

**Experiment Number:** 99930-95  
**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:** 10/18/2014  
**Time Report Requested:** 15:42:06  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>C Number:</b>	MG96005
<b>Lock Date:</b>	Not Entered.
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Both
<b>PWG Approval Date</b>	NONE

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 Lab: NCTR

**CD Rat Male**  
**F4 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	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	1	1	1	2	2	2	1	1	1	1	2	2	2	1	4	3	2	2	2	1	1	1	0	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	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	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	3	3	3	7	7	7	7	7	7	8	1	1	1	1	5	5	5	5	5	5	5	6	9	9	
	4	5	6	4	5	6	7	8	9	0	5	6	7	8	2	3	4	5	6	7	8	9	0	3	4
																								<b>*TOTALS</b>	

**Alimentary System**

Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Inflammation, Chronic	1	1	1		1	1	1		1	1	1	1	1	1					1		1	1	1	1	18	1.0
Necrosis												1	1								1				3	1.0
Vacuolization Cytoplasmic								1									1				2				3	1.3

**Cardiovascular System**

NONE

**Endocrine System**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Accessory Adrenal Cortical Nodule																										1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	

**General Body System**

NONE

**Genital System**

Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Hypospermia												4													1	4.0
Infiltration Cellular, Lymphocyte																						1			1	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

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BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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CAS Number: 446-72-0

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Species/Strain: Rat/CD

Lab: NCTR

CD Rat Male F4 0 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			
ANIMAL ID	1	1	1	2	2	2	1	1	1	1	2	2	2	1	4	3	2	2	2	1	1	1	1	1			
Prostate	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		
Prostate, Dorsal Lobe	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		
Inflammation, Chronic	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	8	1.3	
Inflammation, Suppurative	1	1	1	2	2	2	1	1	1	1	2	2	2	1	4	3	2	2	2	1	1	1	1	1	4	1.5	
Prostate, Ventral Lobe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25		
Inflammation, Chronic	1	1	1	1	1					2	1			3	2	1	2	1		1	2	2	1	1	2	18	1.4
Inflammation, Suppurative	3	3	3	7	7	7	7	7	7	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	1.5	
Rete Testes	4	5	6	4	5	6	7	7	8	9	0	5	6	7	8	2	3	4	5	6	7	8	9	0	3	25	
Dilatation														3											1	3.0	
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		
Seminif Tub, Degeneration				1							4													1	3	2.0	
<b>Hematopoietic System</b>																											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		
Adventitia, Inflammation, Chronic														1								1			2	1.0	
Pigmentation			1		1									1										1	6	1.0	
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		
<b>Integumentary System</b>																											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		
Alveolus, Hyperplasia																								1	4	1.5	
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		

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+ ..Tissue examined microscopically  
X ..Lesion present  
I ..Insufficient tissue  
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 Lab: NCTR

**CD Rat Male**  
**F4 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	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	1	1	1	2	2	2	1	1	1	1	2	2	2	1	4	3	2	2	2	1	1	1	0	3	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	
	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	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	3	3	3	7	7	7	7	7	7	8	1	1	1	1	5	5	5	5	5	5	5	5	6	9	
	4	5	6	4	5	6	7	8	9	0	5	6	7	8	2	3	4	5	6	7	8	9	0	3	4
	<b>*TOTALS</b>																								

**Musculoskeletal System**

Bone, Femur + + + + + + + + + + + + + + + + + + + + + + + 25

**Nervous System**

NONE

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

Kidney + + + + + + + + + + + + + + + + + + + + + + + 25

Inflammation, Chronic					1	1	1	1	1	1	1	1	1	1	1	2	1	1	1			1	1	18	1.1		
Pelvis, Dilatation													2												1	2.0	
Renal Tubule, Dilatation				2	1	1		2	1	1						1	1	2	1	1			2	2	13	1.4	
Renal Tubule, Mineralization					1																					1	1.0
Renal Tubule, Regeneration					2								1				1	1		1	1					6	1.2

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 Lab: NCTR

**CD Rat Male  
 F4/5PPM 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			
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	*TOTALS		
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6				
	1	1	1	1	1	1	2	2	1	1	2	2	1	0	2	2	1	1	1	4	4	1	2	*TOTALS			
	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	3	3	3	4	4	4	8	8	8	1	2	2	2	2	6	6	6	6	9	9	9	1	1				
	7	8	9	0	1	2	1	2	3	4	9	0	1	2	3	1	2	3	4	5	5	6	5				
Rete Testes	+	+	+	+	+	+	+	+	+	+	M	M	+	M	+	+	+	+	+	+	+	M	M	+	20		
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		
Seminif Tub, Degeneration															1											1	1.0
<b>Hematopoietic System</b>																											
NONE																											
<b>Integumentary System</b>																											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		
Alveolus, Hyperplasia						2								1						1	1					4	1.3
<b>Musculoskeletal System</b>																											
NONE																											
<b>Nervous System</b>																											
NONE																											
<b>Respiratory System</b>																											
NONE																											
<b>Special Senses System</b>																											
NONE																											
<b>Urinary System</b>																											
NONE																											

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
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**CD Rat Male  
 F4/100PPM 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
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	1	1	1	1	1	0	2	2	2	2	3	3	1	1	2	2	2	1	1	1	5	5	5	4
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
	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	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	4	4	4	4	4	4	8	8	8	8	2	2	2	2	6	6	6	6	7	7	9	9	0	0
	3	4	5	6	7	8	5	6	7	8	4	5	6	7	8	9	0	1	8	9	0	1	2	
	<b>*TOTALS</b>																							

**Alimentary System**

NONE

**Cardiovascular System**

NONE

**Endocrine System**

NONE

**General Body System**

NONE

**Genital System**

Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Infiltration Cellular, Lymphocyte																									1 1.0	
Penis				+																					1	
Prostate																				+					1	
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Inflammation, Chronic	1						2						1	1		1				1					6 1.2	
Inflammation, Suppurative							2	2					1	1	1										5 1.4	
Prostate, Ventral Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Inflammation, Chronic	1	2	1	1	1	2	1		1	1	2	1	1	2	2	1	2	1		1	1	1	2	1	1	23 1.3
Inflammation, Suppurative								1			2		1	1	2											5 1.4

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F4/100PPM 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	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	1	1	1	1	1	0	2	2	2	2	3	3	1	1	2	2	2	1	1	1	5	5	5	4	
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	
	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	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	2	2	2	
	4	4	4	4	4	4	8	8	8	8	2	2	2	2	6	6	6	6	7	7	9	9	0	0	
	3	4	5	6	7	8	5	6	7	8	4	5	6	7	6	7	8	9	0	1	8	9	0	1	
																									<b>*TOTALS</b>
Rete Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	24
Seminal Vesicle	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	24
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
Seminif Tub, Degeneration	1	1					1				1														4 1.0
<b>Hematopoietic System</b>																									
NONE																									
<b>Integumentary System</b>																									
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
Alveolus, Hyperplasia			2				1								1	1	1				3				6 1.5
<b>Musculoskeletal System</b>																									
NONE																									
<b>Nervous System</b>																									
NONE																									
<b>Respiratory System</b>																									
NONE																									
<b>Special Senses System</b>																									
NONE																									
<b>Urinary System</b>																									
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**CD Rat Male  
 F4/500PPM TO CTL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	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
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5
	1	1	1	1	1	1	2	2	2	2	1	2	2	2	1	0	1	1	5	5	4	2	1	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
	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
	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	4	5	5	5	5	5	8	9	9	9	9	2	2	3	3	3	7	7	0	0	1	1	1	1	
	9	0	1	2	3	4	9	0	1	2	3	8	9	0	1	2	2	3	3	4	5	1	2	3	4
	<b>*TOTALS</b>																								

**Alimentary System**

Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
Inflammation, Chronic			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	18 1.1
Malformation																			X						1
Necrosis																		1					2	2 1.5	
Vacuolization Cytoplasmic												1													1 1.0

**Cardiovascular System**

NONE

**Endocrine System**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
Accessory Adrenal Cortical Nodule																		X				X			2
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
Pars Distalis, Cyst																						X			1
Pars Distalis, Cyst, Multiple				X																					1
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25

**General Body System**

NONE

**Genital System**

Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
-------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

\* ..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: 99930-95  
 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: 10/18/2014  
 Time Report Requested: 15:42:08  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female  
 F4 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	
	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		
	4	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
	7	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	4	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		
	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		
	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	5	5	5	5	5	6	6	9	9	9	9	9	3	3	3	3	3	7	7	7		
	4	5	6	7	8	5	6	7	8	9	0	1	4	5	6	7	8	4	5	6	7	8	5	6	7	8	
Hyperplasia, Multifocal, Focal																										2	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	26	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	26	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	26	
<b>General Body System</b>																											
NONE																											
<b>Genital System</b>																											
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	25	
Diestrus		X							X					X	X			X					X		6		
Estrus										X	X						X								3		
Metestrus					X																	X			2		
Proestrus	X		X	X		X	X		X	X		X			X	X		X	X				X	X	14		
Oviduct	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	25	
Estrus									X						X										2		
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	26		
Autolysis	2																								1		
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	25		
Diestrus		X						X					X	X			X					X		6			
Estrus									X	X						X								3			
Metestrus					X																X	X			3		
Proestrus	X		X	X		X	X		X	X		X			X	X		X	X				X	X	14		
Vagina	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	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: 99930-95  
 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: 10/18/2014  
 Time Report Requested: 15:42:08  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female  
 F4 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		
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	4	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
	7	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1		
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		
	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	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	5	5	5	5	5	6	6	9	9	9	9	9	3	3	3	3	3	3	3		
	4	5	6	7	8	5	6	7	8	9	0	1	4	5	6	7	8	4	5	6	7	8	5	6		
																									*TOTALS	
Autolysis	2																								1	2.0
Diestrus	X																								6	
Estrus	X																								9	
Metestrus	X																								3	
Proestrus	X																								8	
<b>Hematopoietic System</b>																										
Bone Marrow	+																								26	
Autolysis	2																								1	2.0
Lymph Node, Mandibular	+																								1	
Autolysis	2																								1	2.0
Lymph Node, Mesenteric	+																								1	
Hyperplasia, Reticulum Cell	2																								1	2.0
Spleen	+																								26	
Thymus	+																								26	
<b>Integumentary System</b>																										
Mammary Gland	+																								26	
Alveolus, Hyperplasia	3																								14	2.4
Lobules, Hyperplasia	2																								7	1.7
Skin	+																								26	
<b>Musculoskeletal System</b>																										
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  
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 BLANK ..Not examined microscopically  
 1-4 ..Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked







Experiment Number: 99930-95

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/18/2014

Test Type: SPECIAL STUDY

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 15:42:09

Route: DOSED FEED

CAS Number: 446-72-0

First Dose M/F: NA / NA

Species/Strain: Rat/CD

Lab: NCTR

CD Rat Female F4/5PPM TO CTL	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	
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	10
Proestrus	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
Vagina	6	6	6	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	9
Diestrus	1	1	1	1	1	1	1	1	9	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	6
Estrus	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
Metestrus	1	2	2	2	2	6	6	6	6	9	0	0	0	0	3	4	4	7	7	8	8	8	8	0	8
Proestrus	9	0	1	2	3	2	3	4	5	9	0	1	2	3	9	0	1	4	9	0	1	2	3	6	
<b>Hematopoietic System</b>																									
NONE																									
<b>Integumentary System</b>																									
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
Alveolus, Hyperplasia	4		2	1	3	3	1	3	1	1		2	1		2	2	3							2	15
Lobules, Hyperplasia	3		1			2		3				2												1	6
<b>Musculoskeletal System</b>																									
NONE																									
<b>Nervous System</b>																									
NONE																									
<b>Respiratory System</b>																									
NONE																									
<b>Special Senses System</b>																									

\* ..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: 99930-95  
 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: 10/18/2014  
 Time Report Requested: 15:42:09  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female  
 F4/100PPM TO CTL**

	DAY ON TEST																											
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
ANIMAL ID	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			
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
	1	1	1	0	0	2	2	0	0	0	1	1	0	0	1	1	1	1	1	1	1	1	5	5	4			
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	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			
	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			
	2	2	2	2	2	6	6	6	6	7	0	0	0	0	4	4	4	4	4	4	4	8	8	8	8			
	4	5	6	7	8	6	7	8	9	0	4	5	6	7	2	3	4	4	5	6	7	8	4	5	6	7		
																										<b>*TOTALS</b>		
Proestrus	X		X		X	X	X		X	X	X						X	X										8
Vagina	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
Diestrus	X	X		X	X				X						X	X	X	X				8						
Estrus	X		X						X	X	X	X	X	X	X	X	X	X				X	X	X	14			
Proestrus	X				X	X												3										
<b>Hematopoietic System</b>																												
NONE																												
<b>Integumentary System</b>																												
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				
Alveolus, Hyperplasia	2	3	2	4	2	3	4	2	2	3	2	1	1	2	3	2									11	2.6		
Lobules, Hyperplasia	1		3	2	4	1						1									6	2.0						
<b>Musculoskeletal System</b>																												
NONE																												
<b>Nervous System</b>																												
NONE																												
<b>Respiratory System</b>																												
NONE																												
<b>Special Senses System</b>																												
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: 99930-95  
 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: 10/18/2014  
 Time Report Requested: 15:42:09  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female  
 F4/100PPM TO CTL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	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
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	1	1	1	0	0	2	2	0	0	0	1	1	0	0	1	1	1	1	1	1	1	5	5	5	4
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	
	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	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	2	2	2	2	2	6	6	6	7	0	0	0	0	4	4	4	4	4	4	4	8	8	8	8	
	4	5	6	7	8	6	7	8	9	0	4	5	6	7	2	3	4	5	6	7	8	4	5	6	7
	<b>*TOTALS</b>																								

**Urinary System**

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25		
Cyst			X																						1		
Mineralization		1	1	2		3	2	3	3	1	1	1	3	3	1	1	2	2	3	2	1		1	3	2	22	1.9

\* ..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: 99930-95  
 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: 10/18/2014  
 Time Report Requested: 15:42:09  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female  
 F4/500PPM TO CTL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	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	
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	1	1	1	1	1	2	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4	4	1	2	1
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	
	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	
	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	
	2	3	3	3	3	7	7	7	0	0	1	1	1	1	1	4	5	5	8	8	9	9	9	0	0	
	9	0	1	2	3	1	2	3	8	9	0	1	2	3	4	9	0	1	8	9	0	1	2	8	9	
																								<b>*TOTALS</b>		

**Alimentary System**

Liver + + + + + + + + + + + + + + + + + + + + + + + + 25

**Cardiovascular System**

NONE

**Endocrine System**

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

**General Body System**

NONE

**Genital System**

Ovary + + + + + + + + + + + + + + + + + + + + + + + + 25  
 Diestrus X X X X X X X X X X X X X X X X X X X X X X 8  
 Estrus X X X X X X X X X X X X X X X X X X X X X X 2  
 Metestrus X X X X X X X X X X X X X X X X X X X X X X 4  
 Proestrus X X X X X X X X X X X X X X X X X X X X X X 11  
 Oviduct + + + + + + + + + + + + + + + + + + + + + + + + 25  
 Estrus X X X X X X X X X X X X X X X X X X X X X X 3  
 Uterus + + + + + + + + + + + + + + + + + + + + + + + + 25

\* ..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: 99930-95

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/18/2014

Test Type: SPECIAL STUDY

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 15:42:09

Route: DOSED FEED

CAS Number: 446-72-0

First Dose M/F: NA / NA

Species/Strain: Rat/CD

Lab: NCTR

CD Rat Female F4/500PPM TO CTL	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		
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
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		
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			X	X					X					8	
Estrus							X											X						2	
Metestrus														X	X		X				X		X	5	
Proestrus	X		X	X		X					X	X		X			X			X		X		10	
Vagina	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Diestrus		X			X			X	X	X			X	X					X					8	
Estrus					X	X					X								X					4	
Metestrus														X	X		X				X		X	5	
Proestrus	X		X	X						X			X				X			X		X		8	
<b>Hematopoietic System</b>																									
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
<b>Integumentary System</b>																									
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
Alveolus, Hyperplasia		3	3		1	2		1		4			3		3	2			2	1				11	2.3
Lobules, Hyperplasia		1	1							3			4											4	2.3
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	
<b>Musculoskeletal System</b>																									
Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25	

\* ..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: 99930-95  
 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: 10/18/2014  
 Time Report Requested: 15:42:10  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female  
 F4/500PPM TO CTL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	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	1
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	1	1	1	1	1	2	2	1	2	1	1	0	0	0	0	1	1	1	1	5	5	4	4	1	2	1
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
	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	1
	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	
	2	3	3	3	3	7	7	7	0	0	1	1	1	1	1	4	5	5	8	8	9	9	9	0	0	
	9	0	1	2	3	1	2	3	8	9	0	1	2	3	4	9	0	1	8	9	0	1	2	8	9	
																								<b>*TOTALS</b>		

**Nervous System**

NONE

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	25
Mineralization	1	1	1	1		1			1	1	1				1		1			1	1	2	1	1	1	16 1.1
Pelvis, Unilateral, Dilatation																							3			1 3.0

**\*\* 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

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