

**Experiment Number:** 10188 - 02

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

**Date Report Requested:** 08/13/2019

**Test Type:** CHRONIC

Di(2-ethylhexyl) Phthalate

**Time Report Requested:** 10:38:57

**Route:** DOSED FEED

**CAS Number:** 117-81-7

**First Dose M/F:** 06/27/11 / 06/28/11

**Species/Strain:** RATS/HSD

**Lab:** BAT

Final 1\_HSD Rats

**NTP Study Number:** C10188  
**Lock Date:** 07/15/2015  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 3.0.2.3\_002  
**PWG Approval Date:** NONE

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Species/Strain: RATS/HSD

Lab: BAT

Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male
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## Disposition Summary

Animals Initially In Study	50	50	50	50	50
Early Deaths					
Moribund Sacrifice	12	9	4	8	7
Natural Death	13	7	6	7	14
Survivors					
Natural Death	1		1		1
Terminal Sacrifice	24	33	39	35	28
Animals Examined Microscopically	50	49	50	50	50

## ALIMENTARY SYSTEM

Esophagus	(50)	(49)	(50)	(50)	(50)
Intestine Large, Cecum	(49)	(49)	(50)	(50)	(48)
Intestine Large, Colon	(50)	(49)	(50)	(50)	(49)
Intestine Large, Rectum	(50)	(49)	(50)	(50)	(49)
Intestine Small, Duodenum	(50)	(49)	(50)	(49)	(49)
Intestine Small, Ileum	(50)	(49)	(50)	(50)	(49)
Intestine Small, Jejunum	(49)	(49)	(50)	(50)	(49)
Adenocarcinoma	2 (4%)	1 (2%)		1 (2%)	2 (4%)
Liver	(50)	(49)	(50)	(50)	(49)
Carcinoma, Metastatic, Pancreas				1 (2%)	
Fibrosarcoma, Metastatic, Skin		1 (2%)			
Hepatocellular Adenoma		1 (2%)		3 (6%)	7 (14%)
Hepatocellular Adenoma, Multiple					1 (2%)
Hepatocellular Carcinoma	1 (2%)				3 (6%)
Hepatocholangiocarcinoma			1 (2%)		
Mesentery	(4)	(2)	(2)	(1)	(1)
Schwannoma Malignant		1 (50%)			
Oral Mucosa	(0)	(1)	(0)	(0)	(0)
Squamous Cell Papilloma		1 (100%)			
Pancreas	(50)	(49)	(50)	(50)	(49)
Acinus, Adenoma	4 (8%)	4 (8%)	4 (8%)	3 (6%)	7 (14%)
Acinus, Adenoma, Multiple	6 (12%)	3 (6%)	4 (8%)	33 (66%)	15 (31%)
Acinus, Carcinoma				3 (6%)	1 (2%)

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

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Lab: BAT

Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male
Salivary Glands	(50)	(48)	(50)	(50)	(49)
Sarcoma			2 (4%)		
Schwannoma Malignant	2 (4%)			1 (2%)	
Schwannoma Malignant, Metastatic, Skin	1 (2%)				
Stomach, Forestomach	(50)	(49)	(50)	(50)	(49)
Squamous Cell Papilloma				1 (2%)	
Stomach, Glandular	(50)	(49)	(50)	(50)	(49)
Gist					1 (2%)
Leiomyosarcoma				1 (2%)	
Tongue	(0)	(0)	(2)	(0)	(0)
Squamous Cell Papilloma			1 (50%)		

## CARDIOVASCULAR SYSTEM

Blood Vessel	(50)	(49)	(50)	(50)	(49)
Heart	(50)	(49)	(50)	(50)	(49)
Fibrous Histiocytoma					1 (2%)
Schwannoma Malignant	1 (2%)		2 (4%)		
Endocardium, Schwannoma Malignant	1 (2%)			1 (2%)	
Valve, Hemangioma			1 (2%)		

## ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(49)	(50)	(50)	(49)
Adenoma				2 (4%)	
Adrenal Medulla	(50)	(49)	(50)	(50)	(49)
Pheochromocytoma Benign	4 (8%)	4 (8%)	5 (10%)		
Pheochromocytoma Complex	1 (2%)				1 (2%)
Pheochromocytoma Malignant		1 (2%)	1 (2%)		3 (6%)
Bilateral, Pheochromocytoma Benign	1 (2%)				
Islets, Pancreatic	(50)	(49)	(50)	(50)	(49)
Adenoma	2 (4%)	2 (4%)	7 (14%)	4 (8%)	2 (4%)
Parathyroid Gland	(42)	(32)	(31)	(43)	(38)
Pituitary Gland	(50)	(49)	(50)	(50)	(49)
Schwannoma Malignant, Metastatic, Skin	1 (2%)				

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Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male
Pars Distalis, Adenoma	4 (8%)	6 (12%)	7 (14%)	4 (8%)	5 (10%)
Thyroid Gland	(50)	(49)	(50)	(50)	(50)
Sarcoma, Metastatic, Salivary Glands			1 (2%)		
Bilateral, C-cell, Adenoma	1 (2%)	1 (2%)	2 (4%)	1 (2%)	
C-cell, Adenoma	9 (18%)	14 (29%)	14 (28%)	9 (18%)	4 (8%)
C-cell, Adenoma, Multiple		1 (2%)			
C-cell, Carcinoma	1 (2%)	2 (4%)	3 (6%)		
Follicular Cell, Adenoma					2 (4%)

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Epididymis	(49)	(49)	(50)	(50)	(49)
Preputial Gland	(50)	(49)	(50)	(50)	(48)
Carcinoma					1 (2%)
Fibrosarcoma, Metastatic, Skin		1 (2%)			
Squamous Cell Carcinoma				1 (2%)	
Squamous Cell Papilloma		1 (2%)			
Duct, Squamous Cell Papilloma	1 (2%)				
Prostate	(50)	(49)	(50)	(50)	(49)
Seminal Vesicle	(50)	(49)	(50)	(50)	(49)
Testis	(49)	(49)	(50)	(50)	(49)
Interstitial Cell, Adenoma	3 (6%)	1 (2%)	2 (4%)	4 (8%)	5 (10%)
Interstitial Cell, Adenoma, Multiple			1 (2%)	1 (2%)	

## HEMATOPOIETIC SYSTEM

Bone Marrow	(50)	(49)	(50)	(50)	(50)
Lymph Node	(2)	(1)	(6)	(1)	(1)
Lymph Node, Mandibular	(50)	(47)	(49)	(50)	(49)
Schwannoma Malignant, Metastatic, Skin	1 (2%)				

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Lab: BAT

Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male
Lymph Node, Mesenteric Hemangiosarcoma	(49)	(49)	(49) 1 (2%)	(50)	(48)
Spleen Hemangiosarcoma	(50)	(49)	(50) 1 (2%)	(50)	(49)
Thymus	(47)	(46)	(49)	(47)	(47)

## INTEGUMENTARY SYSTEM

Mammary Gland	(49)	(48)	(50)	(50)	(48)
Adenocarcinoma	1 (2%)	1 (2%)			
Fibroadenoma	2 (4%)	1 (2%)	2 (4%)	1 (2%)	1 (2%)
Skin	(50)	(48)	(50)	(50)	(50)
Keratoacanthoma	2 (4%)	3 (6%)		1 (2%)	1 (2%)
Schwannoma Malignant	2 (4%)				2 (4%)
Squamous Cell Carcinoma	1 (2%)			1 (2%)	
Squamous Cell Papilloma			1 (2%)		
Trichoepithelioma	1 (2%)				
Pinna, Neural Crest Tumor					1 (2%)
Subcutaneous Tissue, Fibrolipoma		1 (2%)			
Subcutaneous Tissue, Fibroma	3 (6%)	6 (13%)	3 (6%)	4 (8%)	
Subcutaneous Tissue, Fibroma, Multiple		1 (2%)	1 (2%)		
Subcutaneous Tissue, Fibrosarcoma		2 (4%)	1 (2%)		
Subcutaneous Tissue, Lipoma			1 (2%)		
Subcutaneous Tissue, Liposarcoma	1 (2%)				

## MUSCULOSKELETAL SYSTEM

Bone	(50)	(49)	(50)	(50)	(50)
Skeletal Muscle	(2)	(0)	(0)	(1)	(0)
Leiomyosarcoma, Metastatic, Stomach, Glandular				1 (100%)	
Sarcoma	1 (50%)				

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Lab: BAT

Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male
<b>NERVOUS SYSTEM</b>					
Brain	(50)	(49)	(50)	(50)	(49)
Glioma Malignant		1 (2%)	1 (2%)		
Glioma Malignant, Mixed Cell		1 (2%)			
Oligodendroglioma Malignant			1 (2%)		
Meninges, Schwannoma Malignant, Metastatic, Salivary Glands	1 (2%)				
Nerve Trigeminal	(0)	(0)	(0)	(1)	(0)
Peripheral Nerve	(3)	(0)	(1)	(1)	(0)
Spinal Cord	(1)	(0)	(0)	(1)	(0)
<b>RESPIRATORY SYSTEM</b>					
Lung	(50)	(49)	(50)	(50)	(49)
Adenocarcinoma, Metastatic, Mammary Gland	1 (2%)				
Carcinoma, Metastatic, Pancreas				1 (2%)	
Pheochromocytoma Malignant, Metastatic, Adrenal Medulla			1 (2%)		
Sarcoma, Metastatic, Salivary Glands			1 (2%)		
Nose	(50)	(49)	(50)	(50)	(50)
Sinus, Schwannoma Malignant, Metastatic, Skin	1 (2%)				
Trachea	(50)	(49)	(50)	(50)	(50)
<b>SPECIAL SENSES SYSTEM</b>					
Eye	(50)	(49)	(50)	(50)	(49)
Schwannoma Malignant, Metastatic, Skin	1 (2%)				
Optic Nerve, Schwannoma Malignant, Metastatic, Salivary Glands	1 (2%)				
Harderian Gland	(50)	(49)	(50)	(50)	(50)
Schwannoma Malignant, Metastatic, Salivary Glands	1 (2%)				
Schwannoma Malignant, Metastatic, Skin	1 (2%)				
Zymbal's Gland	(1)	(0)	(0)	(0)	(0)

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Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male
Carcinoma	1 (100%)				
<b>URINARY SYSTEM</b>					
Kidney	(50)	(49)	(50)	(50)	(49)
Lipoma			1 (2%)		
Renal Tubule, Adenoma	1 (2%)			1 (2%)	1 (2%)
Renal Tubule, Adenoma, Amphophilic Vacuolar		1 (2%)			
Renal Tubule, Carcinoma					1 (2%)
Urinary Bladder	(50)	(49)	(50)	(50)	(48)
<b>SYSTEMIC LESIONS</b>					
Multiple Organ	*(50)	*(49)	*(50)	*(50)	*(50)
Histiocytic Sarcoma		2 (4%)			
Leukemia Granulocytic			1 (2%)		
Leukemia Mononuclear		2 (4%)	5 (10%)		
Lymphoma Malignant			3 (6%)		1 (2%)
Mesothelioma Malignant	1 (2%)		2 (4%)		

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

\* Number of animals with any tissue examined microscopically

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

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Harlan Sprague Dawley RATS MALE	0 ppm Male	300 ppm Male	1000 ppm Male	3000 ppm Male	10000 ppm Male
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**Tumor Summary for Males**

Total Animals with Primary Neoplasms (b)	36	38	42	44	35
Total Primary Neoplasms	61	66	82	81	69
Total Animals with Benign Neoplasms	28	31	32	44	30
Total Benign Neoplasms	44	52	57	72	52
Total Animals with Malignant Neoplasms	15	14	16	8	15
Total Malignant Neoplasms	17	14	25	9	16
Total Animals with Metastatic Neoplasms	3	1	2	2	
Total Metastatic Neoplasms	10	2	3	3	
Total Animals with Malignant Neoplasms Uncertain Primary Site					
Total Animals with Neoplasms Uncertain- Benign or Malignant					1
Total Uncertain Neoplasms					1

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

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b - Primary tumors: all tumors except metastatic tumors

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Harlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
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**Disposition Summary**

<b>Animals Initially In Study</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>
<b>Early Deaths</b>					
<b>Moribund Sacrifice</b>	<b>13</b>	<b>9</b>	<b>9</b>	<b>7</b>	<b>12</b>
<b>Natural Death</b>	<b>5</b>	<b>9</b>	<b>7</b>	<b>9</b>	<b>11</b>
<b>Survivors</b>					
<b>Moribund Sacrifice</b>				<b>1</b>	
<b>Natural Death</b>	<b>1</b>			<b>1</b>	
<b>Terminal Sacrifice</b>	<b>31</b>	<b>32</b>	<b>34</b>	<b>32</b>	<b>27</b>
<b>Animals Examined Microscopically</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>

## ALIMENTARY SYSTEM

Esophagus	(49)	(50)	(50)	(49)	(49)
Intestine Large, Cecum	(50)	(50)	(49)	(50)	(48)
Intestine Large, Colon	(50)	(50)	(50)	(50)	(48)
Adenocarcinoma, Metastatic, Uterus					1 (2%)
Intestine Large, Rectum	(50)	(50)	(50)	(50)	(48)
Fibrosarcoma, Metastatic, Skin	1 (2%)				
Intestine Small, Duodenum	(49)	(50)	(50)	(49)	(48)
Intestine Small, Ileum	(50)	(50)	(49)	(49)	(48)
Adenocarcinoma, Metastatic, Uterus	1 (2%)			1 (2%)	
Intestine Small, Jejunum	(50)	(50)	(50)	(50)	(48)
Adenocarcinoma		1 (2%)			
Adenocarcinoma, Metastatic, Uterus	1 (2%)				
Liver	(49)	(50)	(50)	(50)	(48)
Adenocarcinoma, Metastatic, Uterus					2 (4%)
Cholangioma	1 (2%)				1 (2%)
Hepatocellular Adenoma	1 (2%)		4 (8%)	9 (18%)	3 (6%)
Hepatocellular Adenoma, Multiple			1 (2%)		2 (4%)
Hepatocellular Carcinoma					7 (15%)
Hepatocellular Carcinoma, Multiple					1 (2%)
Mesentery	(1)	(1)	(1)	(2)	(1)
Adenocarcinoma, Metastatic, Uterus	1 (100%)				1 (100%)
Pancreas	(49)	(50)	(50)	(50)	(48)

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

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Lab: BAT

Harlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
Adenocarcinoma, Metastatic, Uterus	1 (2%)				2 (4%)
Sarcoma, Metastatic, Kidney		1 (2%)			
Acinus, Adenoma				2 (4%)	1 (2%)
Salivary Glands	(49)	(50)	(50)	(46)	(45)
Sarcoma					1 (2%)
Stomach, Forestomach	(50)	(50)	(50)	(50)	(48)
Sarcoma		1 (2%)			1 (2%)
Squamous Cell Carcinoma			1 (2%)		
Squamous Cell Papilloma		1 (2%)			
Stomach, Glandular	(50)	(50)	(50)	(50)	(48)
Adenocarcinoma, Metastatic, Uterus					1 (2%)

## CARDIOVASCULAR SYSTEM

Blood Vessel	(49)	(50)	(50)	(50)	(48)
Heart	(49)	(50)	(50)	(49)	(48)
Endocardium, Schwannoma Malignant			1 (2%)		1 (2%)

## ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(50)	(50)	(50)	(48)
Adenocarcinoma, Metastatic, Uterus					1 (2%)
Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach			1 (2%)		
Adrenal Medulla	(50)	(50)	(50)	(50)	(47)
Ganglioneuroma	1 (2%)				
Pheochromocytoma Benign			3 (6%)	1 (2%)	
Bilateral, Pheochromocytoma Benign			1 (2%)		
Islets, Pancreatic	(49)	(50)	(50)	(50)	(48)
Adenoma	3 (6%)		1 (2%)		
Parathyroid Gland	(42)	(43)	(42)	(37)	(38)
Adenoma		1 (2%)		1 (3%)	
Pituitary Gland	(49)	(50)	(49)	(49)	(49)
Pars Distalis, Adenoma	15 (31%)	9 (18%)	13 (27%)	10 (20%)	1 (2%)
Pars Distalis, Carcinoma	1 (2%)	1 (2%)			

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Harlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
Thyroid Gland	(49)	(50)	(50)	(47)	(48)
Bilateral, C-cell, Adenoma			2 (4%)		
C-cell, Adenoma	8 (16%)	8 (16%)	7 (14%)	8 (17%)	7 (15%)
C-cell, Carcinoma		1 (2%)	1 (2%)		1 (2%)
Follicular Cell, Adenoma				1 (2%)	2 (4%)
<b>GENERAL BODY SYSTEM</b>					
Peritoneum	(0)	(0)	(2)	(0)	(0)
<b>GENITAL SYSTEM</b>					
Clitoral Gland	(50)	(49)	(49)	(50)	(46)
Carcinoma		1 (2%)			
Squamous Cell Carcinoma			1 (2%)		
Squamous Cell Papilloma			1 (2%)		
Ovary	(50)	(50)	(50)	(50)	(48)
Adenocarcinoma, Metastatic, Uterus				1 (2%)	
Cystadenoma				1 (2%)	
Granulosa Cell Tumor Benign	1 (2%)	1 (2%)			
Granulosa Cell Tumor Malignant	1 (2%)				
Schwannoma Malignant		2 (4%)			
Bilateral, Adenocarcinoma, Metastatic, Uterus					2 (4%)
Paraovarian Tissue, Sarcoma, Metastatic, Kidney		1 (2%)			
Oviduct	(0)	(0)	(0)	(1)	(0)
Uterus	(50)	(50)	(50)	(50)	(48)
Deciduoma Benign	1 (2%)				
Polyp Stromal	7 (14%)	4 (8%)	1 (2%)	7 (14%)	8 (17%)
Polyp Stromal, Multiple	1 (2%)	1 (2%)	1 (2%)		
Schwannoma Malignant					1 (2%)
Schwannoma Malignant, Metastatic, Ovary		1 (2%)			
Schwannoma Malignant, Metastatic, Vagina	1 (2%)				
Squamous Cell Carcinoma		1 (2%)			
Squamous Cell Carcinoma, Multiple					1 (2%)

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Harlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
Squamous Cell Papilloma				1 (2%)	
Cervix, Granular Cell Tumor Benign	1 (2%)				
Cervix, Schwannoma Malignant	1 (2%)	2 (4%)			
Endometrium, Adenocarcinoma	3 (6%)		1 (2%)	3 (6%)	6 (13%)
Endometrium, Adenoma		1 (2%)			
Vagina	(49)	(50)	(50)	(50)	(49)
Polyp					1 (2%)
Schwannoma Malignant	1 (2%)				

## HEMATOPOIETIC SYSTEM

Bone Marrow	(50)	(50)	(50)	(50)	(50)
Lymph Node	(0)	(4)	(4)	(2)	(2)
Deep Cervical, Adenocarcinoma, Metastatic, Mammary Gland					1 (50%)
Deep Cervical, Carcinoma, Metastatic, Thyroid Gland			1 (25%)		
Renal, Nephroblastoma, Metastatic, Kidney					1 (50%)
Renal, Sarcoma		1 (25%)			
Renal, Sarcoma, Metastatic, Stomach, Forestomach		1 (25%)			
Lymph Node, Mandibular	(49)	(49)	(50)	(46)	(42)
Lymph Node, Mesenteric	(49)	(50)	(50)	(49)	(47)
Adenocarcinoma, Metastatic, Uterus	1 (2%)				2 (4%)
Spleen	(49)	(50)	(50)	(50)	(47)
Hemangiosarcoma	1 (2%)				
Thymus	(46)	(50)	(48)	(48)	(45)

## INTEGUMENTARY SYSTEM

Mammary Gland	(50)	(50)	(50)	(50)	(47)
Adenocarcinoma	1 (2%)	3 (6%)	4 (8%)	1 (2%)	1 (2%)
Adenocarcinoma, Multiple			1 (2%)		
Adenoma	1 (2%)	2 (4%)	1 (2%)	1 (2%)	
Adenoma, Multiple			1 (2%)		

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

Test Type: CHRONIC

Di(2-ethylhexyl) Phthalate

Time Report Requested: 10:38:57

Route: DOSED FEED

CAS Number: 117-81-7

First Dose M/F: 06/27/11 / 06/28/11

Species/Strain: RATS/HSD

Lab: BAT

Harlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
Fibroadenoma	22 (44%)	16 (32%)	17 (34%)	24 (48%)	10 (21%)
Fibroadenoma, Multiple	6 (12%)	10 (20%)	9 (18%)	3 (6%)	
Skin	(50)	(50)	(50)	(50)	(49)
Schwannoma Malignant	1 (2%)				
Squamous Cell Carcinoma	1 (2%)				
Subcutaneous Tissue, Fibroma		1 (2%)			
Subcutaneous Tissue, Fibrosarcoma	1 (2%)				
Subcutaneous Tissue, Lipoma	1 (2%)				
Subcutaneous Tissue, Sarcoma					1 (2%)

## MUSCULOSKELETAL SYSTEM

Bone	(50)	(50)	(50)	(50)	(50)
Skeletal Muscle	(2)	(1)	(0)	(0)	(2)
Adenocarcinoma, Metastatic, Uterus					2 (100%)
Hemangioma	1 (50%)				
Sarcoma, Metastatic, Kidney		1 (100%)			

## NERVOUS SYSTEM

Brain	(50)	(50)	(50)	(50)	(49)
Granular Cell Tumor Benign	1 (2%)				
Meningioma Malignant	1 (2%)				
Nerve Trigeminal	(0)	(1)	(0)	(0)	(0)
Peripheral Nerve	(0)	(1)	(1)	(0)	(0)
Trigeminal, Schwannoma Malignant			1 (100%)		
Spinal Cord	(0)	(1)	(0)	(0)	(0)
Nerve, Schwannoma Malignant		1 (100%)			

## RESPIRATORY SYSTEM

Lung	(49)	(50)	(50)	(49)	(48)
Adenocarcinoma, Metastatic, Mammary Gland			2 (4%)		1 (2%)
Adenocarcinoma, Metastatic, Uterus				1 (2%)	1 (2%)

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

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Species/Strain: RATS/HSD

Lab: BAT

Harlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
Carcinoma, Metastatic, Lacrimal Gland	1 (2%)				
Carcinoma, Metastatic, Pituitary Gland	1 (2%)				
Carcinoma, Metastatic, Thyroid Gland			1 (2%)		
Cystic Keratinizing Epithelioma			1 (2%)		
Fibrosarcoma, Metastatic, Skin	1 (2%)				
Hepatocellular Carcinoma, Metastatic, Liver					1 (2%)
Sarcoma, Metastatic, Kidney		1 (2%)			
Nose	(50)	(50)	(50)	(50)	(50)
Carcinoma, Metastatic, Lacrimal Gland	1 (2%)				
Turbinate, Chondroma				1 (2%)	
Trachea	(49)	(50)	(50)	(49)	(49)

## SPECIAL SENSES SYSTEM

Eye	(50)	(50)	(50)	(50)	(49)
Meningioma Malignant, Metastatic, Brain	1 (2%)				
Harderian Gland	(50)	(50)	(50)	(50)	(49)
Meningioma Malignant, Metastatic, Brain	1 (2%)				
Lacrimal Gland	(1)	(0)	(0)	(0)	(0)
Carcinoma	1 (100%)				

## URINARY SYSTEM

Kidney	(50)	(50)	(50)	(50)	(48)
Lipoma		1 (2%)			
Nephroblastoma					1 (2%)
Sarcoma		1 (2%)			
Squamous Cell Carcinoma, Metastatic, Stomach, Forestomach			1 (2%)		
Urethra	(0)	(0)	(0)	(0)	(1)
Urinary Bladder	(50)	(50)	(50)	(48)	(48)
Adenocarcinoma, Metastatic, Uterus					1 (2%)

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

\* Number of animals with any tissue examined microscopically

Experiment Number: 10188 - 02

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

Date Report Requested: 08/13/2019

Test Type: CHRONIC

Di(2-ethylhexyl) Phthalate

Time Report Requested: 10:38:57

Route: DOSED FEED

CAS Number: 117-81-7

First Dose M/F: 06/27/11 / 06/28/11

Species/Strain: RATS/HSD

Lab: BAT

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Harlan Sprague Dawley RATS FEMALE

0 ppm Female

300 ppm Female

1000 ppm Female

3000 ppm Female

10000 ppm Female

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SYSTEMIC LESIONS

Multiple Organ  
Leukemia Mononuclear

\*(50)  
1 (2%)

\*(50)  
1 (2%)

\*(50)  
1 (2%)

\*(50)  
1 (2%)

\*(50)

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

\* Number of animals with any tissue examined microscopically

Experiment Number: 10188 - 02

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

Date Report Requested: 08/13/2019

Test Type: CHRONIC

Di(2-ethylhexyl) Phthalate

Time Report Requested: 10:38:57

Route: DOSED FEED

CAS Number: 117-81-7

First Dose M/F: 06/27/11 / 06/28/11

Species/Strain: RATS/HSD

Lab: BAT

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Harlan Sprague Dawley RATS FEMALE	0 ppm Female	300 ppm Female	1000 ppm Female	3000 ppm Female	10000 ppm Female
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**Tumor Summary for Females**

Total Animals with Primary Neoplasms (b)	44	42	46	42	35
Total Primary Neoplasms	87	73	76	75	59
Total Animals with Benign Neoplasms	41	35	40	40	25
Total Benign Neoplasms	72	56	64	70	36
Total Animals with Malignant Neoplasms	14	17	12	5	17
Total Malignant Neoplasms	15	17	12	5	23
Total Animals with Metastatic Neoplasms	5	3	4	1	5
Total Metastatic Neoplasms	13	6	6	3	20
Total Animals with Malignant Neoplasms Uncertain Primary Site					
Total Animals with Neoplasms Uncertain- Benign or Malignant					
Total Uncertain Neoplasms					

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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