

Experiment Number: 99930-99
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/22/2014
Time Report Requested: 14:14:29
First Dose M/F: NA / NA
Lab: NCTR

C Number:	MG96005
Lock Date:	Not Entered.
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: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:29
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
 F0 0 PPM

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

Alimentary System

Esophagus	A																									0		
Intestine Large, Cecum	A																										0	
Intestine Large, Colon	A																										0	
Intestine Small, Duodenum	A																										0	
Intestine Small, Ileum	A																										0	
Intestine Small, Jejunum	A																										0	
Liver	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	24	
Fibrosis												2															1	2.0
Hepatodiaphragmatic Nodule				X								X									X						3	
Inflammation, Chronic		1	1	1	1		1	1	1	1	2	1	1		1	1			1	1	1	1	1				18	1.1
Necrosis													1							1							2	1.0
Vacuolization Cytoplasmic				1		1	2		1				1					1			1						7	1.1
Pancreas	A																										0	
Salivary Glands	+																										1	

Cardiovascular System

Blood Vessel	+																										1
Heart	+																										1

Endocrine System

Adrenal Cortex	A	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	23
Accessory Adrenal Cortical Nodule																					X						1

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:30
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male F0 0 PPM	DAY ON TEST	ANIMAL ID																				*TOTALS			
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	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	1	1	1	1	1	1	1	1	1		
		8	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
		1	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	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	2	2	2	2		
		0	4	4	4	4	4	5	0	0	0	0	0	0	0	5	5	5	5	5	0	0	0		
		1	6	7	8	9	0	1	2	3	4	5	6	7	0	1	1	1	1	1	2	2	2		
Adrenal Medulla		A	+	+	M	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	22		
Parathyroid Gland		+																					1		
Pituitary Gland		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	24		
Thyroid Gland		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	24		
Inflammation, Chronic																							1	1	1.0
General Body System																									
NONE																									
Genital System																									
Coagulating Gland		A	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	23		
Epididymis		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	24		
Hypospermia						2		3															2	2.5	
Infiltration Cellular, Lymphocyte								1															1	1.0	
Preputial Gland		A																					0		
Prostate		A	+		M													+					2		
Prostate, Dorsal Lobe		A	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	23		
Inflammation, Chronic									1		1	1	1		1		1						6	1.0	
Inflammation, Suppurative					1														1	2		1	1	8	1.3
Prostate, Ventral Lobe		A	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	23		
Inflammation, Chronic						1	2	2	2		1	2	1	1	2	2	1		1	2	2	2	17	1.6	
Inflammation, Suppurative																							2	1.5	
Rete Testes		+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	24		
Dilatation						2		3															2	2.5	

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:30
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F0 0 PPM

	DAY ON TEST	ANIMAL ID																								*TOTALS
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		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	1	1	1	1	1	1	1	1	1	1		
		8	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4			
		1	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	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	2	2	2	2			
		0	4	4	4	4	5	0	0	0	0	0	0	0	5	5	5	5	5	0	0	0	0			
		1	6	7	8	9	0	1	2	3	4	5	6	7	0	1	1	1	1	2	2	2	2			
Seminal Vesicle	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	24		
Dilatation				2										2					2					3 2.0		
Epithelium, Degeneration						2																		1 2.0		
Testes		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		
Autolysis	X																							1		
Seminif Tub, Degeneration					4		4													1				3 3.0		
Hematopoietic System																										
Bone Marrow	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	24		
Lymph Node, Mandibular	A																							0		
Lymph Node, Mesenteric	A																							0		
Spleen	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	24		
Pigmentation			1			1					1					1		1						5 1.0		
Thymus	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	24		
Integumentary System																										
Mammary Gland	A	+	+	+	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	23		
Alveolus, Hyperplasia															1									1 1.0		
Skin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		
Musculoskeletal System																										
Bone, Femur		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		
Nervous System																										
Brain	A																							0		

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:30
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F0 0 PPM

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

Respiratory System

Lung	A																								0	
Nose	A																									0
Trachea	A																									0

Special Senses System

NONE

Urinary System

Kidney	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	24	
Casts Protein					1																				1	1.0
Hyaline Droplet											1									1					2	1.0
Inflammation, Chronic		1	2	1	1	1		1	1	1	1	1	1		1	1	1		1	1	2	1	1	1	20	1.1
Interstitial, Fibrosis											2										2				2	2.0
Renal Tubule, Dilatation				2			2	1			2	2								1	2	2			8	1.8
Renal Tubule, Mineralization		1																							1	1.0
Renal Tubule, Regeneration				1	1	1	1	1				1				1				1	1	1			10	1.0

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:30
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F0 5 PPM

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

***TOTALS**

Alimentary System

Liver																								
									+	+		+		+		+			+					6
Fibrosis																3								1
Hepatodiaphragmatic Nodule												X												1
Malformation								X	X								X							3
Perivascular, Fibrosis																				2				1

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

Coagulating Gland	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	24
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
Infiltration Cellular, Lymphocyte	1																				1			2
Prostate						+			+		+								+		+			5
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
Inflammation, Chronic					2												1			1		1		4
Inflammation, Suppurative	2			2	2					1				2					2	2		1	2	9

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:31
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F0 5 PPM

	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		
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	9	9	9	9	9	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5	5	5	5	5	6	6	9	9	9	9	0	0	2	5	5	5	5	6	6	0	0	0	0		
	1	3	4	7	8	1	4	7	8	9	9	0	8	6	7	8	9	0	1	6	7	8	9	0		
																									*TOTALS	
Prostate, Ventral Lobe																									25	
Inflammation, Chronic																									16	1.3
Inflammation, Suppurative																									2	1.5
Rete Testes																									25	
Seminal Vesicle																									23	
Dilatation																									1	2.0
Malformation																									1	
Testes																									25	
Seminif Tub, Degeneration																									2	2.0
Hematopoietic System																										
NONE																										
Integumentary System																										
Mammary Gland																									24	
Alveolus, Hyperplasia																									3	1.3
Musculoskeletal System																										
NONE																										
Nervous System																										
NONE																										
Respiratory System																										
NONE																										

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014

Time Report Requested: 14:14:31

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male
F0 5 PPM

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

Special Senses System

NONE

Urinary System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:31
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F0 100 PPM

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

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

Parathyroid Gland

+

1

General Body System

NONE

Genital System

Coagulating Gland

+ + + + + + + + I + + + + + M + + + + I + + + +

22

Epididymis

+ +

25

Infiltration Cellular, Lymphocyte

1 1

2 1.0

Prostate

+

4

Prostate, Dorsal Lobe

+ +

25

Inflammation, Chronic

1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1

6 1.3

Inflammation, Suppurative

1 2 1 2 1 3 1

7 1.6

Prostate, Ventral Lobe

+ +

25

Inflammation, Chronic

2 1 1 1 1 1 1 1 1 1 2 1 2 1 2 1 1 2 2 1 2 2 1 2 2

19 1.3

Inflammation, Suppurative

2 1

2 1.5

Rete Testes

+ + + + + + + + + + M + + + + + + + + + + + + + + + + +

24

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

1-4 ..Lesion qualified as:

X ..Lesion present

A ..Autolysis precludes evaluation

1) Minimal 3) Moderate

I ..Insufficient tissue

BLANK ..Not examined microscopically

2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:31
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F0 100 PPM

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|---|----------------|--|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | |
| | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 2 | 2 | 2 | 2 | 2 | | | | |
| | 5 | 5 | 6 | 6 | 6 | 6 | 9 | 0 | 1 | 1 | 1 | 1 | 1 | 6 | 6 | 6 | 6 | 6 | 6 | 1 | 1 | 1 | 1 | 1 | | | | |
| | 2 | 5 | 2 | 3 | 5 | 8 | 6 | 9 | 0 | 2 | 3 | 4 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 2 | 3 | 4 | 5 | 6 | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | *TOTALS | | |
| Seminal Vesicle | + | | | | | | | | | | | | | | | | | | | | | | | | | 25 | | |
| Testes | + | | | | | | | | | | | | | | | | | | | | | | | | | 25 | | |
| Seminif Tub, Degeneration | | | | | | 1 | | | | | | | | | | | 1 | | | | | | 2 | 1.0 | | | | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | | | | | | M | + | | | | | | | | | | | | | | | 23 | | | | | |
| Alveolus, Hyperplasia | | | | | | 2 | | | | | | | | | | | 1 | | | | | | 2 | 1.5 | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | | | | | | | | | | | | | | | | | | | | | + | | | | | | 1 |
| Cortex, Cyst | | | | | | | | | | | | | | | | | | | | | | X | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:31
 First Dose M/F: NA / NA
 Lab: NCTR

**CD Rat Male
 F0 500 PPM**

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

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | X | | X | | | | | | | | | 2 | |
| Inflammation, Chronic | 1 | 1 | | | 1 | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 1.0 |
| Malformation | X | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Necrosis | | | | | | | 2 | | | | | | | | | | | 1 | | | 1 | | 1 | | 4 | 1.3 |
| Vacuolization Cytoplasmic | | 1 | | | 1 | 1 | | | | | | | 1 | | | | 1 | | 1 | 1 | | | 1 | | 8 | 1.0 |
| Mesentery | | | | | | | | | | | | + | | | | | | | | | | | | | 1 | |
| Fat, Inflammation, Chronic | | | | | | | | | | | | 4 | | | | | | | | | | | | | 1 | 4.0 |

Cardiovascular System

NONE

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Accessory Adrenal Cortical Nodule | | | | | | X | | | | | | | | | | | | | | | | | | | 1 | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Pars Distalis, Cyst, Multiple | X | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Inflammation, Chronic | | | | | | | | | | | | | 1 | | | | | | | | | | | 1 | 2 | 1.0 |

General Body System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/22/2014
Time Report Requested: 14:14:31
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Male
F0 500 PPM

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

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Coagulating Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | | |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | | |
| Hyposperimia | | | | | | | | | | | | | 4 | | | | | | | | | | | | | 1 | 4.0 | |
| Preputial Gland | | | | | | | | | | | | | | | | | | | | | | | | + | | 1 | | |
| Duct, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | 1 | 4.0 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | 1 | 4.0 |
| Prostate | | | | | | | | | | + | + | + | | | | | | | | | | | | | + | | 4 | |
| Prostate, Dorsal Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Inflammation, Chronic | | | | 2 | 1 | | | | | 2 | 1 | | 1 | 1 | | 2 | 1 | | | | | | | 1 | 1 | | 10 | 1.3 |
| Inflammation, Suppurative | | 3 | 1 | 2 | 1 | 1 | 1 | | | 1 | 1 | 1 | 2 | 1 | | 2 | 1 | | 2 | | | 1 | | 1 | | 16 | 1.4 | |
| Prostate, Ventral Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Inflammation, Chronic | 1 | | 1 | 2 | 1 | 1 | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | | | 1 | | 2 | | 17 | 1.2 | |
| Inflammation, Suppurative | | | | 2 | | | | | | | | | | | | | | | 2 | | | | | | | | 2 | 2.0 |
| Rete Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Seminal Vesicle | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 24 | |
| Dilatation | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Edema | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | 1 | 2.0 |
| Seminif Tub, Degeneration | | | | | | | 1 | | | | | | | | 4 | | | | | | | | | | | | 2 | 2.5 |

Hematopoietic System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:31
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F0 500 PPM

| | 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 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 5 | 5 | 6 | 6 | 6 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 6 | 9 | 0 | 6 | 7 | 9 | 1 | 5 | 6 | 7 | 8 | 9 | 9 | 0 | 1 | 2 | 3 | 4 | 8 | 9 | 0 | 1 | 2 | 4 | |
| | | | | | | | | | | | | | | | | | | | | | | | | *TOTALS | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 |
| Adventitia, Inflammation, Chronic | | | | | | | | | | | | | | 1 | | | | | | | | 1 | | | 2 1.0 |
| Capsule, Fibrosis | | | | | | | | | | | | | | | | | | | 2 | | | | | | 1 2.0 |
| Capsule, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | 1 | | | | 1 1.0 |
| Pigmentation | | | | | | | | 1 | | | | 1 | | | 1 | 2 | | | 1 | 2 | | 1 | 1 | 2 | 9 1.3 |
| Thymus | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | M | + | + | + | + | + | 23 |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | I | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 24 |
| Alveolus, Hyperplasia | | | 1 | | | | | | | | | | | 2 | | | 1 | 2 | | 2 | | | | | 5 1.6 |
| Duct, Hyperplasia | | | | | | | | | | | | | 1 | | | | | | | | | | | | 1 1.0 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:32
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F0 500 PPM

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

Urinary System

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|--------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 |
| Casts Protein | | | | | | | | | | | | | | 1 | | | | | | | | | | | 1 1.0 |
| Inflammation, Chronic | 1 | 1 | | | 1 | 1 | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 2 | 1 | | | 1 1 | 18 1.1 |
| Renal Tubule, Dilatation | 1 | | | | 1 | 1 | 1 | 1 | | | | | | | 1 | 1 | | | | | | | | | 8 1.0 |
| Renal Tubule, Regeneration | 1 | | | | | | | | | | | | | 1 | 1 | 1 | | | | | 1 | 1 | | 1 | 7 1.0 |

END OF MALE DATA

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:32
 First Dose M/F: NA / NA
 Lab: NCTR

| 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 | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|---|
| CD Rat Female | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| F0 0 PPM | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| ANIMAL ID | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | |
| | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 7 | 7 | 7 | 7 | 7 | 7 | 2 | 2 | 2 | 2 | 3 | 7 | 7 | 7 | 7 | 8 | 8 | |
| | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 5 | 6 | 7 | 8 | 9 | 0 | 5 | 6 | 7 | 8 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | *TOTALS | |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Esophagus | + | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Dilatation | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Intestine Large, Cecum | + | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Intestine Large, Colon | + | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Intestine Small, Duodenum | + | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Intestine Small, Ileum | + | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Intestine Small, Jejunum | + | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Developmental Malformation | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | 2.0 |
| Pancreas | + | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Salivary Glands | + | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Stomach, Forestomach | + | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Stomach, Glandular | + | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----|
| Heart | + | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Cardiomyopathy | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|--|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 26 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 26 | | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:32
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Female
F0 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | ANIMAL ID | *TOTALS | |
|--------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----------|---------|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | 0 | 0 | 0 | 0 | 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 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 8 | 2 | |
| | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 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 | 2 | 2 | 2 | 2 | 2 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 2 | 2 | 2 | 2 | 3 | 7 | 7 | 7 | 7 | 8 | 0 | 0 | |
| | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 5 | 6 | 7 | 8 | 9 | 0 | 5 | 6 | 7 | 8 | 9 | 0 | 0 |
| Bilateral, Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 | 2.0 | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 26 | | |
| Thyroid Gland | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 26 | | |
| Diestrus | | | | | | X | X | | X | X | | | | X | X | | X | | | X | | X | X | 10 | | | |
| Estrus | | | | | | | | | | | | | | | | | X | | | | | X | | 2 | | | |
| Metestrus | X | | | X | | | | | X | | | | X | X | | | X | | | | | | | 6 | | | |
| Proestrus | | X | X | | X | | X | | | X | X | X | | | | | | | X | | | | | 8 | | | |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 26 | | | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 26 | | | |
| Decidual Reaction | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 24 | | | |
| Diestrus | | | | | | X | X | | X | X | | | | X | X | | X | | | X | | X | X | 10 | | | |
| Estrus | | | | | | | | | | | | | | | | | X | | | | | X | | 2 | | | |
| Infiltration Cellular, Eosinophil | 3 | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | | |
| Metestrus | X | | | X | | | | | X | X | | | X | X | | | X | | | X | | | | 7 | | | |
| Proestrus | | X | X | | X | | X | | | | | X | X | | | | | | X | | | | | 7 | | | |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 26 | | | |
| Diestrus | | | | | | X | X | | X | X | | | | X | X | | X | | | X | | X | X | 10 | | | |
| Estrus | | | X | | | | | | | | | | | | | | X | | | | | X | | 3 | | | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:32
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Female
F0 0 PPM

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | ANIMAL ID | *TOTALS | | |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---------|----|-----|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 1 | 1 | 1 | 0 | 0 | | |
| | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | | |
| | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 0 | 0 | 0 | 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 | 2 | 2 | 2 | 2 | 2 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 2 | 2 | 2 | 2 | 2 | 3 | 7 | 7 | 7 | 7 | 8 | 0 | | |
| | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 5 | 6 | 7 | 8 | 9 | 0 | 5 | 6 | 7 | 8 | 9 | 0 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Eosinophil | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Metestrus | X | | | X | | | | | X | X | | | | X | X | | | | | X | | | | | | | 7 | |
| Mucocyte, Hypertrophy | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Proestrus | | X | | | X | | | X | | | | | X | X | | | | | | | X | | | | | | 6 | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 26 | |
| Lymph Node, Mandibular | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Lymph Node, Mesenteric | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | | 25 | |
| Pigmentation | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | 1 | 2.0 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 26 | |
| Atrophy | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | | 25 | |
| Alveolus, Hyperplasia | 4 | | | | | 2 | | | 1 | | | | | 1 | | | 1 | 2 | 2 | | 3 | | 1 | | 1 | | 10 | 1.8 |
| Lobules, Hyperplasia | 4 | | | | | | | | | | | | | | | | 1 | | | 1 | | | | | | | 3 | 2.0 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 26 | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Necrosis, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 26 | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/22/2014
Time Report Requested: 14:14:32
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Female
F0 0 PPM

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

Nervous System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Brain, Brain Stem | + | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Brain, Cerebellum | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Brain, Cerebrum | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

Respiratory System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-----|
| Lung | + | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Inflammation, Multifocal, Chronic Active | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Nose | + | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |

Special Senses System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-----|
| Eye | + | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Cornea, Edema | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |

Urinary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|----|-----|-----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | | | 26 |
| Bilateral, Nephropathy | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | 1 | 2.0 |
| Left, Pelvis, Dilatation | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Mineralization | 1 | | 2 | 2 | | 3 | 3 | 1 | 2 | | 4 | 1 | | | 1 | 1 | | | 3 | 2 | | 1 | 1 | 1 | | 1 | | | | | 17 | 1.8 | |
| Pelvis, Dilatation | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:32
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Female
F0 5 PPM

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

Alimentary System

Liver + 1
 Developmental Malformation X 1

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

Clitoral Gland + 1
 Inflammation, Chronic Active 2 1 2.0
 Ovary + 25
 Diestrus X 9
 Estrus X 2
 Metestrus X 6
 Proestrus X 8
 Oviduct + 25
 Uterus + 25
 Decidual Reaction X 23

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically M ..Missing tissue 1-4 ..Lesion qualified as:
 X ..Lesion present A ..Autolysis precludes evaluation 1) Minimal 3) Moderate
 I ..Insufficient tissue BLANK ..Not examined microscopically 2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:33
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Female
F0 5 PPM

| | 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 | | | | | | | | | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | |
| | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 3 | 3 | 3 | 3 | 3 | 8 | 8 | 8 | 8 | 8 | | | | | | | | | | |
| | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 3 | 7 | 7 | 8 | 8 | 8 | 9 | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | *TOTALS | | | | | | | | | |
| Diestrus | X | | | | | | | X | | | | | | X | | | | | X | X | | | | | 9 | | | | | | | | | |
| Estrus | | | | | | | | | | | X | | | | | | | | | | | X | | | | | 2 | | | | | | | |
| Metestrus | | | | | X | | | | | X | | | X | X | | | | | | | | | | | X | | | | | 5 | | | | |
| Proestrus | X | | X | X | | | | | X | | | | | X | | | | | X | X | | | | | X | | | | | 8 | | | | |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | | | | | | |
| Diestrus | X | | | | | | | X | | | | | | X | X | X | X | | | | | X | X | | | | | 9 | | | | | | |
| Estrus | | | | | | | | X | | | X | X | | | | | | | | | | | X | X | | | | | X | | | | | 6 |
| Metestrus | | | | | X | X | | | | | X | | | X | X | | | | | | | | | | | X | | | | | 6 | | | |
| Proestrus | X | | X | X | | | | | | | | | | | X | | | | | X | | | | | 4 | | | | | | | | | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | | | | | | | |
| Alveolus, Hyperplasia | | | | | | | | 3 | 2 | 3 | 2 | | | 3 | 3 | 2 | 2 | 1 | | | | | 2 | 1 | 1 | | | | | 12 | 2.1 | | | |
| Lobules, Hyperplasia | | | | | | | | | | | | | | | 1 | | | | | | | | | | | 1 | | | | | 1 | 1.0 | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014

Time Report Requested: 14:14:33

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F0 5 PPM

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

*TOTALS

NONE
Special Senses System

NONE
Urinary System

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 |
| Bilateral, Pelvis, Dilatation | 2 | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Inflammation, Chronic Active | | | | 1 | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Mineralization | | 1 | 2 | 1 | 1 | 1 | | 1 | 2 | 3 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | | 1 | 2 | 21 1.3 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ ..Tissue examined microscopically M ..Missing tissue 1-4 ..Lesion qualified as:
X ..Lesion present A ..Autolysis precludes evaluation 1) Minimal 3) Moderate
I ..Insufficient tissue BLANK ..Not examined microscopically 2) Mild 4) Marked

Experiment Number: 99930-99
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/22/2014
Time Report Requested: 14:14:33
First Dose M/F: NA / NA
Lab: NCTR

**CD Rat Female
F0 100 PPM**

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

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----|
| Esophagus | + | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Intestine Large, Cecum | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Intestine Large, Colon | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Intestine Small, Duodenum | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Intestine Small, Ileum | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Intestine Small, Jejunum | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Liver | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Crystals | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Pancreas | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Salivary Glands | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Stomach, Forestomach | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Stomach, Glandular | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|
| Heart | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
|-------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|
| Adrenal Cortex | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Adrenal Medulla | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Pituitary Gland | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Thyroid Gland | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |

General Body System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:33
 First Dose M/F: NA / NA
 Lab: NCTR

**CD Rat Female
 F0 100 PPM**

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

***TOTALS**

| Genital System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-----|
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Ovary | + | | | | | | | | | | | | | | | | | | | | | | | | | | 26 | |
| Corpus Luteum, Hypertrophy | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Diestrus | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 | |
| Estrus | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Metestrus | X | | | | | | | | | | | | | | | | | | | | | | | | | | 8 | |
| Proestrus | X | | | | | | | | | | | | | | | | | | | | | | | | | | 9 | |
| Oviduct | + | | | | | | | | | | | | | | | | | | | | | | | | | | 26 | |
| Uterus | + | | | | | | | | | | | | | | | | | | | | | | | | | | 26 | |
| Decidual Reaction | X | | | | | | | | | | | | | | | | | | | | | | | | | | 24 | |
| Diestrus | X | | | | | | | | | | | | | | | | | | | | | | | | | | 7 | |
| Estrus | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Metestrus | X | | | | | | | | | | | | | | | | | | | | | | | | | | 8 | |
| Pregnancy | X | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Proestrus | X | | | | | | | | | | | | | | | | | | | | | | | | | | 9 | |
| Vagina | + | | | | | | | | | | | | | | | | | | | | | | | | | | 26 | |
| Diestrus | X | | | | | | | | | | | | | | | | | | | | | | | | | | 8 | |
| Estrus | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Metestrus | X | | | | | | | | | | | | | | | | | | | | | | | | | | 8 | |
| Mucocyte, Hyperplasia | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:33
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Female
F0 100 PPM

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | *TOTALS | | | |
|-------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|---|-----|-----|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3.0 | |
| Mucocyte, Hypertrophy | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 7 | | |
| Proestrus | | X | | | | | | | | | | | X | X | X | X | | | | | X | | X | | | | | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Lymph Node, Mandibular | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Lymph Node, Mesenteric | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Spleen | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Thymus | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 26 | |
| Alveolus, Hyperplasia | 4 | | | | | | | | | | | | 3 | 1 | | | 2 | 2 | 2 | 2 | | | | 1 | | 8 | 2.1 | |
| Duct, Hyperplasia | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Lobules, Hyperplasia | | | | | | | | | | | | | 1 | | | 1 | | | 1 | | | | | | | | 3 | 1.0 |
| Skin | + | | | | | | | | | | | | | | | + | | | | | | | | | | | 2 | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Brain, Cerebellum | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Brain, Cerebrum | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014

Time Report Requested: 14:14:34

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
 F0 100 PPM

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

*TOTALS

Respiratory System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Lung | + | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Nose | + | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Trachea | + | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

Special Senses System

NONE

Urinary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|----|-----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 26 | | | |
| Apoptosis | 4 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 | | |
| Bilateral, Parenchym Cell, Proliferation | 3 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | | |
| Inflammation, Chronic Active | | | | 1 | | | | | | | | | | | | | | | 1 | | | | | | 2 | 1.0 | | |
| Mineralization | 2 | 1 | | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 2 | 3 | 1 | | 2 | 1 | 1 | 1 | 3 | | | 1 | 1 | 1 | 2 | 22 | 1.5 |
| Urinary Bladder | + | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 99930-99

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014

Time Report Requested: 14:14:34

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F0 500 PPM

| 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 |
|-------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 4 | 4 | 4 | 4 | 4 | 9 | 9 | 9 | 9 | 9 | 9 |
| | 0 | 1 | 2 | 3 | 4 | 5 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 | 6 | 7 | 8 |
| | *TOTALS | | | | | | | | | | | | | | | | | | | | | | | |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Inflammation, Chronic Active | | | | | | | | | | 2 | | 1 | | | | | | | | | | | | | 2 | 1.5 |
| Left Lat Lobe, Developmental Malformation | | | | | | | X | | X | | | | | | | | | | | | | | | | 2 | |
| Median Lobe, Developmental Malformation | | | | | | | X | | | | | | | | | | | | | | | | | | 1 | |

Cardiovascular System

NONE

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 |

General Body System

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Clitoral Gland | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Abscess | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Keratin Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Diestrus | | | | X | | | | X | | X | X | | | | | | | | | X | | | | X | | 6 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 99930-99

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/22/2014

Test Type: SPECIAL STUDY

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 14:14:34

Route: DOSED FEED

CAS Number: 446-72-0

First Dose M/F: NA / NA

Species/Strain: Rat/CD

Lab: NCTR

| CD Rat Female
F0 500 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | *TOTALS |
|-----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 4 | 4 | 4 | 4 | 4 | 4 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 9 | 9 | 9 | 9 | 9 | 9 | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | |
| Metestrus | | X | | | X | X | | | | | | | | X | X | X | X | X | X | X | X | | | X | 13 | |
| Proestrus | X | | | X | | | | X | | | X | | | | | | | | | X | X | | | | 6 | |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Estrus | | | | | | | | | | | | | X | | | | | | | | | | | | 1 | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Decidual Reaction | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 23 | |
| Diestrus | | | | X | | | X | X | | | | | | | | | | | | X | | | | X | 6 | |
| Metestrus | | X | | | X | X | | | | | | | X | X | X | X | X | X | X | X | | | X | 13 | | |
| Proestrus | X | | | X | | | X | | | X | | | | | | | | | | X | X | | | | 6 | |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Diestrus | | | | X | | | X | X | | | | | | X | | | | | | X | | | | X | 7 | |
| Estrus | | | | X | | | | | | | | | | | | | | | | | | | | | 1 | |
| Keratin Cyst | | | | | | | | | | | | | | | | | | | | X | | | | | 1 | |
| Metestrus | | X | | | X | X | | | | | | X | X | X | | X | X | X | X | X | | | X | 12 | | |
| Proestrus | X | | | | | | X | | | X | | | | | | | | | | X | X | | | | 5 | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | 24 | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 | |
| Alveolus, Hyperplasia | 1 | | | | | | | | 1 | 1 | | | 3 | | | 1 | 2 | | | | | | 1 | 1 | 8 1.4 | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue
M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically
1-4 ..Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 99930-99
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/22/2014
 Time Report Requested: 14:14:34
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Female
F0 500 PPM

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|-----|
| 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 | | |
| Lobules, Hyperplasia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1.0 |
| Skin | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 25 | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 8 | 9 | 9 | 9 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 9 | 9 | 9 | 9 | 9 | 9 | 25 | | | |
| Left, Cyst | 0 | 1 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Mineralization | 0 | 1 | 2 | 3 | 4 | 5 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 | 6 | 7 | 8 | 14 | 2.0 | | |

** END OF REPORT **

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + ..Tissue examined microscopically
 X ..Lesion present
 I ..Insufficient tissue
 M ..Missing tissue
 A ..Autolysis precludes evaluation
 BLANK ..Not examined microscopically
 1-4 ..Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked