

**Experiment Number:** 99930-93  
**Test Type:** SPECIAL STUDY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/17/2014

**Time Report Requested:** 12:50:21

**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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CD Rat MALE	F3 0PPM	F3 5PPM TO CTL	F3 100PPM TO CTL	F3 500PPM TO CTL
<b>Disposition Summary</b>				
<b>Animals Initially In Study</b>	<b>52</b>	<b>50</b>	<b>50</b>	<b>50</b>
<b>Early Deaths</b>				
<b>Moribund</b>	<b>8</b>		<b>11</b>	<b>4</b>
<b>Natural Death</b>	<b>11</b>	<b>7</b>	<b>5</b>	<b>8</b>
<b>Survivors</b>				
<b>Moribund</b>		<b>1</b>		
<b>Natural Death</b>			<b>1</b>	<b>2</b>
<b>Terminal Sacrifice</b>	<b>33</b>	<b>42</b>	<b>33</b>	<b>36</b>
<b>Animals Examined Microscopically</b>	<b>52</b>	<b>50</b>	<b>49</b>	<b>49</b>
<b>ALIMENTARY SYSTEM</b>				
Esophagus	(49)	(49)	(48)	(49)
Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site	1 (2%)			
Intestine Large, Cecum	(41)	(43)	(46)	(45)
Leukemia Granulocytic				1 (2%)
Intestine Large, Colon	(41)	(43)	(46)	(45)
Adenocarcinoma	1 (2%)			
Leukemia Granulocytic				1 (2%)
Intestine Large, Rectum	(38)	(42)	(38)	(38)
Leiomyosarcoma	1 (3%)			
Intestine Small, Duodenum	(41)	(43)	(46)	(43)
Adenocarcinoma	2 (5%)			
Intestine Small, Ileum	(40)	(42)	(45)	(43)
Leukemia Granulocytic				1 (2%)
Intestine Small, Jejunum	(40)	(43)	(45)	(41)
Adenocarcinoma				1 (2%)
Leukemia Granulocytic				1 (2%)

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\* Number of animals with any tissue examined microscopically

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Liver	(49)		(47)	(47)	(48)
Carcinoma, Metastatic, Pancreas					1 (2%)
Hepatocellular Adenoma	1 (2%)				1 (2%)
Hepatocellular Carcinoma	1 (2%)		1 (2%)		
Histiocytic Sarcoma				1 (2%)	
Leukemia	1 (2%)				
Leukemia Granulocytic					1 (2%)
Leukemia Mononuclear				1 (2%)	
Lymphoma Malignant	2 (4%)				
Mesentery	(0)		(1)	(0)	(0)
Pancreas	(45)		(47)	(48)	(47)
Acinar Cell, Adenoma				2 (4%)	
Carcinoma					1 (2%)
Histiocytic Sarcoma				1 (2%)	
Leukemia Granulocytic					1 (2%)
Salivary Glands	(49)		(47)	(47)	(48)
Carcinoma, Metastatic, Pancreas					1 (2%)
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site	1 (2%)				
Leukemia Granulocytic					1 (2%)
Lymphoma Malignant	2 (4%)				
Stomach, Forestomach	(44)		(45)	(48)	(47)
Stomach, Glandular	(41)		(43)	(46)	(46)
Tongue	(0)		(0)	(1)	(0)
CARDIOVASCULAR SYSTEM					
Blood Vessel	(51)		(50)	(49)	(47)
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site	1 (2%)				
Heart	(51)		(48)	(49)	(47)

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Heart	(51)		(48)	(49)	(47)
Leukemia Granulocytic					1 (2%)
Lymphoma Malignant	1 (2%)				
Pericardium, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site	1 (2%)				
ENDOCRINE SYSTEM					
Adrenal Cortex	(48)		(47)	(47)	(47)
Adenoma				1 (2%)	
Leukemia Granulocytic					1 (2%)
Leukemia Mononuclear				1 (2%)	
Lymphoma Malignant	1 (2%)				
Adrenal Medulla	(48)		(46)	(47)	(45)
Leukemia Mononuclear				1 (2%)	
Lymphoma Malignant	1 (2%)				
Pheochromocytoma Benign	4 (8%)		3 (7%)	4 (9%)	2 (4%)
Pheochromocytoma Malignant	1 (2%)				
Islets, Pancreatic	(45)		(49)	(48)	(48)
Adenoma	3 (7%)		3 (6%)	2 (4%)	
Carcinoma				1 (2%)	
Leukemia Granulocytic					1 (2%)
Lymphoma Malignant	1 (2%)				
Parathyroid Gland	(41)		(46)	(48)	(43)
Adenoma				1 (2%)	
Lymphoma Malignant	1 (2%)				
Pituitary Gland	(49)		(46)	(48)	(48)
Lymphoma Malignant	2 (4%)				
Pars Distalis, Adenoma	16 (33%)		18 (39%)	17 (35%)	14 (29%)
Pars Distalis, Adenoma, Multiple	1 (2%)				1 (2%)

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CD Rat MALE	F3	0PPM	F3 5PPM TO CTL	F3 100PPM TO CTL	F3 500PPM TO CTL
Thyroid Gland	(44)		(46)	(46)	(45)
Bilateral, C Cell, Adenoma	1 (2%)				
C Cell, Adenoma	1 (2%)				1 (2%)
C Cell, Carcinoma					1 (2%)
Leukemia Granulocytic					1 (2%)
Lymphoma Malignant	2 (5%)				
GENERAL BODY SYSTEM					
Tissue NOS	(0)		(1)	(0)	(2)
Abdominal, Sarcoma			1 (100%)		
Squamous Cell Carcinoma					1 (50%)
GENITAL SYSTEM					
Coagulating Gland	(44)		(43)	(47)	(45)
Histiocytic Sarcoma				1 (2%)	
Leukemia Granulocytic					1 (2%)
Lymphoma Malignant	1 (2%)				
Sarcoma, Metastatic, Uncertain Primary Site				1 (2%)	
Epididymis	(49)		(48)	(49)	(47)
Leukemia Granulocytic					1 (2%)
Lymphoma Malignant	1 (2%)				
Mesothelioma Malignant			1 (2%)		1 (2%)
Preputial Gland	(48)		(48)	(47)	(47)
Carcinoma				1 (2%)	
Leukemia Granulocytic					1 (2%)
Lymphoma Malignant	2 (4%)				
Squamous Cell Carcinoma				5 (11%)	3 (6%)
Prostate	(6)		(8)	(6)	(4)
Prostate, Dorsal Lobe	(51)		(47)	(47)	(48)

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Adenocarcinoma					1 (2%)
Histiocytic Sarcoma				1 (2%)	
Leukemia Granulocytic					1 (2%)
Lymphoma Malignant	2 (4%)				
Mesothelioma Malignant			1 (2%)		
Sarcoma, Metastatic, Uncertain Primary Site				1 (2%)	
Prostate, Ventral Lobe	(48)		(46)	(48)	(47)
Adenoma				1 (2%)	1 (2%)
Leukemia Granulocytic					1 (2%)
Lymphoma Malignant	2 (4%)				
Rete Testes	(47)		(48)	(46)	(41)
Seminal Vesicle	(43)		(43)	(47)	(45)
Adenoma				1 (2%)	
Histiocytic Sarcoma				1 (2%)	
Lymphoma Malignant	1 (2%)				
Sarcoma				1 (2%)	
Sarcoma, Metastatic, Uncertain Primary Site				1 (2%)	
Testes	(50)		(50)	(48)	(49)
Interstit Cell, Adenoma	1 (2%)		1 (2%)		
Mesothelioma Malignant			1 (2%)		1 (2%)
Seminoma Benign	1 (2%)				
HEMATOPOIETIC SYSTEM					
Bone Marrow	(48)		(48)	(48)	(46)
Carcinoma, Metastatic, Pancreas					1 (2%)
Histiocytic Sarcoma				1 (2%)	
Leukemia	1 (2%)				
Leukemia Granulocytic					1 (2%)

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Lymphoma Malignant	2 (4%)				
Lymph Node	(13)		(9)	(18)	(12)
Axillary, Lymphoma Malignant	1 (8%)				
Inguinal, Leukemia	1 (8%)				
Inguinal, Leukemia Granulocytic					1 (8%)
Inguinal, Lymphoma Malignant	1 (8%)				
Lumbar, Histiocytic Sarcoma				1 (6%)	
Lumbar, Lymphoma Malignant	1 (8%)				
Lumbar, Squamous Cell Carcinoma, Metastatic, Preputial Gland					1 (8%)
Mediastinal, Histiocytic Sarcoma				1 (6%)	
Renal, Histiocytic Sarcoma				1 (6%)	
Renal, Lymphoma Malignant	1 (8%)				
Thoracic, Leukemia Granulocytic					1 (8%)
Lymph Node, Mandibular	(48)		(48)	(48)	(48)
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site	1 (2%)				
Histiocytic Sarcoma				1 (2%)	
Leukemia	1 (2%)				
Leukemia Granulocytic					1 (2%)
Lymphoma Malignant	2 (4%)				
Lymph Node, Mesenteric	(45)		(46)	(47)	(47)
Histiocytic Sarcoma				1 (2%)	
Leukemia Granulocytic					1 (2%)
Lymphoma Malignant	2 (4%)				
Spleen	(50)		(49)	(48)	(47)
Carcinoma, Metastatic, Pancreas					1 (2%)
Histiocytic Sarcoma				1 (2%)	
Leukemia	1 (2%)				

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Leukemia Granulocytic					1 (2%)
Leukemia Mononuclear				1 (2%)	
Lymphoma Malignant	2 (4%)				
Sarcoma	1 (2%)		1 (2%)		
Thymus	(46)		(45)	(41)	(44)
Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site	1 (2%)				
Leukemia Granulocytic					1 (2%)
Lymphoma Malignant	2 (4%)				
<b>INTEGUMENTARY SYSTEM</b>					
Mammary Gland	(39)		(43)	(41)	(41)
Adenocarcinoma				1 (2%)	
Fibroadenoma					2 (5%)
Fibroma					2 (5%)
Skin	(49)		(50)	(48)	(49)
Basal Cell Adenoma					1 (2%)
Fibroma			1 (2%)		
Keratoacanthoma	1 (2%)				1 (2%)
Leukemia Granulocytic					1 (2%)
Lipoma				1 (2%)	
Neurofibrosarcoma					1 (2%)
Schwannoma Malignant	1 (2%)				
Squamous Cell Carcinoma	1 (2%)			3 (6%)	
Squamous Cell Papilloma					1 (2%)
<b>MUSCULOSKELETAL SYSTEM</b>					
Bone	(0)		(0)	(0)	(1)
Chordoma					1 (100%)
Bone, Cranium	(2)		(0)	(0)	(0)

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Bone, Femur	(50)		(50)	(48)	(49)
Skeletal Muscle	(1)		(0)	(0)	(1)
Carcinoma, Metastatic, Pancreas					1 (100%)
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site	1 (100%)				
NERVOUS SYSTEM					
Brain, Brain Stem	(46)		(46)	(48)	(47)
Lymphoma Malignant	1 (2%)				
Reticulosis Malignant					1 (2%)
Brain, Cerebellum	(46)		(46)	(48)	(46)
Astrocytoma Malignant	1 (2%)				
Lymphoma Malignant	1 (2%)				
Reticulosis Malignant					1 (2%)
Brain, Cerebrum	(45)		(46)	(48)	(46)
Astrocytoma Malignant	1 (2%)		1 (2%)		
Lymphoma Malignant	1 (2%)				
Reticulosis Malignant					1 (2%)
RESPIRATORY SYSTEM					
Lung	(48)		(47)	(47)	(46)
Adenocarcinoma			1 (2%)		
Carcinoma, Metastatic, Pancreas					1 (2%)
Carcinoma, Metastatic, Uncertain Primary Site			1 (2%)		
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site	1 (2%)				
Histiocytic Sarcoma				1 (2%)	
Leukemia Granulocytic					1 (2%)
Leukemia Mononuclear				1 (2%)	

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Lymphoma Malignant	2 (4%)				
Nose	(46)		(45)	(49)	(45)
Adventitia, Squamous Cell Carcinoma					1 (2%)
Leukemia Granulocytic					1 (2%)
Lymphoma Malignant	2 (4%)				
Squamous Cell Carcinoma			1 (2%)	1 (2%)	
Trachea	(45)		(44)	(48)	(44)
Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site	1 (2%)				
Lymphoma Malignant	2 (4%)				
SPECIAL SENSES SYSTEM					
Eye	(37)		(43)	(38)	(39)
Adventitia, Squamous Cell Carcinoma					1 (3%)
Retrolbulbar, Carcinoma			1 (2%)		
Harderian Gland	(38)		(43)	(38)	(39)
Adenoma					1 (3%)
Adventitia, Squamous Cell Carcinoma					1 (3%)
Lacrimal Gland	(0)		(2)	(2)	(1)
Zymbal's Gland	(0)		(0)	(1)	(0)
Adenoma				1 (100%)	
URINARY SYSTEM					
Kidney	(46)		(49)	(47)	(47)
Adventitia, Carcinoma, Metastatic, Pancreas					1 (2%)
Histiocytic Sarcoma				1 (2%)	
Leukemia Granulocytic					1 (2%)
Leukemia Mononuclear				1 (2%)	
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Transit Epithe, Papilloma				1 (2%)
Urethra	(0)	(2)	(2)	(1)
Urinary Bladder	(45)	(43)	(47)	(46)
Lymphoma Malignant	1 (2%)			
SYSTEMIC LESIONS				
Multiple Organ	*(52)	*(50)	*(49)	*(49)
Histiocytic Sarcoma			1 (2%)	
Leukemia	1 (2%)			
Leukemia Granulocytic				1 (2%)
Leukemia Mononuclear			1 (2%)	
Lymphoma Malignant	2 (4%)			
Mesothelioma Malignant		1 (2%)		1 (2%)

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<b>Tumor Summary for MALE</b>				
Total Animals with Primary Neoplasms (b)	33	26	36	30
Total Primary Neoplasms	44	34	46	47
Total Animals with Benign Neoplasms	24	21	24	21
Total Benign Neoplasms	30	26	31	29
Total Animals with Malignant Neoplasms	14	8	13	13
Total Malignant Neoplasms	14	8	15	18
Total Animals with Metastatic Neoplasms	1	1	1	2
Total Metastatic Neoplasms	9	1	3	8
Total Animals with Malignant Neoplasms Uncertain Primary Site	1	1	1	
Total Animals with Neoplasms Uncertain - Benign or Malignant				
Total Uncertain Neoplasms				

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

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<b>Disposition Summary</b>					
Animals Initially In Study		53	50	50	50
Early Deaths					
Moribund		15	13	16	17
Natural Death		5	5	5	7
Survivors					
Moribund			1		
Natural Death			1		1
Terminal Sacrifice		33	30	29	25
Animals Examined Microscopically		53	50	50	50

ALIMENTARY SYSTEM

Esophagus	(53)	(50)	(50)	(48)
Intestine Large, Cecum	(52)	(50)	(50)	(49)
Intestine Large, Colon	(53)	(50)	(50)	(49)
Intestine Large, Rectum	(42)	(40)	(40)	(37)
Intestine Small, Duodenum	(52)	(50)	(50)	(49)
Leukemia Mononuclear			1 (2%)	
Intestine Small, Ileum	(51)	(48)	(47)	(48)
Leukemia Mononuclear			1 (2%)	
Intestine Small, Jejunum	(51)	(49)	(49)	(48)
Leiomyosarcoma		1 (2%)		
Leukemia Mononuclear			1 (2%)	
Liver	(53)	(50)	(50)	(49)
Cholangiocarcinoma		1 (2%)		
Fibrous Histiocytoma, Metastatic, Skin	1 (2%)			
Hepatocellular Adenoma			1 (2%)	
Leukemia Mononuclear		1 (2%)	1 (2%)	

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Mesentery	(0)	(1)	(1)	(0)	
Oral Mucosa	(1)	(0)	(1)	(1)	
Sarcoma	1 (100%)				1 (100%)
Pancreas	(52)	(50)	(50)	(49)	
Salivary Glands	(53)	(49)	(50)	(49)	
Stomach	(0)	(1)	(0)	(0)	
Stomach, Forestomach	(52)	(49)	(49)	(49)	
Stomach, Glandular	(53)	(50)	(50)	(49)	
Leukemia Mononuclear			1 (2%)		
CARDIOVASCULAR SYSTEM					
Blood Vessel	(53)	(50)	(50)	(49)	
Heart	(53)	(50)	(50)	(49)	
Schwannoma Nos			1 (2%)		
ENDOCRINE SYSTEM					
Adrenal Cortex	(53)	(50)	(50)	(49)	
Adenoma		2 (4%)	1 (2%)	1 (2%)	
Leukemia Mononuclear			1 (2%)		
Adrenal Medulla	(53)	(46)	(50)	(48)	
Leukemia Mononuclear			1 (2%)		
Pheochromocytoma Benign	2 (4%)	1 (2%)		2 (4%)	
Islets, Pancreatic	(52)	(50)	(50)	(49)	
Adenoma	1 (2%)	2 (4%)	2 (4%)	1 (2%)	
Parathyroid Gland	(53)	(41)	(47)	(46)	
Pituitary Gland	(53)	(50)	(50)	(50)	
Pars Distalis, Adenoma	41 (77%)	42 (84%)	42 (84%)	40 (80%)	
Pars Distalis, Carcinoma		1 (2%)			
Thyroid Gland	(53)	(50)	(50)	(49)	

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\* Number of animals with any tissue examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:50:22

First Dose M/F: NA / NA

Lab: NCTR

CD Rat FEMALE	F3	0 PPM	F3 5PPM TO CTL	F3 100PPM TO CTL	F3 500PPM TO CTL
C Cell, Adenoma			1 (2%)		3 (6%)
C Cell, Carcinoma			1 (2%)		
Leukemia Mononuclear				1 (2%)	
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
Clitoral Gland	(49)		(47)	(49)	(48)
Adenoma	2 (4%)			1 (2%)	
Carcinoma				1 (2%)	
Fibrous Histiocytoma, Metastatic, Skin	1 (2%)				
Leukemia Mononuclear				1 (2%)	
Ovary	(53)		(50)	(49)	(49)
Leukemia Mononuclear				1 (2%)	
Tubulostromal Carcinoma	1 (2%)				
Yolk Sac Carcinoma					1 (2%)
Oviduct	(53)		(49)	(49)	(49)
Leukemia Mononuclear				1 (2%)	
Uterus	(53)		(50)	(50)	(49)
Adenocarcinoma	1 (2%)			1 (2%)	
Adenoma				1 (2%)	
Leiomyoma			1 (2%)		
Leukemia Mononuclear				1 (2%)	
Polyp Stromal	5 (9%)			5 (10%)	2 (4%)
Sarcoma Stromal				2 (4%)	
Vagina	(52)		(49)	(49)	(48)
HEMATOPOIETIC SYSTEM					
Bone Marrow	(53)		(50)	(50)	(49)

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CD Rat FEMALE	F3	0 PPM	F3 5PPM TO CTL	F3 100PPM TO CTL	F3 500PPM TO CTL
Leukemia Mononuclear			1 (2%)	1 (2%)	
Lymph Node	(18)		(9)	(8)	(12)
Axillary, Leukemia Mononuclear			1 (11%)		
Inguinal, Leukemia Mononuclear				1 (13%)	
Inguinal, Sarcoma, Metastatic, Skin	1 (6%)				
Lumbar, Fibrous Histiocytoma, Metastatic, Skin	1 (6%)				
Lumbar, Leukemia Mononuclear			1 (11%)		
Lumbar, Yolk Sac Carcinoma, Metastatic, Ovary					1 (8%)
Mediastinal, Leukemia Mononuclear				1 (13%)	
Pancreatic, Leukemia Mononuclear				1 (13%)	
Popliteal, Sarcoma, Metastatic, Skin	1 (6%)				
Renal, Yolk Sac Carcinoma, Metastatic, Ovary					1 (8%)
Sarcoma, Metastatic, Skin	1 (6%)				
Lymph Node, Mandibular	(53)		(49)	(50)	(49)
Leukemia Mononuclear				1 (2%)	
Lymph Node, Mesenteric	(53)		(50)	(50)	(49)
Leiomyosarcoma, Metastatic, Intestine Small, Jejunum			1 (2%)		
Leukemia Mononuclear				1 (2%)	
Spleen	(53)		(50)	(50)	(49)
Leukemia Mononuclear			1 (2%)	1 (2%)	
Thymus	(48)		(45)	(46)	(47)
Sarcoma	1 (2%)				
Thymoma Malignant	1 (2%)				1 (2%)
<b>INTEGUMENTARY SYSTEM</b>					
Mammary Gland	(53)		(49)	(50)	(50)

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Species/Strain: Rat/CD

P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

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CD Rat FEMALE	F3 0 PPM	F3 5PPM TO CTL	F3 100PPM TO CTL	F3 500PPM TO CTL
Adenocarcinoma	5 (9%)	6 (12%)	8 (16%)	10 (20%)
Adenocarcinoma, Multiple	2 (4%)	2 (4%)	2 (4%)	2 (4%)
Adenoma			1 (2%)	1 (2%)
Fibroadenoma	9 (17%)	9 (18%)	13 (26%)	19 (38%)
Fibroadenoma, Multiple	23 (43%)	11 (22%)	20 (40%)	9 (18%)
Leukemia Mononuclear			1 (2%)	
Skin	(53)	(50)	(50)	(50)
Fibrous Histiocytoma	1 (2%)			
Keratoacanthoma				1 (2%)
Leukemia Mononuclear			1 (2%)	
Sarcoma	1 (2%)			1 (2%)
Squamous Cell Carcinoma	1 (2%)			1 (2%)
MUSCULOSKELETAL SYSTEM				
Bone	(0)	(0)	(1)	(0)
Bone, Femur	(53)	(50)	(50)	(49)
Bone, Joint	(1)	(0)	(0)	(0)
Skeletal Muscle	(1)	(0)	(0)	(0)
NERVOUS SYSTEM				
Brain, Brain Stem	(53)	(50)	(50)	(49)
Brain, Cerebellum	(53)	(50)	(50)	(49)
Granular Cell Tumor Benign	1 (2%)			
Leukemia Mononuclear			1 (2%)	
Brain, Cerebrum	(53)	(50)	(50)	(49)
Carcinoma, Metastatic, Pituitary Gland				1 (2%)
Glioma Malignant, Mixed	1 (2%)			
Granular Cell Tumor Benign				1 (2%)
RESPIRATORY SYSTEM				

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Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P02: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (a)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

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First Dose M/F: NA / NA

Lab: NCTR

CD Rat FEMALE	F3 0 PPM	F3 5PPM TO CTL	F3 100PPM TO CTL	F3 500PPM TO CTL
Lung	(53)	(50)	(50)	(49)
Fibrous Histiocytoma, Metastatic, Skin	1 (2%)			
Leukemia Mononuclear			1 (2%)	
Squamous Cell Carcinoma, Metastatic, Skin				1 (2%)
Nose	(53)	(50)	(50)	(49)
Leukemia Mononuclear			1 (2%)	
Squamous Cell Carcinoma	1 (2%)	1 (2%)		3 (6%)
Trachea	(53)	(50)	(50)	(49)
Leukemia Mononuclear			1 (2%)	
SPECIAL SENSES SYSTEM				
Eye	(43)	(41)	(40)	(38)
Harderian Gland	(43)	(40)	(40)	(38)
Lacrimal Gland	(0)	(1)	(0)	(0)
URINARY SYSTEM				
Kidney	(53)	(50)	(50)	(49)
Leukemia Mononuclear			1 (2%)	
Renal Tubule, Adenoma	1 (2%)		1 (2%)	
Urinary Bladder	(53)	(47)	(48)	(47)
Leukemia Mononuclear			1 (2%)	
SYSTEMIC LESIONS				
Multiple Organ	*(53)	*(50)	*(50)	*(50)
Leukemia Mononuclear		1 (2%)	1 (2%)	

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

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 Test Compound: Endocrine disruptor (Genistein)  
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Date Report Requested: 10/17/2014  
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 Lab: NCTR

CD Rat FEMALE	F3 0 PPM	F3 5PPM TO CTL	F3 100PPM TO CTL	F3 500PPM TO CTL
<b>Tumor Summary for FEMALE</b>				
Total Animals with Primary Neoplasms (b)	52	48	48	49
Total Primary Neoplasms	102	83	104	100
Total Animals with Benign Neoplasms	49	48	46	48
Total Benign Neoplasms	85	69	88	80
Total Animals with Malignant Neoplasms	16	12	14	17
Total Malignant Neoplasms	16	14	15	20
Total Animals with Metastatic Neoplasms	2	1		3
Total Metastatic Neoplasms	7	1		4
Total Animals with Malignant Neoplasms Uncertain Primary Site				
Total Animals with Neoplasms Uncertain - Benign or Malignant	1		1	
Total Uncertain Neoplasms	1		1	

\*\* END OF REPORT \*\*

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