

**Experiment Number:** 99930-94  
**Test Type:** SPECIAL STUDY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS  
ABRIDGED) (a)**

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

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 17:28:11  
**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

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**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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

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CD Rat MALE	F1 0PPM	F1 5PPM	F1 100PPM	F1 500PPM	F1 5PPM/CTL	F1 100PPM/CTL
<b>Disposition Summary</b>						
Animals Initially In Study	54	50	50	50	50	50
Early Deaths						
Moribund	6	5	6	12	7	10
Natural Death	9	3		6	7	5
Survivors						
Moribund	2		1		2	1
Natural Death	1	1		1		2
Terminal Sacrifice	36	41	43	31	34	32
Animals Examined Microscopically	54	50	50	50	50	50
<b>ALIMENTARY SYSTEM</b>						
Esophagus	(53)	(50)	(50)	(50)	(50)	(47)
Intestine Large, Cecum	(44)	(46)	(50)	(46)	(45)	(42)
Serosa, Carcinoma, Metastatic, Prostate				1 (2%)		
Intestine Large, Colon	(46)	(46)	(50)	(46)	(45)	(43)
Adenoma		1 (2%)				
Serosa, Carcinoma, Metastatic, Prostate				1 (2%)		
Intestine Large, Rectum	(37)	(42)	(43)	(34)	(37)	(33)
Intestine Small, Duodenum	(46)	(45)	(50)	(46)	(45)	(43)
Sarcoma						
Serosa, Carcinoma, Metastatic, Prostate				1 (2%)		
Intestine Small, Ileum	(43)	(47)	(50)	(44)	(44)	(42)
Adenocarcinoma		1 (2%)				1 (2%)
Intestine Small, Jejunum	(44)	(45)	(50)	(43)	(42)	(42)
Adenocarcinoma	1 (2%)	1 (2%)				
Liver	(51)	(48)	(50)	(48)	(49)	(47)
Carcinoma, Metastatic, Prostate				1 (2%)		

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically

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CD Rat MALE	F1 0PPM	F1 5PPM	F1 100PPM	F1 500PPM	F1 5PPM/CTL	F1 100PPM/CTL
Cholangiocarcinoma						1 (2%)
Hepatocellular Adenoma	1 (2%)	2 (4%)	2 (4%)		1 (2%)	1 (2%)
Hepatocellular Carcinoma		1 (2%)				
Mesentery	(1)	(1)	(0)	(1)	(1)	(1)
Oral Mucosa	(0)	(0)	(0)	(1)	(0)	(0)
Osteosarcoma				1 (100%)		
Pancreas	(50)	(49)	(50)	(49)	(49)	(46)
Acinar Cell, Adenoma						
Carcinoma, Metastatic, Prostate				1 (2%)		
Salivary Glands	(49)	(49)	(50)	(47)	(49)	(46)
Neurofibrosarcoma	1 (2%)					
Stomach, Forestomach	(45)	(46)	(50)	(46)	(47)	(45)
Stomach, Glandular	(45)	(47)	(50)	(44)	(46)	(44)
<b>CARDIOVASCULAR SYSTEM</b>						
Blood Vessel	(53)	(50)	(50)	(50)	(50)	(48)
Heart	(52)	(50)	(50)	(50)	(48)	(48)
<b>ENDOCRINE SYSTEM</b>						
Adrenal Cortex	(49)	(47)	(50)	(48)	(47)	(46)
Adenoma	1 (2%)	1 (2%)		1 (2%)	2 (4%)	1 (2%)
Adrenal Medulla	(47)	(49)	(50)	(49)	(47)	(46)
Bilateral, Pheochromocytoma Benign	1 (2%)				1 (2%)	
Pheochromocytoma Benign	1 (2%)	1 (2%)	2 (4%)	7 (14%)	2 (4%)	
Pheochromocytoma Complex	1 (2%)					
Pheochromocytoma Malignant		1 (2%)			1 (2%)	1 (2%)
Islets, Pancreatic	(49)	(49)	(50)	(49)	(49)	(46)
Adenoma	1 (2%)	3 (6%)	1 (2%)	5 (10%)		1 (2%)
Carcinoma				1 (2%)		

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CD Rat MALE	F1	0PPM	F1	5PPM	F1	100PPM	F1	500PPM	F1	5PPM/CTL	F1	100PPM/CTL
Carcinoma, Metastatic, Prostate								1 (2%)				
Parathyroid Gland	(47)		(47)		(47)			(47)		(48)		(47)
Adenoma	1 (2%)											
Pituitary Gland	(49)		(46)		(50)			(49)		(49)		(48)
Pars Distalis, Adenoma	22 (45%)		14 (30%)		22 (44%)			21 (43%)		18 (37%)		13 (27%)
Pars Distalis, Adenoma, Multiple	1 (2%)							1 (2%)				
Thyroid Gland	(49)		(47)		(50)			(46)		(46)		(44)
C Cell, Adenoma	1 (2%)		2 (4%)		1 (2%)			1 (2%)		1 (2%)		
C Cell, Carcinoma			1 (2%)					1 (2%)				1 (2%)
Follicular Cel, Adenoma										1 (2%)		
GENERAL BODY SYSTEM												
Tissue NOS	(0)		(0)		(1)			(1)		(0)		(0)
Abdominal, Carcinoma, Metastatic, Prostate								1 (100%)				
Chondrosarcoma					1 (100%)							
GENITAL SYSTEM												
Coagulating Gland	(47)		(49)		(50)			(45)		(45)		(45)
Adenocarcinoma, Metastatic, Prostate	1 (2%)											1 (2%)
Carcinoma, Metastatic, Prostate								1 (2%)				
Epididymis	(51)		(48)		(50)			(49)		(50)		(47)
Carcinoma, Metastatic, Prostate								1 (2%)				
Penis	(0)		(1)		(0)			(0)		(1)		(0)
Preputial Gland	(49)		(48)		(49)			(49)		(50)		(48)
Adventitia, Squamous Cell Carcinoma												1 (2%)
Sarcoma										1 (2%)		
Squamous Cell Carcinoma	1 (2%)		3 (6%)		1 (2%)			2 (4%)		2 (4%)		1 (2%)
Prostate	(8)		(9)		(2)			(2)		(8)		(6)
Prostate, Dorsal Lobe	(48)		(49)		(50)			(49)		(49)		(50)

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\* Number of animals with any tissue examined microscopically

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Adenocarcinoma		2 (4%)										1 (2%)
Carcinoma								1 (2%)				
Carcinoma, Metastatic, Urinary Bladder												
Prostate, Ventral Lobe	(48)		(49)		(50)		(48)		(49)		(48)	
Adenocarcinoma		1 (2%)										1 (2%)
Adenoma										1 (2%)		
Carcinoma								1 (2%)				
Carcinoma, Metastatic, Urinary Bladder												
Rete Testes	(44)		(47)		(47)		(44)		(50)		(46)	
Seminal Vesicle	(47)		(48)		(50)		(45)		(43)		(45)	
Adenocarcinoma, Metastatic, Prostate		2 (4%)										1 (2%)
Carcinoma, Metastatic, Prostate								1 (2%)				
Testes	(50)		(50)		(50)		(49)		(49)		(47)	
Capsule, Carcinoma, Metastatic, Prostate								1 (2%)				
Seminoma Benign								1 (2%)				
HEMATOPOIETIC SYSTEM												
Bone Marrow	(49)		(49)		(50)		(48)		(48)		(47)	
Lymph Node	(15)		(13)		(16)		(8)		(14)		(14)	
Lymph Node, Mandibular	(52)		(50)		(49)		(46)		(49)		(45)	
Fibrosarcoma, Metastatic, Skin										1 (2%)		
Lymph Node, Mesenteric	(48)		(50)		(50)		(46)		(47)		(45)	
Spleen	(52)		(48)		(50)		(48)		(50)		(47)	
Hemangiosarcoma												1 (2%)
Sarcoma								1 (2%)				
Thymus	(42)		(44)		(45)		(42)		(47)		(40)	
INTEGUMENTARY SYSTEM												
Mammary Gland	(41)		(43)		(40)		(42)		(42)		(34)	

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Adenocarcinoma			1 (3%)			
Fibroadenoma		1 (2%)		2 (5%)		
Skin	(51)	(49)	(50)	(50)	(50)	(50)
Basal Cell Adenoma		1 (2%)				
Fibroma	1 (2%)	1 (2%)		1 (2%)	2 (4%)	
Fibrosarcoma			1 (2%)		1 (2%)	
Keratoacanthoma		1 (2%)		1 (2%)		1 (2%)
Lipoma	1 (2%)			2 (4%)	1 (2%)	1 (2%)
Sarcoma	1 (2%)	1 (2%)	1 (2%)		1 (2%)	1 (2%)
Schwannoma Benign						1 (2%)
Schwannoma Malignant					1 (2%)	
Sebaceous GI, Carcinoma					1 (2%)	
Squamous Cell Carcinoma					1 (2%)	1 (2%)
Squamous Cell Papilloma		1 (2%)				
<b>MUSCULOSKELETAL SYSTEM</b>						
Bone, Cranium	(0)	(0)	(0)	(0)	(0)	(1)
Osteoma						1 (100%)
Bone, Femur	(53)	(50)	(50)	(50)	(49)	(50)
Skeletal Muscle	(0)	(0)	(0)	(1)	(0)	(0)
Carcinoma, Metastatic, Prostate					1 (100%)	
<b>NERVOUS SYSTEM</b>						
Brain, Brain Stem	(50)	(48)	(50)	(48)	(50)	(48)
Astrocytoma Malignant						
Glioma Malignant						
Brain, Cerebellum	(50)	(48)	(50)	(47)	(49)	(48)
Astrocytoma Malignant						1 (2%)
Granular Cell Tumor Benign					1 (2%)	

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Granular Cell Tumor Malignant	1	(2%)										1	(2%)
Brain, Cerebrum	(50)		(48)		(50)		(48)		(50)			(48)	
Astrocytoma Malignant												1	(2%)
Glioma Malignant													
Granular Cell Tumor Benign						1	(2%)					1	(2%)
Granular Cell Tumor Malignant			1	(2%)				1	(2%)			1	(2%)
RESPIRATORY SYSTEM													
Lung	(49)		(47)		(50)		(47)		(48)		(44)		
Alveolar Epith, Adenoma			1	(2%)									
Alveolar/Bronchiolar Carcinoma	1	(2%)											
Carcinoma, Metastatic, Prostate								1	(2%)				
Chondrosarcoma, Metastatic, Uncertain Primary Site						1	(2%)						
Fibrosarcoma, Metastatic, Skin						1	(2%)			1	(2%)		
Squamous Cell Carcinoma, Metastatic, Preputial Gland										1	(2%)		
Nose	(48)		(48)		(50)		(48)		(47)		(45)		
Squamous Cell Carcinoma								2	(4%)			1	(2%)
Trachea	(47)		(47)		(50)		(46)		(47)		(46)		
SPECIAL SENSES SYSTEM													
Ear	(0)		(0)		(0)		(0)		(0)		(0)		
Neural Crest Tumor													
Eye	(37)		(42)		(43)		(35)		(37)		(33)		
Adventitia, Squamous Cell Carcinoma								1	(3%)				
Harderian Gland	(39)		(42)		(43)		(37)		(39)		(33)		
Adenoma	1	(3%)											
Lacrimal Gland	(10)		(9)		(10)		(14)		(14)		(12)		
Zymbal's Gland	(0)		(1)		(0)		(1)		(0)		(1)		

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Carcinoma												1 (100%)
Squamous Cell Carcinoma			1 (100%)					1 (100%)				
URINARY SYSTEM												
Kidney		(48)		(48)		(50)		(48)		(48)		(46)
Adenoma, Tubular		1 (2%)										
Fibrosarcoma, Metastatic, Skin						1 (2%)						
Urethra		(0)		(0)		(1)		(1)		(1)		(1)
Urinary Bladder		(47)		(48)		(50)		(46)		(48)		(46)
Serosa, Carcinoma, Metastatic, Prostate								1 (2%)				
Transit Epithe, Carcinoma												
SYSTEMIC LESIONS												
Multiple Organ		*(54)		*(50)		*(50)		*(50)		*(50)		*(50)
Leukemia Granulocytic		1 (2%)										
Leukemia Mononuclear										1 (2%)		
Lymphoma Malignant		2 (4%)		3 (6%)		3 (6%)		2 (4%)		1 (2%)		2 (4%)
Mesothelioma Benign		1 (2%)										
Mesothelioma Malignant						1 (2%)						

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**Lab:** NCTR

**CD Rat MALE**

**F1 500PPM/CTL**

**Disposition Summary**

<b>Animals Initially In Study</b>	<b>50</b>
<b>Early Deaths</b>	
<b>Moribund</b>	<b>5</b>
<b>Natural Death</b>	<b>7</b>
<b>Survivors</b>	
<b>Moribund</b>	
<b>Natural Death</b>	
<b>Terminal Sacrifice</b>	<b>38</b>
<b>Animals Examined Microscopically</b>	<b>50</b>

**ALIMENTARY SYSTEM**

Esophagus	(49)
Intestine Large, Cecum	(44)
Serosa, Carcinoma, Metastatic, Prostate	
Intestine Large, Colon	(46)
Adenoma	1 (2%)
Serosa, Carcinoma, Metastatic, Prostate	
Intestine Large, Rectum	(39)
Intestine Small, Duodenum	(45)
Sarcoma	1 (2%)
Serosa, Carcinoma, Metastatic, Prostate	
Intestine Small, Ileum	(43)
Adenocarcinoma	
Intestine Small, Jejunum	(42)
Adenocarcinoma	
Liver	(48)
Carcinoma, Metastatic, Prostate	

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Cholangiocarcinoma	
Hepatocellular Adenoma	1 (2%)
Hepatocellular Carcinoma	
Mesentery	(1)
Oral Mucosa	(0)
Osteosarcoma	
Pancreas	(48)
Acinar Cell, Adenoma	1 (2%)
Carcinoma, Metastatic, Prostate	
Salivary Glands	(50)
Neurofibrosarcoma	
Stomach, Forestomach	(49)
Stomach, Glandular	(45)
<hr/>	
<b>CARDIOVASCULAR SYSTEM</b>	
Blood Vessel	(49)
Heart	(50)
<hr/>	
<b>ENDOCRINE SYSTEM</b>	
Adrenal Cortex	(46)
Adenoma	1 (2%)
Adrenal Medulla	(45)
Bilateral, Pheochromocytoma Benign	
Pheochromocytoma Benign	4 (9%)
Pheochromocytoma Complex	1 (2%)
Pheochromocytoma Malignant	2 (4%)
Islets, Pancreatic	(48)
Adenoma	3 (6%)
Carcinoma	

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<b>CD Rat MALE</b>	<b>F1 500PPM/CTL</b>
<hr/>	
Carcinoma, Metastatic, Prostate	
Parathyroid Gland	(46)
Adenoma	1 (2%)
Pituitary Gland	(48)
Pars Distalis, Adenoma	15 (31%)
Pars Distalis, Adenoma, Multiple	1 (2%)
Thyroid Gland	(48)
C Cell, Adenoma	1 (2%)
C Cell, Carcinoma	
Follicular Cel, Adenoma	1 (2%)
<hr/>	
GENERAL BODY SYSTEM	
Tissue NOS	(0)
Abdominal, Carcinoma, Metastatic, Prostate	
Chondrosarcoma	
<hr/>	
GENITAL SYSTEM	
Coagulating Gland	(47)
Adenocarcinoma, Metastatic, Prostate	
Carcinoma, Metastatic, Prostate	
Epididymis	(49)
Carcinoma, Metastatic, Prostate	
Penis	(0)
Preputial Gland	(49)
Adventitia, Squamous Cell Carcinoma	
Sarcoma	
Squamous Cell Carcinoma	1 (2%)
Prostate	(3)
Prostate, Dorsal Lobe	(49)

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CD Rat MALE	F1 500PPM/CTL
Adenocarcinoma	
Carcinoma	
Carcinoma, Metastatic, Urinary Bladder	1 (2%)
Prostate, Ventral Lobe	(48)
Adenocarcinoma	
Adenoma	
Carcinoma	1 (2%)
Carcinoma, Metastatic, Urinary Bladder	1 (2%)
Rete Testes	(49)
Seminal Vesicle	(47)
Adenocarcinoma, Metastatic, Prostate	
Carcinoma, Metastatic, Prostate	
Testes	(50)
Capsule, Carcinoma, Metastatic, Prostate	
Seminoma Benign	1 (2%)
<hr/>	
HEMATOPOIETIC SYSTEM	
Bone Marrow	(49)
Lymph Node	(9)
Lymph Node, Mandibular	(48)
Fibrosarcoma, Metastatic, Skin	
Lymph Node, Mesenteric	(46)
Spleen	(49)
Hemangiosarcoma	
Sarcoma	
Thymus	(45)
<hr/>	
INTEGUMENTARY SYSTEM	
Mammary Gland	(45)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically

**Experiment Number:** 99930-94  
**Test Type:** SPECIAL STUDY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 17:28:12  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

CD Rat MALE	F1 500PPM/CTL
Adenocarcinoma	
Fibroadenoma	
Skin	(50)
Basal Cell Adenoma	
Fibroma	2 (4%)
Fibrosarcoma	
Keratoacanthoma	
Lipoma	
Sarcoma	1 (2%)
Schwannoma Benign	
Schwannoma Malignant	
Sebaceous GI, Carcinoma	
Squamous Cell Carcinoma	
Squamous Cell Papilloma	
<hr/>	
MUSCULOSKELETAL SYSTEM	
Bone, Cranium	(0)
Osteoma	
Bone, Femur	(50)
Skeletal Muscle	(2)
Carcinoma, Metastatic, Prostate	
<hr/>	
NERVOUS SYSTEM	
Brain, Brain Stem	(48)
Astrocytoma Malignant	1 (2%)
Glioma Malignant	1 (2%)
Brain, Cerebellum	(48)
Astrocytoma Malignant	
Granular Cell Tumor Benign	

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically

Experiment Number: 99930-94

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS  
ABRIDGED) (a)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014

Time Report Requested: 17:28:12

First Dose M/F: NA / NA

Lab: NCTR

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CD Rat MALE	F1 500PPM/CTL
<hr/>	
Granular Cell Tumor Malignant	
Brain, Cerebrum	(48)
Astrocytoma Malignant	1 (2%)
Glioma Malignant	1 (2%)
Granular Cell Tumor Benign	
Granular Cell Tumor Malignant	
<hr/>	
RESPIRATORY SYSTEM	
Lung	(49)
Alveolar Epith, Adenoma	
Alveolar/Bronchiolar Carcinoma	
Carcinoma, Metastatic, Prostate	
Chondrosarcoma, Metastatic, Uncertain Primary Site	
Fibrosarcoma, Metastatic, Skin	
Squamous Cell Carcinoma, Metastatic, Preputial Gland	
Nose	(48)
Squamous Cell Carcinoma	
Trachea	(48)
<hr/>	
SPECIAL SENSES SYSTEM	
Ear	(1)
Neural Crest Tumor	1 (100%)
Eye	(40)
Adventitia, Squamous Cell Carcinoma	
Harderian Gland	(41)
Adenoma	
Lacrimal Gland	(5)
Zymbal's Gland	(0)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically

**Experiment Number:** 99930-94  
**Test Type:** SPECIAL STUDY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 17:28:12  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

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CD Rat MALE	F1 500PPM/CTL
Carcinoma	
Squamous Cell Carcinoma	
<hr/>	
URINARY SYSTEM	
Kidney	(49)
Adenoma, Tubular	
Fibrosarcoma, Metastatic, Skin	
Urethra	(2)
Urinary Bladder	(47)
Serosa, Carcinoma, Metastatic, Prostate	
Transit Epithe, Carcinoma	1 (2%)
<hr/>	
SYSTEMIC LESIONS	
Multiple Organ	*(50)
Leukemia Granulocytic	
Leukemia Mononuclear	
Lymphoma Malignant	1 (2%)
Mesothelioma Benign	
Mesothelioma Malignant	

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a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically

Experiment Number: 99930-94  
 Test Type: SPECIAL STUDY  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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

Date Report Requested: 10/22/2014  
 Time Report Requested: 17:28:12  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat MALE	F1	0PPM	F1	5PPM	F1	100PPM	F1	500PPM	F1	5PPM/CTL	F1	100PPM/CTL
<b>Tumor Summary for MALE</b>												
Total Animals with Primary Neoplasms (b)	36		32		30		38		33		30	
Total Primary Neoplasms	48		44		38		58		42		40	
Total Animals with Benign Neoplasms	27		26		26		31		27		16	
Total Benign Neoplasms	34		30		29		43		31		21	
Total Animals with Malignant Neoplasms	12		12		9		11		10		16	
Total Malignant Neoplasms	13		14		9		15		11		19	
Total Animals with Metastatic Neoplasms	2				2		1		2		1	
Total Metastatic Neoplasms	3				3		14		3		2	
Total Animals with Malignant Neoplasms Uncertain Primary Site					1							
Total Animals with Neoplasms Uncertain - Benign or Malignant												
Total Uncertain Neoplasms												

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically



**Experiment Number:** 99930-94  
**Test Type:** SPECIAL STUDY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 17:28:12  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

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CD Rat MALE	F1 500PPM/CTL
<b>Tumor Summary for MALE</b>	
<b>Total Animals with Primary Neoplasms (b)</b>	<b>33</b>
<b>Total Primary Neoplasms</b>	<b>47</b>
<b>Total Animals with Benign Neoplasms</b>	<b>28</b>
<b>Total Benign Neoplasms</b>	<b>33</b>
<b>Total Animals with Malignant Neoplasms</b>	<b>10</b>
<b>Total Malignant Neoplasms</b>	<b>13</b>
<b>Total Animals with Metastatic Neoplasms</b>	<b>1</b>
<b>Total Metastatic Neoplasms</b>	<b>2</b>
<b>Total Animals with Malignant Neoplasms Uncertain Primary Site</b>	
<b>Total Animals with Neoplasms Uncertain - Benign or Malignant</b>	<b>1</b>
<b>Total Uncertain Neoplasms</b>	<b>1</b>

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

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically

Experiment Number: 99930-94  
 Test Type: SPECIAL STUDY  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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

Date Report Requested: 10/22/2014  
 Time Report Requested: 17:28:12  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat FEMALE	F1	0PPM	F1	5PPM	F1	100PPM	F1	500PPM	F1	5PPM/CTL	F1	100PPM/CTL
<b>Disposition Summary</b>												
Animals Initially In Study		54		50		50		49		50		50
Early Deaths												
Moribund		24		14		18		20		12		14
Natural Death		3		7		6		6		6		3
Survivors												
Moribund		1				3		1				
Natural Death				1		1		1		1		1
Terminal Sacrifice		26		28		22		21		31		32
Animals Examined Microscopically		54		50		50		49		50		50
<b>ALIMENTARY SYSTEM</b>												
Esophagus		(54)		(50)		(49)		(49)		(50)		(50)
Intestine Large		(0)		(0)		(0)		(0)		(0)		(1)
Intestine Large, Cecum		(54)		(50)		(50)		(49)		(49)		(50)
Intestine Large, Colon		(54)		(50)		(50)		(49)		(50)		(49)
Leiomyosarcoma												
Intestine Large, Rectum		(30)		(32)		(30)		(24)		(33)		(36)
Intestine Small		(0)		(0)		(0)		(0)		(0)		(1)
Intestine Small, Duodenum		(53)		(50)		(48)		(48)		(50)		(50)
Intestine Small, Ileum		(53)		(49)		(47)		(45)		(49)		(48)
Intestine Small, Jejunum		(54)		(49)		(47)		(45)		(49)		(48)
Adenoma				1 (2%)								
Liver		(54)		(50)		(50)		(49)		(50)		(50)
Cholangioma		1 (2%)										
Fibrous Histiocytoma, Metastatic, Skin				1 (2%)								
Hepatocellular Adenoma												
Mesentery		(1)		(2)		(1)		(2)		(2)		(0)

a - Number of animals examined microscopically at site and number of animals with lesion

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\* Number of animals with any tissue examined microscopically

Experiment Number: 99930-94  
 Test Type: SPECIAL STUDY  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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

Date Report Requested: 10/22/2014  
 Time Report Requested: 17:28:12  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat FEMALE	F1 0PPM	F1 5PPM	F1 100PPM	F1 500PPM	F1 5PPM/CTL	F1 100PPM/CTL
Lipoma	1 (100%)					
Sarcoma		1 (50%)				
Pancreas	(54)	(50)	(50)	(48)	(50)	(50)
Salivary Glands	(54)	(50)	(50)	(49)	(50)	(50)
Stomach, Forestomach	(54)	(50)	(50)	(49)	(49)	(49)
Stomach, Glandular	(54)	(50)	(50)	(49)	(50)	(50)
Tongue	(0)	(0)	(0)	(0)	(1)	(0)
<b>CARDIOVASCULAR SYSTEM</b>						
Blood Vessel	(53)	(50)	(50)	(49)	(50)	(50)
Heart	(54)	(50)	(50)	(49)	(50)	(50)
Schwannoma Nos					1 (2%)	
<b>ENDOCRINE SYSTEM</b>						
Adrenal Cortex	(54)	(50)	(50)	(49)	(50)	(50)
Adenoma	2 (4%)	1 (2%)	2 (4%)	1 (2%)		2 (4%)
Carcinoma					1 (2%)	
Adrenal Medulla	(54)	(48)	(50)	(48)	(48)	(50)
Pheochromocytoma Benign		1 (2%)			2 (4%)	
Pheochromocytoma Complex			1 (2%)			
Islets, Pancreatic	(54)	(50)	(50)	(48)	(50)	(50)
Adenoma	1 (2%)	1 (2%)	2 (4%)		2 (4%)	1 (2%)
Carcinoma		1 (2%)		1 (2%)		1 (2%)
Parathyroid Gland	(46)	(46)	(46)	(44)	(47)	(42)
Pituitary Gland	(54)	(50)	(50)	(49)	(49)	(50)
Pars Distalis, Adenoma	38 (70%)	40 (80%)	33 (66%)	46 (94%)	32 (65%)	40 (80%)
Pars Distalis, Carcinoma			1 (2%)			
Thyroid Gland	(54)	(50)	(49)	(49)	(50)	(50)
C Cell, Adenoma	2 (4%)		2 (4%)	3 (6%)	1 (2%)	1 (2%)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically

Experiment Number: 99930-94  
 Test Type: SPECIAL STUDY  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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

Date Report Requested: 10/22/2014  
 Time Report Requested: 17:28:12  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat FEMALE	F1	0PPM	F1	5PPM	F1	100PPM	F1	500PPM	F1	5PPM/CTL	F1	100PPM/CTL
C Cell, Carcinoma												
Follicular Cel, Adenoma												
GENERAL BODY SYSTEM												
Tissue NOS		(0)		(0)		(0)		(0)		(0)		(0)
Liposarcoma												
GENITAL SYSTEM												
Clitoral Gland		(51)		(49)		(49)		(49)		(49)		(49)
Carcinoma						1 (2%)						
Squamous Cell Papilloma		1 (2%)				1 (2%)				1 (2%)		1 (2%)
Ovary		(54)		(50)		(50)		(49)		(50)		(49)
Granulosa Cell Tumor Benign								1 (2%)		1 (2%)		
Granulosa Cell Tumor Malignant						2 (4%)				1 (2%)		
Sarcoma Stromal						1 (2%)						1 (2%)
Oviduct		(54)		(50)		(49)		(49)		(50)		(49)
Uterus		(54)		(50)		(50)		(49)		(50)		(49)
Adenocarcinoma						1 (2%)						
Adenoma								1 (2%)				
Leiomyosarcoma												
Polyp Stromal		4 (7%)		1 (2%)		3 (6%)		1 (2%)		1 (2%)		2 (4%)
Sarcoma Stromal		1 (2%)				1 (2%)				1 (2%)		
Vagina		(54)		(50)		(50)		(48)		(49)		(48)
Granular Cell Tumor Benign		1 (2%)										1 (2%)
Sarcoma Stromal		1 (2%)				1 (2%)						
HEMATOPOIETIC SYSTEM												
Bone Marrow		(54)		(50)		(50)		(48)		(50)		(50)
Lymph Node		(11)		(10)		(12)		(5)		(9)		(10)

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\* Number of animals with any tissue examined microscopically

Experiment Number: 99930-94

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014

Time Report Requested: 17:28:12

First Dose M/F: NA / NA

Lab: NCTR

CD Rat FEMALE	F1	0PPM	F1	5PPM	F1	100PPM	F1	500PPM	F1	5PPM/CTL	F1	100PPM/CTL
Pancreatic, Fibrous Histiocytoma, Metastatic, Skin			1	(10%)								
Renal, Fibrous Histiocytoma, Metastatic, Skin			1	(10%)								
Lymph Node, Mandibular	(53)		(50)		(50)		(49)		(50)		(50)	
Lymph Node, Mesenteric	(54)		(50)		(50)		(48)		(50)		(50)	
Spleen	(54)		(50)		(50)		(49)		(50)		(50)	
Thymus	(50)		(43)		(43)		(44)		(47)		(47)	
Thymoma Malignant	1	(2%)										
<b>INTEGUMENTARY SYSTEM</b>												
Mammary Gland	(54)		(50)		(50)		(49)		(50)		(50)	
Adenocarcinoma	7	(13%)	1	(2%)	6	(12%)	10	(20%)	3	(6%)	3	(6%)
Adenocarcinoma, Multiple	1	(2%)	2	(4%)	2	(4%)	3	(6%)				
Adenoma	2	(4%)	1	(2%)			5	(10%)			2	(4%)
Fibroadenoma	19	(35%)	17	(34%)	20	(40%)	8	(16%)	21	(42%)	14	(28%)
Fibroadenoma, Multiple	13	(24%)	10	(20%)	8	(16%)	4	(8%)	9	(18%)	17	(34%)
Fibroma			1	(2%)								
Skin	(54)		(50)		(50)		(49)		(50)		(50)	
Fibroma	1	(2%)							1	(2%)	1	(2%)
Fibrous Histiocytoma			1	(2%)								
Keratoacanthoma			1	(2%)					1	(2%)		
Lipoma	1	(2%)			1	(2%)					1	(2%)
Osteosarcoma												
Sarcoma	2	(4%)										
Squamous Cell Carcinoma	1	(2%)										
<b>MUSCULOSKELETAL SYSTEM</b>												
Bone, Femur	(54)		(50)		(50)		(49)		(50)		(50)	
Bone, Mandible	(0)		(0)		(0)		(0)		(1)		(0)	

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically

Experiment Number: 99930-94  
 Test Type: SPECIAL STUDY  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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

Date Report Requested: 10/22/2014  
 Time Report Requested: 17:28:12  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat FEMALE	F1	0PPM	F1	5PPM	F1	100PPM	F1	500PPM	F1	5PPM/CTL	F1	100PPM/CTL
Squamous Cell Carcinoma										1 (100%)		
Bone, Tibia	(0)		(0)		(0)		(0)		(0)	(0)		(0)
Skeletal Muscle	(0)		(1)		(1)		(0)		(1)	(1)		(1)
Granulosa Cell Tumor Malignant, Metastatic, Ovary										1 (100%)		
Hemangiosarcoma							1 (100%)					
Lipoma												1 (100%)
Sarcoma							1 (100%)					
<b>NERVOUS SYSTEM</b>												
Brain, Brain Stem	(54)		(50)		(50)		(49)		(50)		(50)	
Brain, Cerebellum	(53)		(50)		(50)		(49)		(49)		(50)	
Astrocytoma Malignant				1 (2%)								
Granular Cell Tumor Benign								1 (2%)				
Brain, Cerebrum	(54)		(50)		(50)		(49)		(50)		(50)	
Astrocytoma Malignant												1 (2%)
Granular Cell Tumor Benign	1 (2%)							1 (2%)				
Granular Cell Tumor Malignant						1 (2%)						
Granular Cell Tumor Nos								1 (2%)				
Meningioma Malignant						1 (2%)						
<b>RESPIRATORY SYSTEM</b>												
Lung	(54)		(50)		(50)		(49)		(50)		(50)	
Alveolar/Bronchiolar Adenoma				1 (2%)		1 (2%)				1 (2%)		
Squamous Cell Carcinoma, Metastatic, Nose								1 (2%)				
Nose	(54)		(50)		(50)		(49)		(50)		(50)	
Squamous Cell Carcinoma						1 (2%)		2 (4%)				
Trachea	(54)		(50)		(50)		(49)		(50)		(50)	
<b>SPECIAL SENSES SYSTEM</b>												

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically

Experiment Number: 99930-94  
 Test Type: SPECIAL STUDY  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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

Date Report Requested: 10/22/2014  
 Time Report Requested: 17:28:12  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat FEMALE	F1 0PPM	F1 5PPM	F1 100PPM	F1 500PPM	F1 5PPM/CTL	F1 100PPM/CTL
Ear	(0)	(0)	(0)	(0)	(2)	(0)
Squamous Cell Papilloma					1 (50%)	
Eye	(32)	(32)	(31)	(26)	(33)	(37)
Harderian Gland	(30)	(34)	(30)	(25)	(33)	(36)
Squamous Cell Carcinoma, Metastatic, Nose				1 (4%)		
Lacrimal Gland	(0)	(1)	(1)	(1)	(1)	(0)
<b>URINARY SYSTEM</b>						
Kidney	(54)	(50)	(50)	(49)	(50)	(50)
Nephroblastoma				1 (2%)		
Renal Tubule, Adenoma						1 (2%)
Transitional Epithelial Carcinoma	1 (2%)					
Urinary Bladder	(54)	(49)	(49)	(49)	(49)	(48)
<b>SYSTEMIC LESIONS</b>						
Multiple Organ	*(54)	*(50)	*(50)	*(49)	*(50)	*(50)
Histiocytic Sarcoma		1 (2%)			1 (2%)	
Leukemia Granulocytic	1 (2%)					
Leukemia Mononuclear				1 (2%)		
Lymphoma Malignant	1 (2%)					

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically

**Experiment Number:** 99930-94  
**Test Type:** SPECIAL STUDY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 17:28:12  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

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CD Rat FEMALE	F1 500PPM/CTL
<b>Disposition Summary</b>	
<b>Animals Initially In Study</b>	<b>50</b>
<b>Early Deaths</b>	
<b>Moribund</b>	<b>18</b>
<b>Natural Death</b>	<b>9</b>
<b>Survivors</b>	
<b>Moribund</b>	
<b>Natural Death</b>	
<b>Terminal Sacrifice</b>	<b>23</b>
<b>Animals Examined Microscopically</b>	<b>50</b>

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**ALIMENTARY SYSTEM**

Esophagus	(50)
Intestine Large	(0)
Intestine Large, Cecum	(50)
Intestine Large, Colon	(50)
Leiomyosarcoma	1 (2%)
Intestine Large, Rectum	(26)
Intestine Small	(0)
Intestine Small, Duodenum	(50)
Intestine Small, Ileum	(47)
Intestine Small, Jejunum	(49)
Adenoma	
Liver	(50)
Cholangioma	
Fibrous Histiocytoma, Metastatic, Skin	
Hepatocellular Adenoma	1 (2%)
Mesentery	(2)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically



Experiment Number: 99930-94

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS  
ABRIDGED) (a)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014

Time Report Requested: 17:28:12

First Dose M/F: NA / NA

Lab: NCTR

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CD Rat FEMALE	F1 500PPM/CTL
Lipoma	
Sarcoma	
Pancreas	(50)
Salivary Glands	(50)
Stomach, Forestomach	(50)
Stomach, Glandular	(50)
Tongue	(0)
<hr/>	
CARDIOVASCULAR SYSTEM	
Blood Vessel	(50)
Heart	(50)
Schwannoma Nos	
<hr/>	
ENDOCRINE SYSTEM	
Adrenal Cortex	(50)
Adenoma	2 (4%)
Carcinoma	
Adrenal Medulla	(48)
Pheochromocytoma Benign	
Pheochromocytoma Complex	
Islets, Pancreatic	(50)
Adenoma	1 (2%)
Carcinoma	
Parathyroid Gland	(43)
Pituitary Gland	(50)
Pars Distalis, Adenoma	43 (86%)
Pars Distalis, Carcinoma	1 (2%)
Thyroid Gland	(50)
C Cell, Adenoma	1 (2%)

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically

Experiment Number: 99930-94

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

Test Compound: Endocrine disruptor (Genistein)

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Lab: NCTR

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CD Rat FEMALE	F1 500PPM/CTL
C Cell, Carcinoma	1 (2%)
Follicular Cel, Adenoma	1 (2%)
<hr/>	
GENERAL BODY SYSTEM	
Tissue NOS	(1)
Liposarcoma	1 (100%)
<hr/>	
GENITAL SYSTEM	
Clitoral Gland	(49)
Carcinoma	
Squamous Cell Papilloma	
Ovary	(49)
Granulosa Cell Tumor Benign	
Granulosa Cell Tumor Malignant	
Sarcoma Stromal	
Oviduct	(47)
Uterus	(50)
Adenocarcinoma	
Adenoma	
Leiomyosarcoma	1 (2%)
Polyp Stromal	3 (6%)
Sarcoma Stromal	
Vagina	(50)
Granular Cell Tumor Benign	
Sarcoma Stromal	1 (2%)
<hr/>	
HEMATOPOIETIC SYSTEM	
Bone Marrow	(50)
Lymph Node	(9)

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CD Rat FEMALE	F1 500PPM/CTL
Pancreatic, Fibrous Histiocytoma, Metastatic, Skin	
Renal, Fibrous Histiocytoma, Metastatic, Skin	
Lymph Node, Mandibular	(50)
Lymph Node, Mesenteric	(50)
Spleen	(50)
Thymus	(47)
Thymoma Malignant	

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INTEGUMENTARY SYSTEM

Mammary Gland	(50)
Adenocarcinoma	7 (14%)
Adenocarcinoma, Multiple	2 (4%)
Adenoma	1 (2%)
Fibroadenoma	18 (36%)
Fibroadenoma, Multiple	7 (14%)
Fibroma	
Skin	(50)
Fibroma	1 (2%)
Fibrous Histiocytoma	
Keratoacanthoma	
Lipoma	
Osteosarcoma	1 (2%)
Sarcoma	1 (2%)
Squamous Cell Carcinoma	

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MUSCULOSKELETAL SYSTEM

Bone, Femur	(50)
Bone, Mandible	(0)

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**Experiment Number:** 99930-94

**Test Type:** SPECIAL STUDY

**Route:** DOSED FEED

**Species/Strain:** Rat/CD

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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

**Lab:** NCTR

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<b>CD Rat FEMALE</b>	<b>F1 500PPM/CTL</b>
Squamous Cell Carcinoma	
Bone, Tibia	(1)
Skeletal Muscle	(0)
Granulosa Cell Tumor Malignant, Metastatic, Ovary	
Hemangiosarcoma	
Lipoma	
Sarcoma	
<hr/>	
<b>NERVOUS SYSTEM</b>	
Brain, Brain Stem	(50)
Brain, Cerebellum	(50)
Astrocytoma Malignant	
Granular Cell Tumor Benign	
Brain, Cerebrum	(50)
Astrocytoma Malignant	
Granular Cell Tumor Benign	
Granular Cell Tumor Malignant	
Granular Cell Tumor Nos	
Meningioma Malignant	
<hr/>	
<b>RESPIRATORY SYSTEM</b>	
Lung	(50)
Alveolar/Bronchiolar Adenoma	
Squamous Cell Carcinoma, Metastatic, Nose	
Nose	(50)
Squamous Cell Carcinoma	1 (2%)
Trachea	(50)

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**SPECIAL SENSES SYSTEM**

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**Route:** DOSED FEED

**Species/Strain:** Rat/CD

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<b>CD Rat FEMALE</b>	<b>F1 500PPM/CTL</b>
Ear	(0)
Squamous Cell Papilloma	
Eye	(28)
Harderian Gland	(26)
Squamous Cell Carcinoma, Metastatic, Nose	
Lacrimal Gland	(2)
<hr/>	
URINARY SYSTEM	
Kidney	(50)
Nephroblastoma	
Renal Tubule, Adenoma	
Transitional Epithelial Carcinoma	
Urinary Bladder	(49)
<hr/>	
SYSTEMIC LESIONS	
Multiple Organ	*(50)
Histiocytic Sarcoma	
Leukemia Granulocytic	
Leukemia Mononuclear	
Lymphoma Malignant	

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Experiment Number: 99930-94  
 Test Type: SPECIAL STUDY  
 Route: DOSED FEED  
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**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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

Date Report Requested: 10/22/2014  
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CD Rat FEMALE	F1	0PPM	F1	5PPM	F1	100PPM	F1	500PPM	F1	5PPM/CTL	F1	100PPM/CTL
<b>Tumor Summary for FEMALE</b>												
Total Animals with Primary Neoplasms (b)		53		47		45		49		45		49
Total Primary Neoplasms		105		84		95		91		83		91
Total Animals with Benign Neoplasms		49		45		44		46		44		49
Total Benign Neoplasms		88		76		73		72		74		85
Total Animals with Malignant Neoplasms		16		7		19		18		8		6
Total Malignant Neoplasms		17		8		22		18		8		6
Total Animals with Metastatic Neoplasms				1				1		1		
Total Metastatic Neoplasms				3				2		1		
Total Animals with Malignant Neoplasms Uncertain Primary Site												
Total Animals with Neoplasms Uncertain - Benign or Malignant								1		1		
Total Uncertain Neoplasms								1		1		

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\* Number of animals with any tissue examined microscopically

**Experiment Number:** 99930-94  
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**CD Rat FEMALE**

**F1 500PPM/CTL**

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**Tumor Summary for FEMALE**

<b>Total Animals with Primary Neoplasms (b)</b>	<b>50</b>
<b>Total Primary Neoplasms</b>	<b>97</b>
<b>Total Animals with Benign Neoplasms</b>	<b>50</b>
<b>Total Benign Neoplasms</b>	<b>79</b>
<b>Total Animals with Malignant Neoplasms</b>	<b>15</b>
<b>Total Malignant Neoplasms</b>	<b>18</b>
<b>Total Animals with Metastatic Neoplasms</b>	
<b>Total Metastatic Neoplasms</b>	
<b>Total Animals with Malignant Neoplasms Uncertain Primary Site</b>	
<b>Total Animals with Neoplasms Uncertain - Benign or Malignant</b>	
<b>Total Uncertain Neoplasms</b>	

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**\*\* END OF REPORT \*\***

a - Number of animals examined microscopically at site and number of animals with lesion

b - Primary tumors: all tumors except metastatic tumors

\* Number of animals with any tissue examined microscopically