 | 9 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 3 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 |
| | | 2 | 4 | 8 | 1 | 8 | 3 | 3 | 6 | 3 | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 5 | 1 |
| | | 4 | 7 | 5 | 6 | 1 | 1 | 4 | 8 | 1 | 2 | 6 | 0 | 9 | 7 | 8 | 7 | 7 | 6 | 7 | 8 | 3 |
| Coagulating Gland | | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Epididymis | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Preputial Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | X |
| Prostate, Dorsal/Lateral Lobe | | + | + | | | | | | | | | | | | | | | | | | | |
| Prostate, Ventral Lobe | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Rete Testes | | + | + | M | + | M | + | + | + | + | + | + | + | + | M | + | M | + | + | + | + | + |
| Seminal Vesicle | | + | + | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Testes | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node | | | | | | | | | | | | | | | A | | | | | | | + |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric | | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen | | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Thymus | | + | + | + | M | A | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | M | M | + | A | M | + | M | M | M | M | M | + | + | + | + | + | M | + | + | + | + |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | | | | X |
| Fibroma | | | | | | | | | | | | | | | | | | | | | | |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | | X |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:38

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male
F3/10PPBTO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 1 | 3 | 3 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | | 9 | 0 | 8 | 2 | 3 | 6 | 6 | 8 | 5 | 7 | 7 | 8 | 9 | 0 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | | |
| | | 8 | 2 | 9 | 4 | 9 | 5 | 8 | 2 | 6 | 4 | 4 | 6 | 9 | 9 | 0 | 1 | 3 | 4 | 7 | 8 | 9 | 9 | | |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | X | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | | | | + | | |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Skeletal Muscle | | + | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Brain, Cerebellum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Granular Cell Tumor Malignant | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Cerebrum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Granular Cell Tumor Malignant | | | | | | | | | | | | | | | | | | | | | | | | | |
| Peripheral Nerve | | A | | | | | | | | | | | | | | | | | | | | | | | |
| Spinal Cord | | A | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Alveolar/Bronchiolar Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Schwannoma Malignant, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma, Metastatic,
Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:38
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male
F3/10PPBTO CTL | DAY ON TEST | 0 |
|---|-------------|---|
| | ANIMAL ID | 0 |
| | | 0 0 0 1 2 3 3 3 3 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 |
| | | 2 4 8 1 8 3 3 6 3 4 4 6 6 7 7 8 8 9 0 5 5 1 1 4 8 8 8 |
| | | 4 7 5 6 1 1 4 8 1 2 6 0 9 7 8 7 7 6 7 7 8 3 4 5 8 6 7 0 3 5 5 |

Special Senses System

Ear

Squamous Cell Papilloma

Eye

+ + + A A +

Harderian Gland

+ +

Lacrimal Gland

+ +

Zymbal's Gland

+ +

Carcinoma

X

Squamous Cell Carcinoma

X

Urinary System

Kidney

+ +

Urethra

+

Urinary Bladder

+ +

SYSTEMIC LESIONS

Multiple Organ

+ +

Leukemia Mononuclear

X

Lymphoma Malignant

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

Experiment Number: 99920-93
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 Time Report Requested: 11:55:38
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F3/10PPBTO CTL

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 |
| 3 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 1 | 1 | 1 | 1 | 9 | 9 | 0 |
| 0 | 5 | 6 | 9 | 1 | 2 | 3 | 4 | 5 | 8 | 0 | 0 | 1 | 7 | 8 | 7 | 8 | 0 | 1 |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Adenoma | | | | | | | | | | | | | | | | | | 1 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Anus, Sarcoma | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cholangioma | | | | | | | | | | | | | | | | | | 1 |
| Mesentery | + | | | | + | | | | + | + | | | | + | | | | 6 |
| Squamous Cell Carcinoma, Metastatic,
Uncertain Primary Site | | | | | | | | | | | | | | X | | | | 1 |
| Oral Mucosa | | | | | | + | | | | | | | | | | | | 4 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |

Cardiovascular System

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:39
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F3/10PPBTO CTL

| DAY ON TEST | CD Rat Male | | | | | | | | | | | | | | | | | |
|------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 |
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Endocrine System | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma | | X | | | | | | | | | | | | | | | | 1 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Bilateral, Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | 1 |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | 5 |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | X |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | X | | X | | | | | | | | | | | | | 3 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Pars Distalis, Adenoma | | X | X | X | X | | | | | | | | | | | | | 18 |
| Pars Intermed, Adenoma | | | | | | | | | | | | | | | | | | 1 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | 1 |
| C Cell, Carcinoma | | | | | X | | | X | | | | | | | | | | 3 |
| General Body System | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:39

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3/10PPBTO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|-------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | |
| Coagulating Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | 4 | |
| Prostate, Dorsal/Lateral Lobe | | | | | | | | | | | | | | | | | | 50 | |
| Prostate, Ventral Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Rete Testes | + | + | + | M | + | M | + | + | + | + | + | + | M | + | + | + | + | 43 | |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node | | | | | | | | | | | | | | | | | | 13 | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Integumentary System | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | 1 | |
| Fibroma | | | | | | | | | | | | | | | | | | 1 | |
| Keratoacanthoma | | | | | X | | | X | | | | | | | | | | 3 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:39

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3/10PPBTO CTL**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 |
| | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 1 | 1 | 1 | 1 | 9 | 9 | 0 | 0 |
| | 0 | 5 | 6 | 9 | 1 | 2 | 3 | 4 | 5 | 8 | 0 | 0 | 1 | 7 | 8 | 7 | 8 | 0 | 1 |

***TOTALS**

1

Schwannoma Malignant

Musculoskeletal System

Bone

Bone, Femur

Skeletal Muscle

1

50

3

Nervous System

Brain, Brain Stem

Brain, Cerebellum

Granular Cell Tumor Malignant

Brain, Cerebrum

Granular Cell Tumor Malignant

Peripheral Nerve

Spinal Cord

50

50

1

50

1

2

0

Respiratory System

Lung

Alveolar/Bronchiolar Adenoma

Schwannoma Malignant, Metastatic, Skin

Squamous Cell Carcinoma, Metastatic,

Uncertain Primary Site

48

1

1

1

Nose

Trachea

49

50

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:39

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3/10PPBTO CTL**

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | |
|----------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 5 | | | | | | | | | | | | | | | | | | |
| | 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5 5 | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | |
| | 3 3 3 3 6 6 6 6 6 6 6 6 6 7 1 1 1 1 1 9 9 9 | | | | | | | | | | | | | | | | | | |
| | 0 5 6 9 1 2 3 4 5 8 0 0 1 7 8 7 8 0 0 1 | | | | | | | | | | | | | | | | | | |
| *TOTALS | | | | | | | | | | | | | | | | | | | |

Special Senses System

| | | |
|-------------------------|---|----|
| Ear | + | 1 |
| Squamous Cell Papilloma | X | 1 |
| Eye | + | 48 |
| Harderian Gland | + | 50 |
| Lacrimal Gland | | 2 |
| Zymbal's Gland | | 2 |
| Carcinoma | | 1 |
| Squamous Cell Carcinoma | | 1 |

Urinary System

| | | |
|-----------------|---|----|
| Kidney | + | 50 |
| Urethra | | 1 |
| Urinary Bladder | + | 49 |

SYSTEMIC LESIONS

| | | |
|----------------------|---|----|
| Multiple Organ | + | 50 |
| Leukemia Mononuclear | | 1 |
| Lymphoma Malignant | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:39
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male
F3/50PPBTO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 3 | 0 | 5 | 6 | 0 | 2 | 5 | 5 | 7 | 0 | 0 | 0 | 1 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | 9 | 4 | 3 | 9 | 8 | 5 | 5 | 5 | 4 | 3 | 9 | 9 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| | | 0 | 2 | 3 | 3 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 |
| | | 1 | 1 | 1 | 3 | 0 | 1 | 2 | 2 | 4 | 6 | 7 | 7 | 8 | 0 | 1 | 2 | 5 | 5 | 6 | 6 | 6 |
| | | 9 | 9 | 1 | 2 | 5 | 1 | 4 | 5 | 4 | 9 | 6 | 8 | 1 | 6 | 6 | 2 | 1 | 9 | 0 | 1 | 2 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | A | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum | A | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | A | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | A | + | A | + | M | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Hepatocellular Adenoma

X

| | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mesentery | | | | | | | | | | | | | | | | | | | | | | |
| Oral Mucosa | + | + | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma | X | X | X | | | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular | A | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Endocrine System

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:40
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male
F3/50PPBTO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 3 | 0 | 5 | 6 | 0 | 2 | 5 | 5 | 7 | 0 | 0 | 0 | 1 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | 9 | 4 | 3 | 9 | 8 | 5 | 5 | 5 | 4 | 3 | 9 | 9 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| CD Rat Male
F3/50PPBTO CTL | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | | 0 | 2 | 3 | 3 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 |
| | | 1 | 1 | 1 | 3 | 0 | 1 | 2 | 2 | 4 | 6 | 7 | 7 | 8 | 0 | 1 | 2 | 5 | 5 | 6 | 6 | 6 |
| | | 9 | 9 | 1 | 2 | 5 | 1 | 4 | 5 | 4 | 9 | 6 | 8 | 1 | 6 | 6 | 2 | 1 | 9 | 0 | 1 | 4 |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pheochromocytoma Benign | | | | | | | | | | | | | | X | | | | | | | | |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | X |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | M | + | + |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pars Distalis, Adenoma | | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | X |
| General Body System | | | | | | | | | | | | | | | | | | | | | | |
| Tissue NOS | | | | | | | | | | | | | | + | | | | | | | | |
| Sarcoma | | | | | | | | | | | | | | X | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | |
| Coagulating Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Carcinoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | X | | | | | | | | |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | X |
| Ductus Deferens | | | | | | | | | | | | | | | | | | | | | | + |
| Epididymis | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Penis | | | | | | | | | | | | | | + | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:40
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male
F3/50PPBTO CTL | DAY ON TEST | DAY ON TEST | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 3 | 0 | 5 | 6 | 0 | 2 | 5 | 5 | 7 | 0 | 0 | 0 | 1 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | 9 | 4 | 3 | 9 | 8 | 5 | 5 | 5 | 4 | 3 | 9 | 9 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| ANIMAL ID | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | | 0 | 2 | 3 | 3 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 |
| | | 1 | 1 | 1 | 3 | 0 | 1 | 2 | 2 | 4 | 6 | 7 | 7 | 8 | 0 | 1 | 2 | 5 | 5 | 6 | 6 | 6 |
| | | 9 | 9 | 1 | 2 | 5 | 1 | 4 | 5 | 4 | 9 | 6 | 8 | 1 | 6 | 6 | 2 | 1 | 9 | 0 | 1 | 4 |
| Preputial Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma | | | | | | | X | | X | X | X | | X | X | | | | | | | | X |
| Prostate, Dorsal/Lateral Lobe | | + | | + | + | | | | | | | | | | | | | | | | | |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | |
| Prostate, Ventral Lobe | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | |
| Rete Testes | | + | + | + | + | + | + | + | + | + | + | + | M | M | + | + | + | + | + | M | M | + |
| Seminal Vesicle | | A | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Testes | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Interstit Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node | | | | | | | A | | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mandibular | | | | | | | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric | | | | | | | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen | | | | | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | |
| Thymus | | | | | | | + | + | M | + | + | M | + | + | + | + | + | M | + | M | + | + |
| Integumentary System | | | | | | | A | + | + | M | + | + | M | + | + | + | + | + | + | + | + | + |
| Mammary Gland | | | | | | | | | | | | | | | | | | | | | | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:40
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male
F3/50PPBTO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 3 | 0 | 5 | 6 | 0 | 2 | 5 | 5 | 7 | 0 | 0 | 0 | 1 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | | 9 | 4 | 3 | 9 | 8 | 5 | 5 | 5 | 4 | 3 | 9 | 9 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | |
| | | 0 | 2 | 3 | 3 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 3 | 0 | 1 | 2 | 2 | 4 | 6 | 7 | 7 | 8 | 0 | 1 | 2 | 5 | 5 | 6 | 6 | 9 | 9 | |
| | | 9 | 9 | 1 | 2 | 5 | 1 | 4 | 5 | 4 | 9 | 6 | 8 | 1 | 6 | 6 | 2 | 1 | 9 | 0 | 1 | 2 | 8 | 9 |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | X | |
| Fibroadenoma | | | | | | | | | | | | | | | | | | | | | | | X | |
| Skin | | | | | | | | | | | | | | | | | | | | | | | | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Fibroma | | | | | | | | | | | | | | | | | | | | | | | | |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Lipoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | | | | | | | | | | | | | | | | | | | | | | | |
| Cranial Nerve, Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | | | | | | | | | | | | | | | | | | | | | | | | |
| Reticulosis Malignant | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Cerebellum | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Cerebrum | | | | | | | | | | | | | | | | | | | | | | | | |
| Meninges, Granular Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:40
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male
F3/50PPBTO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 3 | 0 | 5 | 6 | 0 | 2 | 5 | 5 | 7 | 0 | 0 | 0 | 1 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | | 9 | 4 | 3 | 9 | 8 | 5 | 5 | 5 | 4 | 3 | 9 | 9 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | |
| | | 0 | 2 | 3 | 3 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 3 | 0 | 1 | 2 | 2 | 4 | 6 | 7 | 7 | 8 | 0 | 1 | 2 | 5 | 5 | 6 | 6 | 9 | 9 | |
| | | 9 | 9 | 1 | 2 | 5 | 1 | 4 | 5 | 4 | 9 | 6 | 8 | 1 | 6 | 6 | 2 | 1 | 9 | 0 | 1 | 2 | 8 | 9 |
| Thymoma Malignant, Metastatic, Uncertain Primary Site | | X | | | | | | | | | | | | | | | | | | | | | | |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Osteosarcoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | |
| Ear | | | | | | | | | | | | | | | | | | | | | | | | |
| Neural Crest Tumor | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Iris, Melanoma Benign | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lacrimal Gland | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Liposarcoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:40
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F3/50PPBTO CTL

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 9 |
| | 9 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| | 0 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| | 1 | 8 | 9 | 9 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 5 | 6 | 1 | 1 | 1 |
| | 4 | 9 | 1 | 2 | 0 | 1 | 2 | 5 | 6 | 3 | 4 | 1 | 2 | 9 | 0 | 3 | 4 | 2 |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | | | | | | | | | | | 3 |
| Oral Mucosa | | | | | | | + | + | | | | | | | | | | 6 |
| Squamous Cell Carcinoma | | | | | | | X | | | | | | | | | | | 5 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

Endocrine System

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99920-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:41

First Dose M/F: NA / NA

Lab: NCTR

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:41
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F3/50PPBTO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|-------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 0 | |
| 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 9 | |
| 9 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 1 | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | |
| 0 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| 1 | 8 | 9 | 9 | 9 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 5 | 6 | 1 | 1 | 1 |
| 4 | 9 | 1 | 2 | 0 | 1 | 2 | 5 | 6 | 3 | 4 | 1 | 2 | 9 | 0 | 3 | 4 | 2 | 4 | |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | 49 |
| Carcinoma | | | | | | | | | | | | | | | | | | X | 1 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | 7 |
| Prostate, Dorsal/Lateral Lobe | | | | | | | | | | | | | | | | | | + | 50 |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | 1 |
| Prostate, Ventral Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | 1 |
| Rete Testes | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 44 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 47 |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 |
| Interstit Cell, Adenoma | | | | | | | | | | | | | | | | | | X | 1 |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 |
| Lymph Node | | | | | | | | | | | | | | | | | | + | 16 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 49 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 48 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 |
| Sarcoma | | | | | | | | | | | | | | | | | | X | 1 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 45 |
| Integumentary System | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 45 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | 2 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:41

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3/50PPBTO CTL**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 0 |
| | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 9 |
| | 9 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| | 0 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| | 1 | 8 | 9 | 9 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 5 | 6 | 1 | 1 | 1 | 1 | 1 |
| | 4 | 9 | 1 | 2 | 0 | 1 | 2 | 5 | 6 | 3 | 4 | 1 | 2 | 9 | 0 | 3 | 4 | 2 | 4 |

***TOTALS**

Adenoma 1

Fibroadenoma 1

Skin + 50

Carcinoma 1

Fibroma X 2

Keratoacanthoma X 1

Lipoma X 2

Sarcoma X 1

Musculoskeletal System

Bone, Femur + 50

Nervous System

Brain 1

Cranial Nerve, Schwannoma Malignant 1

Brain, Brain Stem + 50

Reticulosis Malignant 1

Brain, Cerebellum + 50

Brain, Cerebrum + 50

Meninges, Granular Cell Tumor Benign 1

Respiratory System

Lung + 50

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:41

First Dose M/F: NA / NA

Lab: NCTR

* ..Total animals with tissue examined microscopically: Total animals with tumor

M ..Missing tissue

± ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| Insufficient tissue

Experiment Number: 99920-93

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/23/2014

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

Time Report Requested: 11:55:41

CAS Number: 57-63-6

First Dose M/F: NA / NA

Lab: NCTR

Alimentary System

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ .. Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:42

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3 0PPB | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | |
| | | 4 | 7 | 0 | 1 | 4 | 7 | 7 | 7 | 0 | 0 | 4 | 4 | 5 | 5 | 5 | 7 | 8 | 8 | 9 | 0 | |
| | | 7 | 4 | 4 | 8 | 8 | 1 | 5 | 9 | 2 | 3 | 1 | 4 | 1 | 1 | 6 | 6 | 1 | 0 | 2 | 6 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 5 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 8 | |
| | | 0 | 7 | 1 | 4 | 9 | 3 | 4 | 6 | 5 | 5 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | 6 | |
| | | 6 | 4 | 4 | 2 | 8 | 7 | 6 | 7 | 1 | 3 | 9 | 8 | 2 | 3 | 7 | 8 | 9 | 7 | 2 | 1 | |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma, Metastatic, Uterus | | | | | | | | | | | | | | | | | | X | | | | |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | X | | | |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | | X | | | |
| Cardiovascular System | | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Endocrine System | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | X | | | | | | |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pars Distalis, Adenoma | | | | | | | | | | | | | | | | | | M | M | + | + | |
| Thyroid Gland | | | | | | | | | | | | | | | | | | | X | X | X | |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | X | | | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:42
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Female
F3 0PPB | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 4 | 7 | 0 | 1 | 4 | 7 | 7 | 7 | 0 | 0 | 4 | 4 | 5 | 5 | 5 | 5 | 7 | 8 | 8 | 9 | 0 | 0 | 2 | 2 | 4 | 4 |
| | | 7 | 4 | 4 | 8 | 8 | 1 | 5 | 9 | 2 | 3 | 1 | 4 | 1 | 1 | 6 | 6 | 1 | 0 | 0 | 2 | 6 | 8 | 1 | 2 | 6 | 9 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 5 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 8 | 8 | 9 | 9 | 9 |
| | | 0 | 7 | 1 | 4 | 9 | 3 | 4 | 6 | 5 | 5 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 7 | 0 | 9 | 9 | 2 |
| | | 6 | 4 | 4 | 2 | 8 | 7 | 6 | 7 | 1 | 3 | 9 | 8 | 2 | 3 | 7 | 8 | 9 | 7 | 2 | 1 | 5 | 2 | 1 | 2 | 8 | 3 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Ovary | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Oviduct | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Endometrium, Adenocarcinoma

X

X

Endometrium, Adenoma

X

Nephroblastoma, Metastatic, Kidney

X

Polyp Stromal

X

Vagina

M

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Nephroblastoma, Metastatic, Kidney

X

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Schwannoma Malignant, Metastatic, Skin | X | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node, Mesenteric | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Nephroblastoma, Metastatic, Kidney | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephroblastoma, Metastatic, Kidney | X | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Thymus | + | + | + | + | + | + | + | + | + | M | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/23/2014

Test Type: SPECIAL STUDY

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

Time Report Requested: 11:55:42

Route: DOSED FEED

CAS Number: 57-63-6

First Dose M/F: NA / NA

Species/Strain: Rat/CD

Lab: NCTR

| CD Rat Female
F3 OPPB | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 4 | 7 | 0 | 1 | 4 | 7 | 7 | 7 | 0 | 0 | 4 | 4 | 5 | 5 | 5 | 5 | 7 | 8 | 8 | 9 | 0 | 0 | 2 | 2 | 4 | |
| | | 7 | 4 | 4 | 8 | 8 | 1 | 5 | 9 | 2 | 3 | 1 | 4 | 1 | 1 | 6 | 6 | 1 | 0 | 0 | 2 | 6 | 8 | 1 | 2 | 6 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 5 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 8 | 9 | 9 | |
| | | 0 | 7 | 1 | 4 | 9 | 3 | 4 | 6 | 5 | 5 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 7 | 0 | 9 | 9 | |
| | | 6 | 4 | 4 | 2 | 8 | 7 | 6 | 7 | 1 | 3 | 9 | 8 | 2 | 3 | 7 | 8 | 9 | 7 | 2 | 1 | 5 | 2 | 1 | 2 | 3 | |

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | X | X | X | | | | | | | | | |
| Fibroadenoma | | | | X | X | | | | | | | | | | | | X | X | X | | | | | | | | | |
| Fibroadenoma, Multiple | | | | | | X | X | | | | | | | | | | X | | X | | X | X | | | | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Lipoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma | | | | | | | X | | | | | | | | | | | | | | | | | | | | | |
| Schwannoma Malignant | | | | | | | | X | | | | | | | | | | | | | | | | | | | | |

Musculoskeletal System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Skeletal Muscle | | | | | | | | + | + | | | | | | | | | | | | | | | | | | | |
| Diaphragm, Adenocarcinoma, Metastatic,
Uterus | | | | | | | | | | | | | | | | | | | | | X | | | | | | | |
| Diaphragm, Nephroblastoma, Metastatic,
Kidney | | | | | | | | | | | | | | | | | | X | | | | | | | | | | |

Nervous System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Respiratory System

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:42

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3 0PPB | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 4 | 7 | 0 | 1 | 4 | 7 | 7 | 7 | 0 | 0 | 4 | 4 | 5 | 5 | 5 | 5 | 7 | 8 | 8 | 9 | 0 | 2 | 2 |
| | | 7 | 4 | 4 | 8 | 8 | 1 | 5 | 9 | 2 | 3 | 1 | 4 | 1 | 1 | 6 | 6 | 1 | 0 | 0 | 2 | 6 | 8 | 1 |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Alveolar/Bronchiolar Adenoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | X |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lipoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephroblastoma | | | | | | | | | | | | | | | | | | | | | | | | X |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | X |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol)
CAS Number: 57-63-6

Date Report Requested: 10/23/2014
Time Report Requested: 11:55:42
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Female
F3 0PPB | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 4 4 4 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 9 9 9 0 0 0 0 0 0 0 0 0 0 3 3 4 4 4 4 5 5 5 5 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 1 1 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 0 0 9 9 9 9 9 9 9 9 9 9 0 1 0 0 0 1 1 1 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 2 2 6 6 6 6 7 7 7 7 7 7 9 3 8 8 8 2 2 2 2 3 3 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 6 7 3 5 6 0 1 2 7 8 6 5 1 2 5 7 2 2 3 0 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Adenocarcinoma, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | 1 |
| Cholangiocarcinoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | | | | | X |
| Nephroblastoma, Metastatic, Kidney | | | | | | | | | | | | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | 3 |
| Adenocarcinoma, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nephroblastoma, Metastatic, Kidney | | | | | | | | | | | | | | | | | | | | | | 1 |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | 2 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | 2 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Adenocarcinoma, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | 1 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:43

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3 0PPB | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | *TOTALS |
|------------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Adenocarcinoma, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | 1 |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | | | | 1 |
| Cardiovascular System | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Endocrine System | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | 2 |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Adenoma | | X | | | | | | | | | | | | | | | | | | | 1 |
| Parathyroid Gland | | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Pars Distalis, Adenoma | | X | X | X | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | 32 | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | 1 |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | 1 |
| General Body System | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:43

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3 0PPB | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 9 | 0 | 0 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | |
| | | 8 | 2 | 2 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 9 | 3 | 8 | 8 | 8 | 2 | 2 | 2 | 3 | 3 |
| | | 3 | 6 | 7 | 3 | 5 | 6 | 0 | 1 | 2 | 7 | 8 | 6 | 5 | 1 | 2 | 5 | 7 | 2 | 3 | 0 | 1 |

*TOTALS

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Endometrium, Adenocarcinoma | X | | | | | | | | | | | | | | | | | | | | 4 |
| Endometrium, Adenoma | | | | | | | | | | | | | | | | | | | | | 1 |
| Nephroblastoma, Metastatic, Kidney | | | | | | | | | | | | | | | | | | | | | 1 |
| Polyp Stromal | | | | | | | | | | | | | | | | | | | | | 1 |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 |
| Nephroblastoma, Metastatic, Kidney | | | | | | | | | | | | | | | | | | | | | 1 |

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Schwannoma Malignant, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | 10 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 |
| Nephroblastoma, Metastatic, Kidney | | | | | | | | | | | | | | | | | | | | | 1 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:43
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Female
F3 0PPB | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|--|--|--|--|--|--|---------------|--|--|--|-------------------------|--|--|---------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | 7 7 7 7 7 7 7 | | | | | | | 7 7 7 7 7 7 7 | | | | | | | 7 7 7 7 7 7 7 | | | | | | | | | | | | | | |
| ANIMAL ID | 4 4 4 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 9 9 9 0 | | | | | | | | | | | | 3 3 4 4 4 4 5 5 5 5 5 5 | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 1 1 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 9 0 0 9 9 9 9 9 9 9 9 9 9 9 9 9 0 1 0 0 0 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 8 2 2 6 6 6 6 7 7 7 7 7 9 3 8 8 8 2 2 2 2 2 3 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 6 7 3 5 6 0 1 2 7 8 6 5 1 2 5 7 2 2 3 0 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

*TOTALS

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Adenocarcinoma | X | | | | | | | | | | | | | | | | | | | | | 6 | |
| Fibroadenoma | | X | | | | | | | | | | | | | | | | | | | | X | 17 |
| Fibroadenoma, Multiple | | X | | X | X | | | X | X | | | | | | | | | | | | | X | 19 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Lipoma | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | 1 |

Musculoskeletal System

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Diaphragm, Adenocarcinoma, Metastatic, | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Uterus | | | | | | | | | | | | | | | | | | | | | | | |
| Diaphragm, Nephroblastoma, Metastatic, | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Kidney | | | | | | | | | | | | | | | | | | | | | | | |

Nervous System

| | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |

Respiratory System

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:43

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3 0PPB | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | *TOTALS | |
|--------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Alveolar/Bronchiolar Adenoma | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Lipoma | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nephroblastoma | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:43

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3/2PPB TO CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 1 | 9 | 2 | 4 | 4 | 5 | 9 | 9 | 0 | 2 | 2 | 7 | 8 | 8 | 9 | 0 | 0 | 1 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | | 8 | 5 | 2 | 1 | 8 | 7 | 7 | 9 | 9 | 1 | 4 | 3 | 0 | 3 | 6 | 0 | 8 | 8 | 2 | 6 | 6 | 7 | 9 | 9 | 9 | 9 | 9 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 8 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 1 | 9 | 9 | 9 | 9 | 9 |
| | | 0 | 0 | 4 | 8 | 9 | 9 | 1 | 9 | 0 | 0 | 1 | 0 | 4 | 5 | 5 | 6 | 6 | 7 | 8 | 8 | 9 | 0 | 3 | 2 | 3 | 3 | 3 | 4 |
| | | 8 | 5 | 9 | 4 | 9 | 2 | 9 | 3 | 6 | 0 | 8 | 0 | 4 | 7 | 4 | 8 | 3 | 5 | 9 | 9 | 3 | 4 | 8 | 1 | 2 | 4 | 5 | 3 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Duodenum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Ileum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Jejunum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Leiomyoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma, Metastatic, Intestine Small, Jejunum | | | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Cholangiocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hepatocellular Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Pancreas | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Glandular | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:44

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3/2PPB TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 1 | 9 | 2 | 4 | 4 | 5 | 9 | 9 | 0 | 2 | 2 | 7 | 8 | 8 | 9 | 0 | 0 | 1 | 2 | 2 | 3 | 4 | 4 | 4 | 4 |
| | | 8 | 5 | 2 | 1 | 8 | 7 | 7 | 9 | 9 | 1 | 4 | 3 | 0 | 3 | 6 | 0 | 8 | 8 | 2 | 6 | 6 | 7 | 9 | 9 | 9 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| | | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 8 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 1 | 9 | 9 | 9 |
| | | 0 | 0 | 4 | 8 | 9 | 1 | 9 | 0 | 0 | 1 | 0 | 4 | 5 | 5 | 6 | 6 | 7 | 8 | 8 | 9 | 9 | 0 | 3 | 2 | 3 |
| | | 8 | 5 | 9 | 4 | 9 | 2 | 9 | 3 | 6 | 0 | 8 | 0 | 4 | 7 | 4 | 8 | 3 | 5 | 9 | 9 | 9 | 3 | 4 | 8 | 1 |
| Granulosa Cell Tumor Benign | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Granulosa Cell Tumor Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Sertoli Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oviduct | + A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Endometrium, Adenocarcinoma | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Endometrium, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Polyp Stromal | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node, Mesenteric | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Thymus | + | A | + | + | M | + | + | + | + | + | + | + | + | + | + | M | + | + | + | M | M | + | + | + | + | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Fibroadenoma | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | X |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
Time Report Requested: 11:55:44
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Female
F3/2PPB TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 1 | 9 | 2 | 4 | 4 | 5 | 9 | 9 | 0 | 2 | 2 | 7 | 8 | 8 | 9 | 0 | 0 | 1 | 2 | 2 | 3 | 4 | 4 | 4 |
| | | 8 | 5 | 2 | 1 | 8 | 7 | 7 | 9 | 9 | 1 | 4 | 3 | 0 | 3 | 6 | 0 | 8 | 8 | 2 | 6 | 6 | 7 | 9 | 9 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 8 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 1 | 9 | 9 | 9 |
| | | 0 | 0 | 4 | 8 | 9 | 1 | 9 | 0 | 0 | 1 | 0 | 4 | 5 | 5 | 6 | 6 | 7 | 8 | 8 | 9 | 0 | 3 | 2 | 3 |
| | | 8 | 5 | 9 | 4 | 9 | 2 | 9 | 3 | 6 | 0 | 8 | 0 | 4 | 7 | 4 | 8 | 3 | 5 | 9 | 9 | 3 | 4 | 8 | 1 |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Ear, Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | | | X | | | | |
| Fibroma | | | | | | | | | | | | | | | | | | | | X | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle | | + | | | | | | | | | | | | | | | | | | | | | | | |
| Diaphragm, Granulosa Cell Tumor | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Malignant, Metastatic, Ovary | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebellum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebrum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Peripheral Nerve | | + | | | | | | | | | | | | | | | | | | | | | | | |
| Spinal Cord | | + | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Trachea | | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:44

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F3/2PPB TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 1 | 9 | 2 | 4 | 4 | 5 | 9 | 9 | 0 | 2 | 2 | 7 | 8 | 8 | 9 | 0 | 0 | 1 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | |
| | 8 | 5 | 2 | 1 | 8 | 7 | 7 | 9 | 9 | 1 | 4 | 3 | 0 | 3 | 6 | 0 | 8 | 8 | 2 | 6 | 6 | 7 | 9 | 9 | 9 | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Urinary Bladder | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | X |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
Time Report Requested: 11:55:44
First Dose M/F: NA / NA
Lab: NCTR

**CD Rat Female
 F3/2PPB TO CTL**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 9 | 9 | 0 | 0 | 0 | 0 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | 2 | 3 | 7 | 7 | 1 | 2 | 5 | 7 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 7 | 7 | 2 |
| | 3 | 3 | 3 | 4 | 7 | 2 | 0 | 6 | 3 | 4 | 7 | 8 | 2 | 3 | 4 | 4 | 5 | 4 |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Carcinoma | | | | | | | | | | | | | | | | | | 1 |
| Leiomyoma | | | | | X | | | | | | | | | | | | | 1 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Intestine Small,
Jejunum | | | | | | | | | | | | | | | | | | 1 |
| Cholangiocarcinoma | | | | | | | | | | | | | | X | | | | 1 |
| Hepatocellular Carcinoma | | | | | | | X | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | | | | | | | | | | | 3 |
| Oral Mucosa | | | | | | | + | | | | | | | | | | | 4 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol)
CAS Number: 57-63-6

Date Report Requested: 10/23/2014
Time Report Requested: 11:55:45
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Female
F3/2PPB TO CTL

| | DAY ON TEST | Tissue Examined | | | | | | | | | | | | | | | | | | | | *TOTALS | |
|------------------------------|-------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | 2 | 3 | 7 | 7 | 1 | 2 | 5 | 7 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 7 | 7 | 2 | 3 | | | |
| | 3 | 3 | 3 | 4 | 7 | 2 | 0 | 6 | 3 | 4 | 7 | 8 | 2 | 3 | 4 | 4 | 5 | 4 | 4 | 2 | | | |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Cardiovascular System | | | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Endocrine System | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Parathyroid Gland | M | + | + | + | + | + | M | + | + | + | + | + | + | + | + | M | + | + | + | + | + | 45 | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | | | 30 | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| C Cell, Adenoma | | | | | | | X | | | | | | | | | | | | | | | 1 | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Granulosa Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | | 1 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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Experiment Number: 99920-93

Test Type: SPECIAL STUDY

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P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

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CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:45

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3/2PPB TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|--------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 9 | 9 | 9 | 0 | 0 | 0 | 0 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 1 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 2 | 3 | 3 | 7 | 7 | 7 | 1 | 2 | 5 | 7 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 7 | 7 | 2 |
| 3 | 3 | 3 | 3 | 4 | 7 | 2 | 0 | 6 | 3 | 4 | 7 | 8 | 2 | 3 | 4 | 4 | 5 | 4 | 2 |
| Granulosa Cell Tumor Benign | | | | | | | | | | | | | | | | | | | 1 |
| Granulosa Cell Tumor Malignant | | | | | | | | | | | | | | | | | | | 1 |
| Sertoli Cell Tumor Benign | X | | | | | | | | | | | | | | | X | | | 2 |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Endometrium, Adenocarcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Endometrium, Adenoma | | | | | | | | | | | | | | | | | | | 1 |
| Polyp Stromal | X | | | | | | | | | | | | | | | X | | | 7 |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | + | | + | + | + | | + | + | | | + | + | + | | | | | + | 17 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Integumentary System | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | X | | X | | | X | | | | | | | | | | | X | | 4 |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | | | | | 2 |
| Fibroadenoma | X | | | | | X | | | X | | X | | | | | | | | 13 |
| Fibroadenoma, Multiple | X | | X | | | X | | X | X | X | X | X | X | X | X | X | X | X | 21 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:45
 First Dose M/F: NA / NA
 Lab: NCTR

**CD Rat Female
 F3/2PPB TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | *TOTALS |
|---------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 9 | 9 | 9 | 0 | 0 | 0 | 0 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 1 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 2 | 3 | 7 | 7 | 7 | 1 | 2 | 5 | 7 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 7 | 7 | 2 | 3 |
| 3 | 3 | 3 | 3 | 4 | 7 | 2 | 0 | 6 | 3 | 4 | 7 | 8 | 2 | 3 | 4 | 4 | 5 | 4 | 4 | 2 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Ear, Basal Cell Adenoma | | | | | | | X | | | | | | | | | | | | | 1 |
| Fibroma | | | | | | | | | | | | | | | | | | | | 2 |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | 1 |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | 4 |
| Diaphragm, Granulosa Cell Tumor | | | | | | | | | | | | | | | | | | | | 1 |
| Malignant, Metastatic, Ovary | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Peripheral Nerve | | | | | | | | | | | | | | | | | | | | 1 |
| Spinal Cord | | | | | | | | | | | | | | | | | | | | 1 |
| Respiratory System | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:45

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F3/2PPB TO CTL**

| | DAY ON TEST | Harderian Gland | | | | | | | | | | | | | | | | | | *TOTALS |
|-------------------------|-------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 9 | 9 | 0 | 0 | 0 | 0 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Urinary System | | 0 | 1 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mesothelioma Malignant | | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:45

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3/10PPBTO CTL | DAY ON TEST | TEST RESULTS | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-------------|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 3 | 8 | 9 | 3 | 4 | 5 | 0 | 0 | 2 | 2 | 3 | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 9 | 0 | 1 | 1 | 2 | 2 | 3 | 4 |
| | 9 | 2 | 0 | 2 | 0 | 6 | 3 | 8 | 0 | 0 | 6 | 5 | 6 | 0 | 0 | 2 | 7 | 7 | 2 | 8 | 6 | 3 | 6 | 7 | 1 | 8 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 1 | 2 | 2 | 3 | 6 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 1 |
| | 2 | 2 | 9 | 6 | 7 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 5 | 5 | 5 | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 0 | 0 |
| | 0 | 2 | 3 | 2 | 8 | 9 | 5 | 7 | 7 | 9 | 7 | 8 | 3 | 5 | 5 | 8 | 9 | 2 | 4 | 2 | 0 | 4 | 1 | 0 | 5 | 8 |

Alimentary System

Cardiovascular System

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

± ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/23/2014

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

Time Report Requested: 11:55:45

CAS Number: 57-63-6

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3/10PPBTO CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 1 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 3 | 8 | 9 | 3 | 4 | 5 | 0 | 0 | 2 | 2 | 3 | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 9 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 |
| | | 9 | 2 | 0 | 2 | 0 | 6 | 3 | 8 | 0 | 0 | 6 | 5 | 6 | 0 | 0 | 2 | 7 | 7 | 2 | 8 | 6 | 3 | 6 | 7 | 1 | 8 | 4 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | | 0 | 0 | 1 | 2 | 2 | 3 | 6 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 1 |
| | | 2 | 2 | 9 | 6 | 7 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 3 | 5 | 5 | 5 | 6 | 6 | 7 | 8 | 8 | 8 | 8 | 9 | 9 | 0 |
| | | 0 | 2 | 3 | 2 | 8 | 9 | 5 | 7 | 7 | 9 | 7 | 9 | 7 | 8 | 3 | 5 | 8 | 9 | 2 | 5 | 4 | 2 | 0 | 4 | 1 | 0 | 5 |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | X | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | M | + | M | + | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pars Distalis, Adenoma | | | | | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | X | | | | | | | | |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

General Body System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tissue NOS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma, Deep Invasion | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | X | | | | | | | | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Granulosa Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | X | | | | | | | | |
| Sertoli Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:46
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Female
F3/10PPBTO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
| | 3 | 8 | 9 | 3 | 4 | 5 | 0 | 0 | 2 | 2 | 3 | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 9 | 0 | 1 | 1 |
| | 9 | 2 | 0 | 2 | 0 | 6 | 3 | 8 | 0 | 0 | 6 | 5 | 6 | 0 | 0 | 2 | 7 | 7 | 2 | 8 | 6 | 3 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 1 | 2 | 2 | 3 | 6 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 1 |
| | | 2 | 2 | 9 | 6 | 7 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 5 | 5 | 5 | 6 | 7 | 8 | 8 | 9 |
| | | 0 | 2 | 3 | 2 | 8 | 9 | 5 | 7 | 7 | 9 | 7 | 8 | 3 | 5 | 8 | 9 | 2 | 5 | 4 | 2 | 0 |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Endometrium, Adenoma | | | | | | | | | | | | | | | | | | X | X | | | |
| Polyp Stromal | | | | | | | | | | | | | | | | | | | | | | |
| Vagina | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | + |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma, Metastatic, Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | X |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | M | M | + | + | + | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | X |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | X |
| Fibroadenoma | | | X | | X | X | X | | | | X | X | | X | X | X | X | X | X | X | X | |
| Fibroadenoma, Multiple | | | | | | | | X | X | X | | X | | X | X | X | X | X | X | X | X | |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Fibrous Histiocytoma | | | | | | | | | | | | | | | | | | | | | | X |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | X |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

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 Time Report Requested: 11:55:46
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Female
F3/10PPBTO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 9 | 9 | 9 | 0 | 0 | 0 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 2 | 3 | 3 | 1 | 1 | 2 | 6 | 7 | 1 | 5 | 7 | 7 | 8 | 9 | 3 | 7 | 2 | 2 | 2 |
| | 4 | 6 | 7 | 5 | 6 | 1 | 4 | 5 | 9 | 2 | 2 | 7 | 6 | 5 | 7 | 1 | 5 | 6 | 8 |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Carcinoma | | | | | | | | | | | | | | | X | | | | 1 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mesentery | | | | | | | | | | | | | | | | | | + | 4 |
| Oral Mucosa | | | | | | | + | | | + | | | | | | | | | 7 |
| Fibrous Histiocytoma | | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | X | | | | 2 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | X | | | | 2 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:46

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3/10PPBTO CTL

| DAY ON TEST | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 1 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 9 | 9 | 9 | 0 | 0 | 0 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 |
| | 2 | 3 | 3 | 1 | 1 | 2 | 6 | 7 | 1 | 5 | 7 | 7 | 8 | 9 | 3 | 7 | 2 | 2 | 2 |
| | 4 | 6 | 7 | 5 | 6 | 1 | 4 | 5 | 9 | 2 | 2 | 7 | 6 | 5 | 7 | 1 | 5 | 6 | 8 |

*TOTALS

Endocrine System

| | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | 1 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 36 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | 1 |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | 1 |

General Body System

| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Tissue NOS | | | | | | | | | | | | | | | | | | + | 1 |
| Squamous Cell Carcinoma, Deep Invasion | | | | | | | | | | | | | | | | | | X | 1 |

Genital System

| | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma | | | | | | | | | | | | | | | | | | | 1 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Granulosa Cell Tumor Benign | | | | | | | | | | | | | | | | | | | 1 |
| Sertoli Cell Tumor Benign | | | | | | | | | | | | | | | | | | | 1 |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:46

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3/10PPBTO CTL

| | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|---------------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 1 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Endometrium, Adenoma | | | | | | | | | | | | | | | | | | | | 2 |
| Polyp Stromal | X | | | | | | | | | | | | | | | | | | | 2 |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | + | + | | + | | | | | | | | | | | | | | | 10 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Zymbal's Gland | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Integumentary System | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | X | X | | | | | | | X | X | X | | | | | | | | | 6 |
| Adenocarcinoma, Multiple | | | X | | | | | | | | | | | | | | | | | 3 |
| Fibroadenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 21 |
| Fibroadenoma, Multiple | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 19 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibrous Histiocytoma | | | | | | | | | | | | | | | | | | | | 1 |
| Sarcoma | | X | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:47

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3/10PPBTO CTL

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | |
|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 4 4 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | | | | | | | | | | | | | | | | | |
| | 9 9 9 9 9 9 0 0 0 9 9 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | |
| | 0 0 0 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | | | | | | | | | | | |
| | 9 9 9 0 0 0 9 9 0 0 0 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | | | | | | | | |
| | 2 3 3 1 1 2 6 7 1 5 7 7 8 9 3 7 2 2 2 2 2 | | | | | | | | | | | | | | | | | |
| | 4 6 7 5 6 1 4 5 9 2 2 7 6 5 7 1 5 6 8 | | | | | | | | | | | | | | | | | |

*TOTALS

Musculoskeletal System

Bone, Femur + + + + + + + + + + + + + + + + + + + 50

Nervous System

Brain, Brain Stem + + + + + + + + + + + + + + + + + + + 50

Brain, Cerebellum + + + + + + + + + + + + + + + + + + + 50

Brain, Cerebrum + + + + + + + + + + + + + + + + + + + 50

Respiratory System

Lung + + + + + + + + + + + + + + + + + + + 50

Adenocarcinoma, Metastatic, Mammary Gland + + + + + + + + + + + + + + + + + + + 1

Carcinoma, Metastatic, Thyroid Gland + + + + + + + + + + + + + + + + + + + 1

Carcinoma, Metastatic, Zymbal'S Gland + + + + + + + + + + + + + + + + + + + 1

Nose + + + + + + + + + + + + + + + + + + + 50

Trachea + + + + + + + + + + + + + + + + + + + 50

Special Senses System

Ear + + + + + + + + + + + + + + + + + + + 2

Neural Crest Tumor + + + + + + + + + + + + + + + + + + + 2

Eye + + + + + + + + + + + + + + + + + + + 49

Harderian Gland + + + + + + + + + + + + + + + + + + + 50

Squamous Cell Carcinoma, Deep Invasion + + + + + + + + + + + + + + + + + + + X 1

Zymbal's Gland + + + + + + + + + + + + + + + + + + + 1

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:47

First Dose M/F: NA / NA

Lab: NCTR

* ..Total animals with tissue examined microscopically: Total animals with tumor

M ..Missing tissue

+ .. Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:47
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Female
F3/50PPBTO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 2 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | |
| | | 8 | 2 | 0 | 2 | 3 | 9 | 4 | 6 | 7 | 9 | 9 | 0 | 1 | 3 | 6 | 7 | 7 | 8 | 8 | 9 | 0 | 1 | |
| | | 7 | 1 | 0 | 7 | 0 | 3 | 8 | 1 | 8 | 6 | 7 | 3 | 6 | 3 | 9 | 7 | 9 | 0 | 2 | 4 | 7 | 5 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 5 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | |
| | | 4 | 5 | 9 | 1 | 2 | 9 | 9 | 2 | 5 | 9 | 9 | 5 | 0 | 1 | 3 | 5 | 5 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | 3 | 2 | 1 | 8 | 1 | 9 | 7 | 2 | 7 | 7 | 8 | 2 | 4 | 5 | 6 | 0 | 1 | 8 | 6 | 3 | 1 | 3 | 4 |
| Alimentary System | | | | | | | | | | | | | | | | | | | | | | | | |
| Esophagus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Duodenum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Ileum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Jejunum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Liver | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cholangioma | | | | | | | | | | | | | | | | | | X | | | | | | |
| Mesentery | | + | | | + | | | | | | | | | | | | | | + | | | | | |
| Oral Mucosa | | | | | | | | | | | | | | + | | | | | | | | | + | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | X | | | | | | | | | | |
| Pancreas | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cardiovascular System | | | | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

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P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**Test Compound:** ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)**CAS Number:** 57-63-6**Date Report Requested:** 10/23/2014**Time Report Requested:** 11:55:47**First Dose M/F:** NA / NA**Lab:** NCTR

| CD Rat Female
F3/50PPBTO CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 8 | 2 | 0 | 2 | 3 | 9 | 4 | 6 | 7 | 9 | 9 | 0 | 1 | 3 | 6 | 7 | 7 | 8 | 8 | 9 | 0 | 1 | 2 | 4 | 4 | 4 |
| | | 7 | 1 | 0 | 7 | 0 | 3 | 8 | 1 | 8 | 6 | 7 | 3 | 6 | 3 | 9 | 7 | 9 | 0 | 2 | 4 | 7 | 5 | 1 | 3 | 8 | 9 |
| | | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 5 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 |
| | | 4 | 5 | 9 | 1 | 2 | 9 | 9 | 2 | 5 | 9 | 9 | 5 | 0 | 1 | 3 | 5 | 5 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 8 | 2 |
| | | 3 | 2 | 1 | 8 | 1 | 9 | 7 | 2 | 7 | 7 | 8 | 2 | 4 | 5 | 6 | 0 | 1 | 8 | 6 | 3 | 1 | 3 | 4 | 0 | 4 | 5 |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Parathyroid Gland | + | + | + | + | M | + | + | M | + | + | + | M | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pars Distalis, Adenoma | | | | | X | X | | X | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Bilateral, C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

General Body System

Tissue NOS
Alveolar/Bronchiolar Carcinoma, Metastatic,
Lung

Genital System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | X | X | | | | | | | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Granulosa Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | | | | | | | X |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
Time Report Requested: 11:55:48
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Female
F3/50PPBTO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ANIMAL ID | 2 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 8 | 2 | 0 | 2 | 3 | 9 | 4 | 6 | 7 | 9 | 9 | 0 | 1 | 3 | 6 | 7 | 7 | 8 | 8 | 9 | 0 | 1 |
| | | 7 | 1 | 0 | 7 | 0 | 3 | 8 | 1 | 8 | 6 | 7 | 3 | 6 | 3 | 9 | 7 | 9 | 0 | 2 | 4 | 7 | 5 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 5 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 |
| | | 4 | 5 | 9 | 1 | 2 | 9 | 9 | 2 | 5 | 9 | 9 | 5 | 0 | 1 | 3 | 5 | 5 | 4 | 5 | 6 | 7 | 8 |
| | | 3 | 2 | 1 | 8 | 1 | 9 | 7 | 2 | 7 | 7 | 8 | 2 | 4 | 5 | 6 | 0 | 1 | 8 | 6 | 3 | 1 | 3 |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leiomyoma | | | | | | | | | | | | | | X | | | | | | | | | |
| Polyp Stromal | | | | | | | | | | | | | | X | | | | | | | | | X |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | + |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | | | | | | | | | | | | X | | | | X | X | X | X | | X | |
| Fibroadenoma | | | | | | | | | | | | | X | X | X | X | | X | X | X | | | |
| Fibroadenoma, Multiple | | | | | | | | | | | | | X | X | X | X | | X | X | X | X | X | X |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | | | | | X |
| Fibroma | | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma | | | | | | | | | | | | | | X | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:48

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3/50PPBTO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 2 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 8 | 2 | 0 | 2 | 3 | 9 | 4 | 6 | 7 | 9 | 9 | 0 | 1 | 3 | 6 | 7 | 7 | 8 | 8 | 9 | 0 | 1 | 2 | 4 | 4 | |
| | | 7 | 1 | 0 | 7 | 0 | 3 | 8 | 1 | 8 | 6 | 7 | 3 | 6 | 3 | 9 | 7 | 9 | 0 | 2 | 4 | 7 | 5 | 1 | 3 | 8 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 5 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | |
| | | 4 | 5 | 9 | 1 | 2 | 9 | 9 | 2 | 5 | 9 | 9 | 5 | 0 | 1 | 3 | 5 | 5 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 8 | 2 |
| | | 3 | 2 | 1 | 8 | 1 | 9 | 7 | 2 | 7 | 7 | 8 | 2 | 4 | 5 | 6 | 0 | 1 | 8 | 6 | 3 | 1 | 3 | 4 | 0 | 4 | 5 |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Skeletal Muscle | | | | | | | + | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Brain, Cerebellum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Astrocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Cerebrum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Peripheral Nerve | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spinal Cord | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma, Metastatic, Mammary Gland | | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| Alveolar/Bronchiolar Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| Alveolar/Bronchiolar Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014

Time Report Requested: 11:55:48

First Dose M/F: NA / NA

Lab: NCTR

Urinary System

Liposarcoma

Nephroblastoma

Renal Tubule, Adenoma

Urinary Bladder

Transit Epithe. Papilloma

SYSTEMIC LESIONS

Multiple Organ

Lymphoma Malignant

1

| | |
|-------------------------------|---|
| Route: DOSED FEED | |
| Species/Strain: Rat/CD | |
| CD Rat Female | DAY ON TEST |
| F3/50PPBTO CTL | 0 0 0 0 0
2 3 4 4 4
8 2 0 2 3
7 1 0 7 0 |
| | ANIMAL ID |
| | 0 0 0 0 0
0 0 0 0 0
0 0 0 1 1
4 5 9 1 2
3 2 1 8 1 |
| Urinary System | |
| Kidney | + |
| Liposarcoma | + |
| Nephroblastoma | X |
| Renal Tubule, Adenoma | |
| Urinary Bladder | + |
| Transit Epithe, Papilloma | + |
| SYSTEMIC LESIONS | |
| Multiple Organ | + |
| Lymphoma Malignant | X |

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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 Route: DOSED FEED
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CAS Number: 57-63-6

Date Report Requested: 10/23/2014
Time Report Requested: 11:55:48
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Female
F3/50PPBTO CTL

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4 | 4 | 6 | 7 | 2 | 2 | 2 | 1 | 2 | 5 | 3 | 7 | 7 | 8 | 8 | 9 | 9 | 9 | 7 | 2 |
| 0 | 1 | 9 | 6 | 4 | 5 | 8 | 8 | 0 | 1 | 6 | 8 | 9 | 0 | 9 | 0 | 1 | 3 | 3 | 9 |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

Cholangioma

1

Mesentery

4

Oral Mucosa

2

Squamous Cell Carcinoma

1

Pancreas

50

Salivary Glands

50

Stomach, Forestomach

50

Squamous Cell Carcinoma

1

Stomach, Glandular

50

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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I ..Insufficient tissue

Experiment Number: 99920-93

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First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3/50PPBTO CTL

| DAY ON TEST | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 4 | 4 | 6 | 7 | 2 | 2 | 2 | 1 | 2 | 5 | 3 | 7 | 7 | 8 | 8 | 9 | 9 | 7 |
| | 0 | 1 | 9 | 6 | 4 | 5 | 8 | 8 | 0 | 1 | 6 | 8 | 9 | 0 | 9 | 0 | 1 | 3 |
| | | | | | | | | | | | | | | | | | | 9 |

TOTALS*Endocrine System**

| | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | 1 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | X | 1 |
| Parathyroid Gland | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | 44 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 32 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Bilateral, C Cell, Adenoma | | | | | | | | | | | | | | | | | | 1 |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | 1 |

General Body System

| | | | | | | | | | | | | | | | | | | |
|---|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Tissue NOS | | + | | | | | | | | | | | | | | | | 1 |
| Alveolar/Bronchiolar Carcinoma, Metastatic,
Lung | | X | | | | | | | | | | | | | | | | 1 |

Genital System

| | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Adenoma | | | | | | | | | | | | | | | | | | 2 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Granulosa Cell Tumor Benign | | | | | | | | | | | | | | | | | | 2 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99920-93

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First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3/50PPBTO CTL

| | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS | |
|-----------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leiomyoma | | | | | | | | | | | | | | | | | | | | 1 | |
| Polyp Stromal | | | | | | | | | | | | | | | | | | | | X | 5 |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | + | 5 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node, Mesenteric | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenocarcinoma | | X | | X | | | | | | | | | | | | | | | | 10 | |
| Fibroadenoma | X | | | | | | | | | | | | | | | | | | | 13 | |
| Fibroadenoma, Multiple | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 24 | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | X | 1 | |
| Fibroma | | | | | | | | | | | | | | | | | | | | 1 | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | 1 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Estradiol)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
 Time Report Requested: 11:55:48
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Female
F3/50PPBTO CTL

| DAY ON TEST | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 4 | 4 | 6 | 7 | 2 | 2 | 2 | 1 | 2 | 5 | 3 | 7 | 7 | 8 | 8 | 9 | 9 | 7 |
| | 0 | 1 | 9 | 6 | 4 | 5 | 8 | 8 | 0 | 1 | 6 | 8 | 9 | 0 | 9 | 0 | 1 | 3 |
| | | | | | | | | | | | | | | | | | | 9 |

*TOTALS

Musculoskeletal System

| | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | 1 |

Nervous System

| | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Astrocytoma Malignant | X | | | | | | | | | | | | | | | | | 1 |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Peripheral Nerve | | | | | | | | | | | | | | | | | | 1 |
| Spinal Cord | | | | | | | | | | | | | | | | | | 1 |

Respiratory System

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma, Metastatic, Mammary Gland | | | | | | | | | | | | | | | | | | 1 |

| | | | | | | | | | | | | | | | | | | |
|--------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Alveolar/Bronchiolar Adenoma | | | | | | | | | | | | | | | | | | 1 |
| Alveolar/Bronchiolar Carcinoma | | | | | | | | | | | | | | | | | | 1 |

X

| | | | | | | | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

Special Senses System

| | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99920-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: ENDOCRINE DISRUPTOR(Ethynodiol Diacetate)

CAS Number: 57-63-6

Date Report Requested: 10/23/2014
Time Report Requested: 11:55:49
First Dose M/F: NA / NA
Lab: NCTR

**CD Rat Female
 F3/50PPBTO CTL**

| DAY ON TEST | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 4 | 4 | 6 | 7 | 2 | 2 | 2 | 1 | 2 | 5 | 3 | 7 | 7 | 8 | 8 | 9 | 9 | 7 |
| | 0 | 1 | 9 | 6 | 4 | 5 | 8 | 8 | 0 | 1 | 6 | 8 | 9 | 0 | 9 | 0 | 1 | 3 |
| | | | | | | | | | | | | | | | | | | 9 |

*TOTALS

Urinary System

| | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Liposarcoma | | | | X | | | | | | | | | | | | | | 1 |
| Nephroblastoma | | | | | | | | | | | | | | | | | | 1 |
| Renal Tubule, Adenoma | | | | | | | | | | | | | | X | | | | 1 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Transit Epithe, Papilloma | | | | | | | X | | | | | | | | | | | 1 |

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | 1 |

** END OF REPORT **

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue