

**Experiment Number:** 99920-93

**Test Type:** SPECIAL STUDY

**Route:** DOSED FEED

**Species/Strain:** Rat/CD

**P07: 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:** 11:56:31

**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

**P07: 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:** 11:56:31

**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

## P07: 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: 11:56:31

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	5	5
		4	2	9	1	7	2	5	0	9	1	0	6	9	0	3	0	3	2	1	3	9	9	9
Blood Vessel		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Heart		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Endocrine System</b>																								
Adrenal Cortex		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adenoma																								
Adrenal Medulla		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pheochromocytoma Benign																					X			
Pheochromocytoma Malignant																						X		
Islets, Pancreatic		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adenoma																								
Parathyroid Gland		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adenoma																								
Pituitary Gland		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pars Distalis, Adenoma																					X			
Thyroid Gland		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
C Cell, Carcinoma																					X			
<b>General Body System</b>																								
NONE																								
<b>Genital System</b>																								
Coagulating Gland		A	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	A	+	+	+	
Epididymis		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

\* ..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

## P07: 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: 11:56:31

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	5	
		4	2	9	1	7	2	5	0	9	1	0	6	9	0	3	0	3	2	1	3	9	9	
		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	+	+	+	+	+	
Seminal Vesicle	A	+	A	A	+	+	+	+	+	A	A	+	+	+	+	A	+	+	+	+	+	+	+	
Testes		+	+	+	+	+	+	+	+	2	4	0	0	2	5	6	7	0	9	0	1	1	2	
<b>Hematopoietic System</b>																								
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	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Integumentary System</b>																								
Mammary Gland	A	M	A	+	+	M	+	M	+	+	A	+	M	+	+	M	+	+	+	+	+	+	+	
Fibroma																								
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Basal Cell Adenoma																								
Sarcoma																	X							
<b>Musculoskeletal System</b>																								

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

M ..Missing tissue

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Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

## P07: 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: 11:56:32

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	5	
		4	2	9	1	7	2	5	0	9	1	0	6	9	0	3	0	3	2	1	3	9	9	
Bone, Femur		+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	+	+	
Skeletal Muscle			+												+	+								
<b>Nervous System</b>																								
Brain, Brain Stem		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Brain, Cerebellum		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Brain, Cerebrum		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Osteoma														X										
Peripheral Nerve															+	+								
Spinal Cord															A	A								
<b>Respiratory System</b>																								
Lung		A	+	A	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	
Nose		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Trachea		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Special Senses System</b>																								
Eye		A	+	A	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	
Retrobulbar, Squamous Cell Carcinoma, Deep Invasion																		X						
Harderian Gland		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lacrimal Gland																								
Zymbal's Gland																								
Carcinoma																								

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

M ..Missing tissue

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A ..Autolysis precludes evaluation

X ..Lesion present

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I ..Insufficient tissue

X

**Experiment Number:** 99920-93

**P07: 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:** 11:56:32

## Route: DOSED FEED

CAS Number: 57-63-6

**First Dose M/F:** NA / NA

**Species/Strain:** Rat/CD

Lab: NCTR

## **Urinary System**

Kidney

## Urethra

## Urinary Bladder

## **SYSTEMIC LESIONS**

## Multiple Organ

### Lymphoma Malignant

X 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

| ..Insufficient tissue

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

P07: 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: 11:56:32  
 First Dose M/F: NA / NA  
 Lab: NCTR

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

**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			X																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

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

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Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

## P07: 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: 11:56:32

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
ANIMAL ID	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	5	5	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	4
	0	0	9	9	9	9	3	2	4	5	5	5	5	5	5	4	3	2	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	9	9	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	9	9	0	0	0	0	1	3	4	5	9	0	0	0	0	0	0	1	2
	4	5	2	3	9	0	7	9	3	9	2	5	6	7	8	9	9	0	1
<b>*TOTALS</b>																			
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
<b>Endocrine System</b>																			
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Adenoma																		X	1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Pheochromocytoma Benign									X	X									4
Pheochromocytoma Malignant																			1
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Adenoma																			2
Parathyroid Gland	+	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Adenoma																			1
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Pars Distalis, Adenoma	X	X	X	X					X	X	X	X	X	X	X	X	X	X	24
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
C Cell, Carcinoma	X																		3
<b>General Body System</b>																			
NONE																			
<b>Genital System</b>																			
Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49

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

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

P07: 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: 11:56:32  
 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	7	7
5	5	5	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	4
0	0	9	9	9	9	3	2	4	5	5	5	5	5	5	5	4	3	2	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	1	1	1	1
9	9	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1
9	9	0	0	0	0	1	3	4	5	9	0	0	0	0	0	0	1	2	2
4	5	2	3	9	0	7	9	3	9	2	5	6	7	8	9	9	0	1	1
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Squamous Cell Carcinoma																			2
Prostate, Dorsal/Lateral Lobe			+	+															50
Prostate, Ventral Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Rete Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
<b>Hematopoietic System</b>																			
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Lymph Node	+											M							14
Lymph Node, Mandibular	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Thymus	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	47
<b>Integumentary System</b>																			
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	42
Fibroma												X							1
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Basal Cell Adenoma	X											X							2
Sarcoma																			1
<b>Musculoskeletal System</b>																			

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

M ..Missing tissue

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Route: DOSED FEED

Species/Strain: Rat/CD

## P07: 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: 11:56:32

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
<b>Nervous System</b>																				
Brain, Brain Stem		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Brain, Cerebellum		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Brain, Cerebrum		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Osteoma																				1
Peripheral Nerve																				2
Spinal Cord																				0
<b>Respiratory System</b>																				
Lung		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Nose		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Trachea		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
<b>Special Senses System</b>																				
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

## P07: 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: 11:56:33

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male  
F3 0PPB

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

\*TOTALS

## Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Urethra	+																		3
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
<b>SYSTEMIC LESIONS</b>																			
Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymphoma Malignant																			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

**P07: 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:** 11:56:33

**First Dose M/F:** NA / NA

Lab: NCTR

## Alimentary System

## Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach

Y

## **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

**P07: 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:** 11:56:33

**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

## P07: 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: 11:56:34

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	9	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				
<b>Integumentary System</b>																					
Mammary Gland	A	+	+	+	+	M	+	+	+	M	M	M	+	+	+	+	M	+	+	M	+
Fibroadenoma																	X				
Fibroma																					
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Keratoacanthoma																		X			
Lipoma																					X
<b>Musculoskeletal System</b>																					
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

**P07: 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:** 11:56:34

**First Dose M/F:** NA / NA

Lab: NCTR

## **Nervous System**

## Respiratory System

## **Special Senses System**

## Urinary 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

## P07: 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:** 11:56:34

## **Route: DOSED FEED**

**CAS Number:** 57-63-6

**First Dose M/F:** NA / NA

**Species/Strain:** Rat/CD

## Lab: NCTE

\* ..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

P07: 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: 11:56:34  
 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	4	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4
	9	9	3	2	2	2	4	4	4	4	5	5	5	5	9	7	
	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
	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	0	0	4	4	4	4	5	5	5	5	6	6	6	0	1	1	1
	7	8	3	4	7	8	4	5	6	7	8	6	7	9	3	4	5
																	*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
<b>Cardiovascular System</b>																		
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  
**Test Type:** SPECIAL STUDY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P07: 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:** 11:56:34  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

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

DAY ON TEST	CD Rat Male																		
	F3/2PPB TO CTL																		
	ANIMAL ID																		
	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	4	4	
	9	9	3	2	2	2	4	4	4	4	4	5	5	5	5	5	9	7	
	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	1	1	1	1	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	
	0	0	4	4	4	4	5	5	5	5	5	6	6	6	6	0	1	1	
	7	8	3	4	7	8	4	5	6	7	8	6	7	9	3	4	5	6	
	<b>*TOTALS</b>																		
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Endocardium, Schwannoma Malignant																			1
Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach																			1
<b>Endocrine System</b>																			
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Adenoma																			1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	48	
Pheochromocytoma Benign													X						4
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Adenoma																			1
Parathyroid Gland	M	+	+	+	+	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
<b>General Body System</b>																			
NONE																			
<b>Genital System</b>																			

\* ..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

P07: 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: 11:56:34  
 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	
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	4	4
9	9	3	2	2	2	4	4	4	4	5	5	5	5	5	5	9	7
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	1	1	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
0	0	4	4	4	4	5	5	5	5	6	6	6	6	0	1	1	1
7	8	3	4	7	8	4	5	6	7	8	6	7	9	3	4	5	6
Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach																	1
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Carcinoma																	1
Squamous Cell Carcinoma													X				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
<b>Hematopoietic System</b>																	
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

**P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Type:** SPECIAL STUDY

**Route: DOSED FEED**

**Species/Strain:** Rat/CD

## **Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)**

CAS Number: 57-63-6

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:56:35

**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

P07: 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: 11:56:35  
 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
	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	4	4
	9	9	3	2	2	2	4	4	4	4	5	5	5	5	9	7	
	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
	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	0	0	4	4	4	4	5	5	5	5	6	6	6	0	1	1	1
	7	8	3	4	7	8	4	5	6	7	8	6	7	9	3	4	5
																	*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

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

## P07: 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: 11:56:35

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
ANIMAL ID	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	4	4
	9	9	3	2	2	2	4	4	4	4	5	5	5	5	5	9	7	
	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	1	1	1	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	0	0	4	4	4	4	5	5	5	5	6	6	6	6	0	0	1	1
	7	8	3	4	7	8	4	5	6	7	8	6	7	9	3	4	5	6
	*TOTALS																	
Urethra																		1
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
<b>SYSTEMIC LESIONS</b>																		
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

**P07: 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:** 11:56:35

**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

P07: 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: 11:56:36  
 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	5	6	6	6	6	7	6	7	7	7	7	7	7	7	7	7	7
	9	0	8	2	3	6	6	8	5	7	7	8	0	9	2	2	2	3	4	4	4	5	4	4
	8	2	9	4	9	5	8	2	6	4	4	6	9	9	1	0	4	3	7	9	9	9	0	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	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	1	1	4	5
		4	7	5	6	1	1	4	8	1	2	6	0	7	9	7	8	6	7	7	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																								+
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

P07: 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: 11:56:36  
 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
	1	3	3	4	5	5	5	5	6	6	6	6	7	6	7	7	7	7	7	7	7	7
	9	0	8	2	3	6	6	8	5	7	7	8	0	9	2	2	2	3	4	4	5	4
	8	2	9	4	9	5	8	2	6	4	4	6	9	9	1	0	4	3	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	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	1	1
		4	7	5	6	1	1	4	8	1	2	6	0	7	9	7	8	6	7	3	4	5
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		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Hematopoietic System</b>																						
Bone Marrow		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node															A							
Lymph Node, Mandibular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node, Mesenteric		+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen		+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Thymus		+	+	+	M	A	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+
<b>Integumentary System</b>																						
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

## P07: 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: 11:56:36

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	6	7	7	7	7	7	7	7	7	7	7	
		9	0	8	2	3	6	6	8	5	7	7	8	0	9	2	2	2	3	4	4	4	5	4	
		8	2	9	4	9	5	8	2	6	4	4	6	9	9	1	0	4	3	7	9	9	0	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	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	6	7	7	8	8	9	9	0	1	1	4	
		4	7	5	6	1	1	4	8	1	2	6	0	7	9	7	8	6	7	7	3	4	5	5	
		X																							
Schwannoma Malignant																									
<b>Musculoskeletal System</b>																									
Bone																									
Bone, Femur																									
Skeletal Muscle																									
<b>Nervous System</b>																									
Brain, Brain Stem																									
Brain, Cerebellum																									
Granular Cell Tumor Malignant																									
Brain, Cerebrum																									
Granular Cell Tumor Malignant																									
Peripheral Nerve																									
Spinal Cord																									
<b>Respiratory System</b>																									
Lung																									
Alveolar/Bronchiolar Adenoma																									
Schwannoma Malignant, Metastatic, Skin																									
Squamous Cell Carcinoma, Metastatic, Uncertain Primary Site																									
Nose																									
Trachea																									

\* ..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

P07: 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: 11:56:36  
 First Dose M/F: NA / NA  
 Lab: NCTR

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

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

\*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

+ ..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

P07: 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: 11:56:36  
 First Dose M/F: NA / NA  
 Lab: NCTR

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

DAY ON TEST	CD Rat Male																		*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	
	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	5	5	5	5	4	4	4	
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
<b>Endocrine System</b>																			
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Adenoma		X																	1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Bilateral, Pheochromocytoma Benign																			1
Pheochromocytoma Benign																			5
Pheochromocytoma Malignant															X				2
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Adenoma			X		X														3
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Pars Distalis, Adenoma		X	X	X	X										X				18
Pars Intermed, Adenoma															X				1
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
C Cell, Adenoma																			1
C Cell, Carcinoma					X				X										3
<b>General Body System</b>																			
NONE																			
<b>Genital System</b>																			

\* ..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

## P07: 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: 11:56:37

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	5	5	5	5	4	4	4	
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	
<b>Hematopoietic System</b>																			
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Lymph Node																		13	
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47	
<b>Integumentary System</b>																			
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

## P07: 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: 11:56:37

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
ANIMAL ID	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	5	5	5	4	4	4	4
	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	1	1	1	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	3	3	3	3	6	6	6	6	6	6	7	9	9	0	0	1	1	1
	0	5	6	9	1	2	3	4	5	8	0	7	8	0	1	0	1	7
																		8

**\*TOTALS**

1

Schwannoma Malignant

**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

Spinal Cord

**Respiratory System**

Lung

Alveolar/Bronchiolar Adenoma

Schwannoma Malignant, Metastatic, Skin

Squamous Cell Carcinoma, Metastatic,

Uncertain Primary Site

Nose

Trachea

1

50

3

50

50

X

1

50

1

2

0

48

1

1

X

1

49

50

\* ..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

## P07: 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: 11:56:37

First Dose M/F: NA / NA

Lab: NCTR

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

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

**\*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	X	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

**P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Type:** SPECIAL STUDY

## **Route: DOSED FEED**

**Species/Strain:** Rat/CD

## **Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)**

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:56:37

**First Dose M/F:** NA / NA

Lab: NCTR

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## Alimentary System

## **Cardiovascular System**

## **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

| ..Insufficient tissue

Page 34

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

P07: 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: 11:56:38  
 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
		9	3	0	5	6	0	2	5	5	7	0	0	1	3	4	4	4	4	4	4
		1	9	4	3	9	8	5	5	5	4	3	9	9	6	8	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	0
		0	0	2	3	3	7	8	8	8	8	8	8	8	9	9	9	9	9	9	9
		1	1	1	1	3	0	1	2	2	4	6	7	7	8	0	1	2	5	5	6
		4	9	9	1	2	5	1	4	5	4	9	6	8	1	6	6	2	1	9	0
Adrenal Cortex		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adrenal Medulla		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pheochromocytoma Benign														X							
Pheochromocytoma Malignant																					X
Islets, Pancreatic		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenoma																					X
Parathyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	M	+
Pituitary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+
Pars Distalis, Adenoma																					+
Thyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
C Cell, Carcinoma																					X
<b>General Body System</b>																					
Tissue NOS														+							
Sarcoma														X							
<b>Genital System</b>																					
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

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

P07: 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: 11:56:38  
 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	
	ANIMAL ID	0	1	5	5	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	
		9	3	0	5	6	0	2	5	5	7	0	0	0	1	3	4	4	4	4	4	5	5	
		1	9	4	3	9	8	5	5	5	4	3	9	9	6	8	9	9	9	9	9	9	9	
Preputial Gland	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Carcinoma																								
Squamous Cell Carcinoma											X	X	X	X	X	X	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	M	
Integumentary System																								
Mammary Gland	+	A	+	+	+	M	+	M	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adenocarcinoma							X				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

## P07: 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: 11:56:38

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	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
Adenoma																					X			
Fibroadenoma																					X			
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Carcinoma																					X			
Fibroma																								
Keratoacanthoma																								
Lipoma																					X			
Sarcoma																								
<b>Musculoskeletal System</b>																								
Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Nervous System</b>																								
Brain																					+			
Cranial Nerve, Schwannoma Malignant																					X			
Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Reticulosis Malignant																					X			
Brain, Cerebellum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Brain, Cerebrum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Meninges, Granular Cell Tumor Benign																					X			
<b>Respiratory System</b>																								
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

\* ..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

**P07: 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:** 11:56:38

**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

P07: 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: 11:56:38  
 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	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5
		9	9	9	9	9	4	4	3	3	2	2	2	2	4	4	5	4	4
		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	0	0	0	1	1	1
		0	1	1	1	1	3	3	3	3	4	4	4	4	5	6	1	1	1
		6	1	2	3	4	1	2	3	4	0	1	2	5	6	9	0	2	3
		<b>*TOTALS</b>																	

#### 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

## P07: 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: 11:56:38

First Dose M/F: NA / NA

Lab: NCTR

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

DAY ON TEST	ANIMAL ID																		<b>*TOTALS</b>
	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	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5		
	9	9	9	9	9	4	4	3	3	2	2	2	2	4	4	5	4		
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Pheochromocytoma Benign																		1	
Pheochromocytoma Malignant																		1	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Adenoma																		1	
Parathyroid Gland	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Pars Distalis, Adenoma						X	X	X	X	X	X	X	X					26	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
C Cell, Carcinoma																		1	
<b>General Body System</b>																			
Tissue NOS																		1	
Sarcoma																		1	
<b>Genital System</b>																			
Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Carcinoma, Metastatic, Uncertain Primary Site																		1	
Schwannoma Malignant																		1	
Ductus Deferens																		1	
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Penis																		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

P07: 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: 11:56:39  
 First Dose M/F: NA / NA  
 Lab: NCTR

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

	DAY ON TEST	ANIMAL ID																		<b>*TOTALS</b>
		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	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	9	9	9	9	9	4	4	3	3	2	2	2	2	2	4	4	5	4	4	4
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Carcinoma																				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																				1
<b>Hematopoietic System</b>																				
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymph Node																				16
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Sarcoma																				1
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
<b>Integumentary System</b>																				
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

## P07: 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: 11:56:39

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
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	5	5	5	5	5	5	5	5	5	5	5	5	5
	9	9	9	9	9	4	4	3	3	2	2	2	2	4	4	5	4	4
	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	1	1	1	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	0	1	1	1	1	3	3	3	3	4	4	4	4	4	5	6	1	1
	6	1	2	3	4	1	2	3	4	0	1	2	5	6	9	0	2	3

**\*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

P07: 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: 11:56:39  
 First Dose M/F: NA / NA  
 Lab: NCTR

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

DAY ON TEST																			<b>*TOTALS</b>	
	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	1	
	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	50	
	9	9	9	9	9	4	4	3	3	2	2	2	2	2	4	4	5	4	1	
	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	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	
	0	1	1	1	1	3	3	3	3	4	4	4	4	4	5	6	1	1	1	
	6	1	2	3	4	1	2	3	4	0	1	2	5	6	9	0	2	3	4	
Thymoma Malignant, Metastatic, Uncertain Primary Site																				1
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Osteosarcoma																			1	
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
<b>Special Senses System</b>																				
Ear																			1	
Neural Crest Tumor																			1	
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Iris, Melanoma Benign																			1	
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Lacrimal Gland																			1	
<b>Urinary System</b>																				
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Liposarcoma																			1	
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
<b>SYSTEMIC LESIONS</b>																				
Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	

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

\* ..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

**P07: 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:** 11:56:39

**First Dose M/F:** NA / NA

Lab: NCTR

CD Rat Female F3 OPPB	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	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	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	4	5
		7	4	4	8	8	1	5	9	2	3	4	1	1	1	6	6	1	0	0	2	8	6	2	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	0
		0	1	2	2	2	3	3	3	4	5	8	8	8	8	8	8	8	8	8	8	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	5	2	3
		6	4	4	2	8	7	6	7	1	3	8	9	7	8	9	7	2	1	2	5	2	8	1	3	2

---

## 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

## P07: 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: 11:56:39

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female F3 0PPB	DAY ON TEST	Neoplasms by Individual Animal (Systemic Lesions Abridged)																							
		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	
Stomach, Forestomach		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adenocarcinoma, Metastatic, Uterus																			X						
Squamous Cell Papilloma																				X					
Stomach, Glandular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Leiomyosarcoma																				X					
<b>Cardiovascular System</b>																									
Blood Vessel		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Heart		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Endocrine System</b>																									
Adrenal Cortex		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adenoma																				X					
Adrenal Medulla		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Islets, Pancreatic		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adenoma																				+	+	+	+	+	
Parathyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	
Pituitary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pars Distalis, Adenoma																			+	+	+	+	+	+	
Thyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
C Cell, Adenoma																				X					
C Cell, Carcinoma																					X				
<b>General Body System</b>																									

\* ..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

**P07: 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:** 11:56:40

**First Dose M/F:** NA / NA

Lab: NCTR

NONE

## **Genital System**

## Hematopoietic 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

**P07: 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:** 11:56:40

CAS Number: 57-63-6

**First Dose M/F:** NA / NA

Lab: NCTR

## **Integumentary System**

## **Musculoskeletal System**

## **Nervous System**

## Respiratory 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

## P07: 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: 11:56:40

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	4	1	1	1	6	6	1	0	0	2	8	6	2
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

**P07: 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:** 11:56:40

**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

## P07: 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: 11:56:40

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		
		5	4	5	5	5	5	4	4	4	4	5	5	5	5	5	5	5	5	5	5		
		0	9	0	0	0	0	9	9	9	9	4	4	3	5	5	4	5	5	5	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	0	0	1	1	1	1	1	1	1	1	1	1	1	1		
		9	9	9	9	9	9	9	9	0	0	0	0	0	0	1	1	1	1	1	1		
		6	6	7	7	7	7	7	8	9	3	6	7	1	2	5	6	2	2	3	3		
		6	7	0	1	2	7	8	9	3	6	7	1	2	5	6	2	3	7	0	1		
		*TOTALS																					
Stomach, Forestomach		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52		
Adenocarcinoma, Metastatic, Uterus																						1	
Squamous Cell Papilloma																						1	
Stomach, Glandular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52		
Leiomyosarcoma																						1	
<b>Cardiovascular System</b>																							
Blood Vessel		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52		
Heart		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52		
<b>Endocrine System</b>																							
Adrenal Cortex		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52		
Adenoma																						2	
Adrenal Medulla		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52		
Islets, Pancreatic		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52		
Adenoma																						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	X	X	32		
Thyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52		
C Cell, Adenoma																						1	
C Cell, Carcinoma																						1	
<b>General Body System</b>																							

\* ..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

**P07: 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:** 11:56:41

**First Dose M/F:** NA / NA

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
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		5	4	5	5	5	5	5	4	4	4	4	5	5	5	5	5	5	5	5
		0	9	0	0	0	0	0	9	9	9	9	4	4	4	3	5	5	4	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	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	1	1	1	1	1	1	1
		9	9	9	9	9	9	9	9	9	0	0	0	0	0	0	1	1	1	1
		6	6	7	7	7	7	7	7	8	2	2	8	8	8	9	2	2	2	3
		6	7	0	1	2	7	8	9	3	6	7	1	2	5	6	2	3	7	0

NONE

## **Genital System**

## Hematopoietic 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

**P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Type:** SPECIAL STUDY

## **Route: DOSED FEED**

**Species/Strain:** Rat/CD

**Test Compound: ENDOCRINE DISRUPTOR(Ethinyl Estradiol)**

**CAS Number:** 57-63-6

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:56:41

**First Dose M/F:** NA / NA

Lab: NCTR

## **Integumentary System**

## Musculoskeletal System

### **Nervous System**

## Respiratory 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

## P07: 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: 11:56:41

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
	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	
<b>Special Senses System</b>																							
Eye		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52	
Harderian Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52	
<b>Urinary System</b>																							
Kidney		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52	
Lipoma																							1
Nephroblastoma																							1
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52	
<b>SYSTEMIC LESIONS</b>																							
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

**P07: 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:** 11:56:41

**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

I ..Insufficient tissue



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

P07: 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: 11:56:42  
 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	6	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
		1	9	2	4	4	5	9	0	9	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	4	1	3	0	3	6	0	8	8	2	6	6	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
		1	2	2	2	2	3	3	7	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9
		0	0	4	8	9	1	9	0	0	0	1	4	5	5	6	6	7	8	8	9	9	0	2	3	3
		8	5	9	4	9	2	9	6	3	8	0	0	4	7	4	8	3	5	9	9	9	3	8	1	2
Granulosa Cell Tumor Benign																		X								
Granulosa Cell Tumor Malignant																										X
Sertoli Cell Tumor Benign																										X
Oviduct	+ A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Endometrium, Adenocarcinoma																										X
Endometrium, Adenoma																										X
Polyp Stromal																										X
Vagina	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Hematopoietic System</b>																										
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node																										+
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node, Mesenteric	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Thymus	+	A	+	+	M	+	+	+	+	+	+	+	+	+	+	M	+	+	+	M	M	+	+	+	+	
<b>Integumentary System</b>																										
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adenocarcinoma																										X
Adenocarcinoma, Multiple																	X		X							
Fibroadenoma																	X		X	X	X	X	X	X	X	
Fibroadenoma, Multiple																	X		X	X	X	X	X	X	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

### P07: 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: 11:56:42  
 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	6	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7
		1	9	2	4	4	5	9	0	9	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	4	1	3	0	3	6	0	8	8	2	6	6	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
		1	2	2	2	2	3	3	7	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9
		0	0	4	8	9	1	9	0	0	0	1	4	5	5	6	6	7	8	8	9	0	2	3	3	4
		8	5	9	4	9	2	9	6	3	8	0	0	4	7	4	8	3	5	9	9	3	8	1	2	4
Skin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Ear, Basal Cell Adenoma																							X	X		
Fibroma																										
<b>Musculoskeletal System</b>																										
Bone																										
Bone, Femur		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Skeletal Muscle		+																								
Diaphragm, Granulosa Cell Tumor																										X
Malignant, Metastatic, Ovary																										
<b>Nervous System</b>																										
Brain, Brain Stem		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Brain, Cerebellum		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Brain, Cerebrum		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Peripheral Nerve																										
Spinal Cord																										
<b>Respiratory System</b>																										
Lung		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Nose		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Trachea		+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Special Senses System</b>																										
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

## P07: 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: 11:56:42

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
	4	4	5	5	5	5	6	5	6	6	6	6	7	7	7	7	7	7	7	7
	1	9	2	4	4	5	9	0	9	2	2	7	8	8	9	0	0	1	2	2
	8	5	2	1	8	7	7	9	9	4	1	3	0	3	6	0	8	8	2	6
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

P07: 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: 11:56:42  
 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	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	4
	9	0	0	9	2	5	5	4	4	4	4	4	4	4	4	5	5	9
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	8	1	2	2	5	7	7	8	8	8	8	9	9	9	2	3	3	3
	1	7	2	3	0	4	5	6	3	4	7	8	2	3	4	4	2	3
	7	2	3	0	4	5	6	3	4	7	8	2	3	4	4	2	3	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																		1
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Carcinoma, Metastatic, Intestine Small, Jejunum																		1
Cholangiocarcinoma														X				1
Hepatocellular Carcinoma																		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

**P07: 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:** 11:56:42

**First Dose M/F:** NA / NA

Lab: NCTR

## General Body System

NONE

## **Genital System**

### Clitoral Gland

## Adenoma

## Ovary

## Granulosa Cell Tumor Benign

50

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

### M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

| ..Insufficient tissue

Experiment Number: 99920-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

## P07: 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: 11:56:42

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
ANIMAL ID	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	4	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	4
	9	0	0	9	2	5	5	4	4	4	4	4	4	4	5	5	9	7

**\*TOTALS**

Granulosa Cell Tumor Benign																			1
Granulosa Cell Tumor Malignant																			1
Sertoli Cell Tumor Benign																			2
Oviduct	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Endometrium, Adenocarcinoma																			1
Endometrium, Adenoma																			1
Polyp Stromal							X			X				X		X		7	
Vagina	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
<b>Hematopoietic System</b>																			
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Lymph Node	+	+	+	+														17	
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45	
<b>Integumentary System</b>																			
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Adenocarcinoma					X			X									X	4	
Adenocarcinoma, Multiple																		2	
Fibroadenoma						X	X				X							13	
Fibroadenoma, Multiple					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

## P07: 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: 11:56:43

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	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	
	9	0	0	9	2	5	5	4	4	4	4	4	4	4	4	5	5	9	7		
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Ear, Basal Cell Adenoma		X																		1	
Fibroma																				2	
<b>Musculoskeletal System</b>																					
Bone																				1	
Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Skeletal Muscle																				4	
Diaphragm, Granulosa Cell Tumor																				1	
Malignant, Metastatic, Ovary																					
<b>Nervous System</b>																					
Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Brain, Cerebellum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Brain, Cerebrum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Peripheral Nerve																				1	
Spinal Cord																				1	
<b>Respiratory System</b>																					
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49		
<b>Special Senses System</b>																					
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

## P07: 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: 11:56:43

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	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4		
	9	0	0	9	2	5	5	4	4	4	4	4	4	4	4	5	5	9	7		
	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	1	1	1	1		
<b>Urinary System</b>		9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	
Kidney		8	1	2	2	5	7	7	7	8	8	8	8	9	9	9	2	3	3	3	
Urinary Bladder		1	7	2	3	0	4	5	6	3	4	7	8	2	3	4	4	2	3	4	
<b>SYSTEMIC LESIONS</b>																					
Multiple Organ		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Mesothelioma Malignant																					

\* ..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

**P07: 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:** 11:56:43

**CAS Number:** 57-63-6

**CAS Number:** 57-63-6

**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	8	9	9	0	1	1	2	2	3
	9	2	0	2	0	6	3	8	0	0	6	5	6	0	0	2	7	7	2	8	6	6	3	7	1	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	2	2	3	6	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9
	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	1	0	5	8	4	2	3

## **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

**P07: 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:** 11:56:43

**CAS Number:** 57-63-6

**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	
	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	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	1	4	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	
	2	2	9	6	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	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	
	4	2	0	2	0	6	3	8	0	0	6	5	6	0	0	2	7	7	2	8	6	6	3	7	4	4	
	5	2	0	2	0	6	3	8	0	0	6	5	6	0	0	2	7	7	2	8	6	6	3	7	4	4	
	6	2	0	2	0	6	3	8	0	0	6	5	6	0	0	2	7	7	2	8	6	6	3	7	4	4	
	7	2	0	2	0	6	3	8	0	0	6	5	6	0	0	2	7	7	2	8	6	6	3	7	4	4	
	8	2	0	2	0	6	3	8	0	0	6	5	6	0	0	2	7	7	2	8	6	6	3	7	4	4	
	9	2	0	2	0	6	3	8	0	0	6	5	6	0	0	2	7	7	2	8	6	6	3	7	4	4	

## **Endocrine System**

## **General Body System**

Tissue NOS  
Squamous Cell Carcinoma, Deep Invasion

## **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

| ..Insufficient tissue

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

P07: 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: 11:56:43  
 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	6
	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	9
		2	2	9	6	7	0	0	0	0	1	2	3	3	5	5	5	6	6	7	8	8
		0	2	3	2	8	9	5	7	7	9	7	8	3	5	8	9	2	5	4	0	5
Uterus		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Endometrium, Adenoma																						
Polyp Stromal																						X
Vagina		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hematopoietic System																						
Bone Marrow		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node																						+
Lymph Node, Mandibular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Carcinoma, Metastatic, Zymbal's Gland																						X
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Spleen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Thymus		+	+	+	+	+	+	+	+	+	+	M	+	+	+	M	M	+	+	+	M	
Integumentary System																						
Mammary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adenocarcinoma																						X X
Adenocarcinoma, Multiple																						X
Fibroadenoma			X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	
Fibroadenoma, Multiple							X	X	X		X						X		X	X	X	
Skin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Fibrous Histiocytoma																						X
Sarcoma																						

\* ..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

**P07: 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:** 11:56:44

**First Dose M/F:** NA / NA

Lab: NCTR

### Carcinoma

x

## Urinary System

Kidney

#### Renal Tubule, Adenoma

## Urinary Bladder

## **SYSTEMIC LESIONS**

## Multiple Organ

## Histiocytic Sarcoma

### Lymphoma Malignant

#### Mesothelioma Malignant

x

x

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

+ .. Tissue examined microscopically

X ..Lesion present

| ..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

P07: 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: 11:56:44  
 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
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	5	5	4	4	4	5	4	4	5	5	5	5	5	5	5	5	5	4
	0	0	8	9	9	0	9	8	1	5	4	4	4	5	5	5	4	5
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	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	1
6	7	8	1	1	1	2	2	5	7	7	7	8	9	2	2	2	3	3
4	5	2	5	6	9	1	9	2	1	2	7	6	5	5	6	8	7	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

## P07: 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: 11:56:44

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
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	5	5	4	4	4	5	4	4	5	5	5	5	5	5	5	5	5	4
	0	0	8	9	9	0	9	8	1	5	4	4	4	5	5	5	4	5
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	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	0	0	1	1	1	1
	9	9	9	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	6	7	8	1	1	1	2	2	5	7	7	7	8	9	2	2	2	3
	4	5	2	5	6	9	1	9	2	1	2	7	6	5	5	6	8	7

\*TOTALS

## Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adenoma																		1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	47
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Pars Distalis, Adenoma	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																		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

P07: 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: 11:56:44  
 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
5	5	5	4	4	4	5	4	4	5	5	5	5	5	5	5	5	5	5	4
0	0	8	9	9	0	9	8	1	5	4	4	4	5	5	5	5	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	0	1	1	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	1
6	7	8	1	1	1	2	2	5	7	7	7	8	9	2	2	2	3	3	3
4	5	2	5	6	9	1	9	2	1	2	7	6	5	5	6	8	7	8	8
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Endometrium, Adenoma																			2
Polyp Stromal																			X
Vagina	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
<b>Hematopoietic System</b>																			
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Lymph Node																			10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Carcinoma, Metastatic, Zymbal's Gland																			1
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46	
<b>Integumentary System</b>																			
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Adenocarcinoma																			6
Adenocarcinoma, Multiple																			3
Fibroadenoma	X		X		X		X												21
Fibroadenoma, Multiple	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	19	
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Fibrous Histiocytoma																			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

**P07: 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:** 11:56:45

**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

P07: 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: 11:56:45  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Female F3/50PPBTO CTL	DAY ON TEST	Alimentary System																							
		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	8	7	7	8	9	0	1	2	
		7	1	0	7	0	3	8	1	8	6	7	3	6	3	9	0	7	9	2	4	7	5	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	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	9	9	
		4	5	9	1	2	9	9	2	5	9	9	5	0	1	3	4	5	5	5	6	7	8	9	2
		3	2	1	8	1	9	7	2	7	7	8	2	4	5	6	8	0	1	6	3	1	3	0	4

Alimentary System

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

Cholangioma

+

Mesentery

+

Oral Mucosa

+

Squamous Cell Carcinoma

X

Pancreas

+

Salivary Glands

+

Stomach, Forestomach

+

Squamous Cell Carcinoma

X

Stomach, Glandular

+

Cardiovascular System

Blood Vessel

+

Heart

+

\* ..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

**P07: 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:** 11:56:45

**CAS Number:** 57-63-6

**CAS Number:** 57-63-6

**First Dose M/F:** NA / NA

## Lab: NCTR

## **Endocrine System**

## **General Body System**

Tissue NOS  
Alveolar/Bronchiolar Carcinoma, Metastatic,  
UND

## **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

P07: 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: 11:56:45  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Female F3/50PPBTO CTL	DAY ON TEST	P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)																				
		Test Compound: ENDOCRINE DISRUPTOR(Ethyne Estradiol)																				
	ANIMAL ID	CAS Number: 57-63-6																				
		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	7	7	7	7	7
		8	2	0	2	3	9	4	6	7	9	0	1	3	6	8	7	7	8	9	0	1
		7	1	0	7	0	3	8	1	8	6	7	3	6	3	9	0	7	9	2	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	0	0	0
		0	0	0	1	1	1	2	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	4	5	5	5	6	7
		3	2	1	8	1	9	7	2	7	7	8	2	4	5	6	8	0	1	6	3	1
Oviduct		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Uterus		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Leiomyoma																						
Polyp Stromal																						
Vagina		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Hematopoietic System</b>																						
Bone Marrow		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node																						
Lymph Node, Mandibular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Spleen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Thymus		+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	
<b>Integumentary System</b>																						
Mammary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adenocarcinoma																						
Fibroadenoma																						
Fibroadenoma, Multiple					X		X															
Skin		+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	
Basal Cell Adenoma																						
Fibroma																						
Sarcoma																						

\* ..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

**P07: 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:** 11:56:46

**CAS Number:** 57-63-6

**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

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

P07: 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: 11:56:46  
 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	7
	4	4	4	4	5	5	4	4	4	5	5	5	5	5	5	5	5	5	5
	9	9	9	8	0	0	9	9	9	2	5	4	4	4	4	4	4	5	3
	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	1	1	1	1	1	1	1	1	1	1	1	1
<b>*TOTALS</b>																			

**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

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

## P07: 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: 11:56:46

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	5	5	4	4	4	5	5	5	5	5	5	5	5	5
	9	9	9	8	0	0	9	9	9	2	5	4	4	4	4	4	5	3
	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	0	0	0	0	0	0	0	1
	4	6	7	8	1	2	2	2	2	5	7	7	7	8	8	9	9	3
	1	9	6	4	8	0	4	5	8	1	3	8	9	0	9	0	1	6

**\*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			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							X											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

P07: 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: 11:56:46  
 First Dose M/F: NA / NA  
 Lab: NCTR

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

	DAY ON TEST	ANIMAL ID																		<b>*TOTALS</b>	
		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	5	5	4	4	4	5	5	5	5	5	5	5	5	5	5	5	
	9	9	9	8	0	0	9	9	9	2	5	4	4	4	4	4	4	5	3		
Oviduct	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Leiomyoma																				1	
Polyp Stromal																				X	5
Vagina	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
<b>Hematopoietic System</b>																					
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Lymph Node																				+	5
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Lymph Node, Mesenteric	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
<b>Integumentary System</b>																					
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

## P07: 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: 11:56:46

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	5	5	4	4	4	5	5	5	5	5	5	5	5	5
	9	9	9	8	0	0	9	9	9	2	5	4	4	4	4	4	5	3
	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	0	0	0	0	0	0	0	1
	4	6	7	8	1	2	2	2	2	5	7	7	7	8	8	9	9	3
	1	9	6	4	8	0	4	5	8	1	3	8	9	0	9	0	1	6

\*TOTALS

## Musculoskeletal System

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

## Nervous System

Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Brain, Cerebellum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Astrocytoma Malignant																		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
--------------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---

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

P07: 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: 11:56:46  
 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	5	5	4	4	4	5	5	5	5	5	5	5	5	5
	9	9	9	8	0	0	9	9	9	2	5	4	4	4	4	4	5	3
	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	0	0	0	0	0	0	0	1
	4	6	7	8	1	2	2	2	2	5	7	7	7	8	8	9	9	3
	1	9	6	4	8	0	4	5	8	1	3	8	9	0	9	0	1	6

\*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