

Experiment Number: 20006 - 03

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**

Date Report Requested: 04/16/2013

Test Type: CHRONIC

Indole-3-carbinol

Time Report Requested: 09:53:55

Route: GAVAGE

CAS Number: 700-06-1

First Dose M/F: 03/14/07 / 03/15/07

Species/Strain: RATS/HSD

Lab: BAT

F1_HSD

NTP Study Number: C20006B
Lock Date: 06/21/2010
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 3.0.1.1_001
PWG Approval Date: NONE

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Species/Strain: RATS/HSD

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Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg
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Disposition Summary

Animals Initially In Study	50	50	50	50
Early Deaths				
Dosing Accident				1
Moribund Sacrifice	14	23	15	20
Natural Death	16	14	18	17
Survivors				
Terminal Sacrifice	20	13	17	12
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(50)	(50)	(50)	(50)
Inflammation		1 [2.0]		
Epithelium, Hyperplasia		1 [1.0]		
Intestine Large, Cecum	(50)	(50)	(50)	(50)
Hyperplasia, Lymphoid		1 [3.0]		
Necrosis	1 [3.0]	1 [4.0]		
Intestine Large, Colon	(50)	(50)	(50)	(50)
Erosion	1 [3.0]			
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Fibrosis				1 [1.0]
Intestine Small, Duodenum	(43)	(48)	(47)	(48)
Lymphatic, Ectasia			15 [1.5]	14 [1.4]
Intestine Small, Ileum	(35)	(43)	(42)	(38)
Intestine Small, Jejunum	(40)	(39)	(40)	(42)
Lymphatic, Ectasia		2 [1.0]	27 [1.7]	41 [2.0]
Liver	(50)	(50)	(50)	(50)
Angiectasis	1 [3.0]			
Basophilic Focus	3		3	1
Cholangiofibrosis		1 [2.0]	3 [2.7]	1 [2.0]
Clear Cell Focus	14	13	18	9
Degeneration, Cystic			1 [3.0]	
Eosinophilic Focus	10	12	10	6
Hepatodiaphragmatic Nodule	2		1	1

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

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

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Lab: BAT

Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg
Mixed Cell Focus	4	2	1	2
Necrosis	3 [2.3]	3 [1.3]	5 [2.0]	7 [2.3]
Artery, Inflammation, Chronic Active		1 [1.0]		
Bile Duct, Cyst			1 [2.0]	5 [2.4]
Bile Duct, Cyst, Multiple			1 [2.0]	
Bile Duct, Fibrosis	2 [2.0]		1 [3.0]	1 [1.0]
Bile Duct, Hyperplasia	7 [1.1]	4 [1.0]	3 [1.7]	3 [1.0]
Oval Cell, Hyperplasia				1 [1.0]
Periportal, Inflammation, Chronic Active	1 [2.0]			
Mesentery	(2)	(2)	(1)	(0)
Artery, Inflammation, Chronic Active	1 [4.0]			
Artery, Mineralization		1 [2.0]		
Fat, Necrosis	1 [3.0]			
Oral Mucosa	(50)	(50)	(50)	(50)
Foreign Body		1		
Hyperplasia, Squamous		1 [2.0]	2 [2.5]	1 [3.0]
Sebaceous Gland, Ectopic Tissue				1
Pancreas	(50)	(50)	(50)	(49)
Angiectasis				1 [1.0]
Thrombosis		1 [3.0]		
Acinus, Atrophy	1 [1.0]	1 [1.0]		2 [1.0]
Acinus, Hyperplasia	16 [1.4]	10 [1.3]	14 [1.8]	10 [2.2]
Artery, Inflammation, Chronic Active	22 [2.2]	32 [1.8]	27 [1.9]	21 [2.0]
Salivary Glands	(50)	(50)	(49)	(50)
Metaplasia		1 [2.0]		2 [1.0]
Stomach, Forestomach	(50)	(50)	(50)	(50)
Erosion			1 [1.0]	
Hyperplasia	19 [1.7]	19 [1.7]	19 [2.3]	22 [1.8]
Inflammation	2 [2.0]		4 [1.3]	1 [1.0]
Necrosis	1 [4.0]			
Ulcer	2 [1.5]	1 [3.0]	1 [3.0]	1 [1.0]
Stomach, Glandular	(50)	(50)	(50)	(50)
Epithelium, Amyloid Deposition			1 [3.0]	
Epithelium, Hyperplasia	2 [1.0]	5 [2.0]	7 [2.0]	3 [2.0]
Epithelium, Inflammation		1 [3.0]		
Epithelium, Inflammation, Chronic Active	3 [1.0]	4 [2.0]	2 [1.5]	1 [2.0]

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b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

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Lab: BAT

Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg
Epithelium, Mineralization	7 [2.4]	12 [2.5]	6 [2.3]	10 [1.8]
Epithelium, Necrosis	1 [1.0]			
Epithelium, Ulcer		1 [1.0]		
Epithelium, Muscularis, Hyperplasia, Focal		1 [2.0]		
Tongue	(0)	(0)	(0)	(1)
Tooth	(1)	(0)	(1)	(0)
Malformation			1 [3.0]	
Necrosis	1 [3.0]			

CARDIOVASCULAR SYSTEM

Blood Vessel	(50)	(50)	(50)	(50)
Dilatation	1 [3.0]			
Inflammation, Chronic Active	30 [2.0]	38 [2.1]	30 [2.3]	29 [1.9]
Mineralization		2 [3.0]	1 [3.0]	1 [3.0]
Thrombosis			1	
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	47 [2.4]	48 [2.6]	49 [2.5]	48 [2.4]
Mineralization	1 [2.0]			1 [3.0]
Atrium, Thrombosis	1 [4.0]	3 [3.3]	3 [3.3]	3 [3.3]
Epicardium, Inflammation	1 [2.0]	1 [3.0]		
Pericardium, Inflammation			1 [3.0]	

ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(49)	(50)	(50)
Atrophy				1 [3.0]
Degeneration, Cystic	4 [2.0]	3 [2.3]	5 [1.8]	4 [2.0]
Degeneration, Fatty	8 [2.0]	13 [1.8]	5 [1.6]	16 [1.8]
Hematopoietic Cell Proliferation			1 [2.0]	
Hemorrhage			1 [3.0]	
Hyperplasia	14 [2.3]	19 [2.1]	19 [2.1]	6 [2.0]
Necrosis	1 [1.0]			2 [1.5]
Thrombosis		1 [2.0]		
Adrenal Medulla	(50)	(49)	(50)	(50)

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Angiectasis	1 [2.0]			
Degeneration, Fatty		1 [1.0]		
Hyperplasia	18 [2.2]	22 [2.2]	20 [1.9]	19 [1.5]
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia	3 [2.0]	6 [2.0]	1 [2.0]	3 [2.0]
Parathyroid Gland	(43)	(46)	(50)	(47)
Hyperplasia	3 [3.0]	10 [2.2]	13 [2.0]	8 [2.5]
Pituitary Gland	(50)	(49)	(50)	(47)
Pars Distalis, Hyperplasia	17 [2.0]	18 [2.6]	19 [2.0]	12 [1.8]
Thyroid Gland	(50)	(46)	(48)	(47)
Thrombosis	1 [2.0]			
C-cell, Hyperplasia	6 [2.2]	4 [2.0]	4 [2.8]	5 [3.2]
C-cell, Hypertrophy				1 [2.0]
Follicular Cell, Hyperplasia		1 [4.0]		
Follicular Cell, Hypertrophy	21 [1.8]	34 [1.9]	33 [2.1]	36 [2.6]

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Epididymis	(50)	(50)	(50)	(50)
Atrophy	1 [3.0]			
Preputial Gland	(50)	(50)	(49)	(50)
Cyst	7 [2.6]		3 [3.3]	5 [2.8]
Fibrosis	1 [1.0]			
Inflammation	2 [3.0]			1 [3.0]
Prostate	(50)	(50)	(50)	(50)
Atrophy	1 [2.0]	1 [2.0]		
Fibrosis	1 [2.0]	3 [1.7]	2 [2.0]	1 [2.0]
Hyperplasia	3 [2.0]	4 [2.3]	7 [2.7]	3 [1.7]
Inflammation, Acute	1 [1.0]	6 [1.5]		6 [2.2]
Inflammation, Chronic Active				1 [1.0]
Necrosis	1 [3.0]			

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Seminal Vesicle	(49)	(50)	(50)	(50)
Hypoplasia			1 [2.0]	
Inflammation, Acute				2 [4.0]
Testes	(49)	(50)	(50)	(50)
Atrophy	30 [2.1]	37 [2.0]	35 [1.7]	33 [1.6]
Pigmentation, Hemosiderin			1 [1.0]	
Artery, Inflammation, Chronic Active	28 [2.3]	34 [2.1]	33 [2.3]	33 [2.2]
Interstitial Cell, Hyperplasia	1 [1.0]		1 [1.0]	2 [2.5]

HEMATOPOIETIC SYSTEM

Bone Marrow	(50)	(50)	(50)	(50)
Hyperplasia	1 [3.0]	2 [2.0]	4 [2.3]	3 [2.0]
Lymph Node	(4)	(8)	(8)	(6)
Angiectasis				1 [2.0]
Bronchial, Hemorrhage		1 [3.0]	1 [3.0]	
Deep Cervical, Hemorrhage		1 [3.0]		
Deep Cervical, Hyperplasia, Plasma Cell		1 [3.0]		
Deep Cervical, Inflammation		1 [4.0]		
Iliac, Infiltration Cellular, Histiocyte			1 [2.0]	
Lumbar, Hemorrhage			2 [3.0]	
Mediastinal, Ectasia		1 [3.0]	1 [3.0]	
Mediastinal, Hemorrhage	1 [3.0]	2 [2.5]	3 [3.0]	1 [2.0]
Mediastinal, Hyperplasia, Lymphoid		1 [4.0]		
Mediastinal, Infiltration Cellular, Lipocyte				1 [3.0]
Mediastinal, Infiltration Cellular, Histiocyte		1 [3.0]		
Mediastinal, Pigmentation, Hemosiderin				1 [3.0]
Pancreatic, Hemorrhage		1 [2.0]		1 [3.0]
Renal, Ectasia	2 [3.5]			
Renal, Hemorrhage	1 [3.0]	2 [3.0]		
Renal, Pigmentation, Hemosiderin				1 [3.0]
Lymph Node, Mandibular	(50)	(50)	(49)	(50)
Ectasia		1 [3.0]	1 [3.0]	1 [3.0]
Hemorrhage			1 [3.0]	
Hyperplasia, Plasma Cell	1 [2.0]			

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Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Ectasia		1 [3.0]		
Hemorrhage		1 [1.0]		
Hyperplasia, Lymphoid	1 [3.0]			1 [2.0]
Lymphatic, Ectasia			1 [3.0]	5 [1.4]
Spleen	(50)	(50)	(50)	(50)
Atrophy				1 [3.0]
Hematopoietic Cell Proliferation	28 [2.1]	33 [2.2]	28 [2.0]	29 [2.0]
Inflammation	1 [2.0]			
Necrosis			1 [3.0]	
Thymus	(46)	(49)	(49)	(47)
Atrophy	41 [2.2]	41 [2.6]	42 [2.4]	41 [2.5]
Hemorrhage			1 [3.0]	
Epithelial Cell, Hyperplasia	1 [2.0]			
INTEGUMENTARY SYSTEM				
Mammary Gland	(50)	(50)	(50)	(50)
Fibrosis			1 [2.0]	
Inflammation				1 [3.0]
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion	5	3	2	2
Inflammation	3 [2.3]	2 [3.0]		2 [3.5]
Necrosis		2 [3.5]		
Epidermis, Ulcer	1 [3.0]			
Sebaceous Gland, Hyperplasia				1 [3.0]
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Fibrous Osteodystrophy	12 [3.0]	19 [3.0]	13 [3.1]	8 [3.1]
Maxilla, Fracture			1 [2.0]	

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Harlan Sprague Dawley RATS MALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion				1
Gliosis		2 [1.0]		
Necrosis				2 [2.5]
Spinal Cord	(0)	(2)	(1)	(0)
Degeneration		2 [2.5]	1 [2.0]	
RESPIRATORY SYSTEM				
Lung	(49)	(50)	(50)	(50)
Edema			1 [3.0]	1 [2.0]
Fibrosis				1 [2.0]
Foreign Body		1	1	
Hemorrhage			1 [1.0]	1 [1.0]
Hemorrhage, Multifocal	3 [1.3]	3 [1.0]	7 [1.6]	7 [1.9]
Inflammation, Granulomatous			1 [2.0]	
Inflammation, Chronic	17 [1.6]	21 [1.9]	24 [1.8]	23 [1.8]
Mineralization				1 [4.0]
Necrosis	1 [3.0]			
Alveolar Epithelium, Hyperplasia	1 [4.0]		1 [1.0]	1 [1.0]
Alveolus, Infiltration Cellular, Histiocyte	19 [1.2]	22 [1.1]	19 [1.4]	13 [1.2]
Alveolus, Mineralization	1 [3.0]	2 [2.5]	1 [3.0]	1 [2.0]
Nose	(50)	(50)	(50)	(50)
Foreign Body	4	12	11	10
Fungus	1			
Inflammation	1 [2.0]			
Inflammation, Chronic Active	11 [1.5]	15 [1.3]	16 [1.7]	15 [1.5]
Thrombosis		1 [1.0]		
Respiratory Epithelium, Hyperplasia	2 [2.0]	2 [1.0]	4 [1.8]	7 [1.7]
Respiratory Epithelium, Metaplasia, Squamous			2 [1.0]	
Trachea	(50)	(50)	(50)	(50)
Inflammation	1 [2.0]	1 [2.0]	1 [2.0]	

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SPECIAL SENSES SYSTEM

Ear	(0)	(0)	(1)	(0)
External Ear, Hyperplasia, Squamous			1 [3.0]	
Eye	(50)	(50)	(49)	(49)
Cataract				1 [2.0]
Anterior Chamber, Inflammation, Acute	2 [1.0]	1 [3.0]	4 [2.3]	3 [2.0]
Cornea, Inflammation, Acute	20 [2.1]	25 [2.1]	17 [2.3]	21 [1.9]
Retina, Fibrosis				1 [3.0]
Harderian Gland	(50)	(50)	(49)	(50)
Angiectasis				1 [2.0]
Pigmentation, Porphyrin	1 [3.0]			
Lacrimal Gland	(1)	(2)	(4)	(0)
Degeneration	1 [2.0]	2 [3.0]	4 [2.5]	

URINARY SYSTEM

Kidney	(50)	(50)	(50)	(50)
Cyst				1 [2.0]
Metaplasia, Osseous		1 [2.0]		
Nephropathy	50 [3.2]	49 [3.3]	49 [3.4]	50 [3.4]
Renal Tubule, Dilatation			1 [3.0]	
Urinary Bladder	(50)	(50)	(50)	(50)
Hemorrhage				1 [2.0]
Inflammation				1 [1.0]

*** END OF MALE ***

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Disposition Summary

Animals Initially In Study	50	50	50	50
Early Deaths				
Dosing Accident		1		1
Moribund Sacrifice	24	22	23	11
Natural Death	5	8	7	8
Survivors				
Moribund Sacrifice		1	1	
Terminal Sacrifice	21	18	19	30
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(50)	(50)	(50)	(50)
Inflammation		2 [2.0]		
Perforation				1
Intestine Large, Cecum	(50)	(50)	(50)	(48)
Intestine Large, Colon	(50)	(50)	(50)	(48)
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Metaplasia			1 [2.0]	
Intestine Small, Duodenum	(48)	(47)	(48)	(47)
Lymphatic, Ectasia			16 [1.2]	38 [1.5]
Intestine Small, Ileum	(47)	(47)	(48)	(47)
Intestine Small, Jejunum	(47)	(46)	(48)	(48)
Lymphatic, Ectasia			30 [1.7]	47 [2.5]
Liver	(50)	(50)	(50)	(48)
Angiectasis	1 [1.0]		2 [2.0]	3 [1.7]
Basophilic Focus	14	6	11	14
Cholangiofibrosis		1 [1.0]		
Clear Cell Focus	6	7	4	18
Eosinophilic Focus		4	5	6
Hepatodiaphragmatic Nodule			3	2
Inflammation, Chronic				1 [2.0]
Mixed Cell Focus	5	1	5	4
Necrosis	1 [2.0]	2 [3.5]		

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Pigmentation	1 [3.0]			
Thrombosis		1 [2.0]		
Bile Duct, Cyst	2 [2.5]	1 [2.0]	4 [2.5]	4 [2.5]
Bile Duct, Cyst, Multiple	2 [2.5]	1 [2.0]	2 [2.0]	2 [2.5]
Bile Duct, Hyperplasia	2 [1.5]			
Centrilobular, Degeneration		1 [3.0]		
Mesentery	(0)	(2)	(2)	(1)
Artery, Inflammation, Chronic Active		1 [3.0]		
Oral Mucosa	(50)	(50)	(50)	(50)
Hyperplasia, Squamous			1 [1.0]	2 [2.0]
Pancreas	(50)	(49)	(49)	(48)
Acinus, Hyperplasia	1 [2.0]	3 [1.3]		1 [1.0]
Artery, Inflammation, Chronic Active	1 [3.0]	4 [1.5]	3 [2.7]	6 [2.2]
Salivary Glands	(50)	(49)	(48)	(50)
Inflammation	1 [2.0]			
Stomach, Forestomach	(50)	(50)	(50)	(49)
Hyperplasia	2 [2.0]	5 [2.4]	7 [2.1]	3 [2.3]
Inflammation	1 [1.0]			1 [3.0]
Pigmentation, Melanin		1 [2.0]		
Ulcer	1 [2.0]			
Stomach, Glandular	(50)	(49)	(50)	(49)
Erosion			1 [3.0]	
Ulcer	1 [2.0]			
Epithelium, Hyperplasia	1 [2.0]		1 [2.0]	
Epithelium, Mineralization			1 [1.0]	
Tongue	(1)	(1)	(0)	(1)
Cyst				1 [3.0]
Erosion	1 [3.0]			
Inflammation		1 [3.0]		
Tooth	(0)	(1)	(0)	(0)

CARDIOVASCULAR SYSTEM

Blood Vessel	(50)	(50)	(50)	(50)
Degeneration, Focal			1 [2.0]	

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

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Test Type: CHRONIC

Indole-3-carbinol

Time Report Requested: 09:53:55

Route: GAVAGE

CAS Number: 700-06-1

First Dose M/F: 03/14/07 / 03/15/07

Species/Strain: RATS/HSD

Lab: BAT

Harlan Sprague Dawley RATS FEMALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg
Inflammation, Chronic Active	1 [3.0]	3 [1.3]	4 [2.5]	7 [1.9]
Thrombosis			1 [3.0]	
Heart	(50)	(50)	(50)	(49)
Cardiomyopathy	24 [1.2]	24 [1.7]	24 [1.8]	24 [1.4]
Atrium, Thrombosis		1 [4.0]		
Epicardium, Inflammation	1 [2.0]	3 [2.3]		1 [3.0]
Pericardium, Inflammation			2 [2.5]	

ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(50)	(50)	(48)
Degeneration, Cystic	16 [2.3]	12 [2.1]	11 [2.4]	15 [2.3]
Degeneration, Fatty	5 [2.4]	3 [2.0]		1 [2.0]
Hyperplasia	18 [2.3]	11 [2.0]	18 [1.9]	15 [1.9]
Hypertrophy	1 [1.0]			
Inflammation		1 [1.0]		1 [1.0]
Necrosis			1 [2.0]	1 [3.0]
Thrombosis		1 [2.0]	1 [3.0]	
Bilateral, Degeneration, Cystic	1 [4.0]			
Adrenal Medulla	(50)	(50)	(50)	(48)
Hyperplasia	15 [1.1]	13 [1.8]	11 [1.9]	12 [1.7]
Islets, Pancreatic	(50)	(50)	(50)	(50)
Parathyroid Gland	(47)	(49)	(46)	(49)
Hyperplasia		2 [1.0]		
Pituitary Gland	(50)	(50)	(50)	(49)
Pars Distalis, Hyperplasia	19 [2.5]	14 [2.1]	18 [3.3]	24 [2.0]
Thyroid Gland	(49)	(49)	(48)	(47)
C-cell, Hyperplasia	7 [2.0]	5 [2.0]	6 [2.3]	5 [2.6]
Follicular Cell, Hyperplasia	1 [2.0]		1 [2.0]	1 [3.0]
Follicular Cell, Hypertrophy	27 [1.6]	23 [1.7]	24 [1.7]	30 [2.0]

GENERAL BODY SYSTEM

None

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GENITAL SYSTEM

Clitoral Gland	(50)	(50)	(50)	(50)
Cyst	5 [2.8]	2 [2.5]	3 [3.0]	4 [3.0]
Inflammation	1 [1.0]			2 [3.0]
Ovary	(50)	(50)	(50)	(49)
Angiectasis				1 [3.0]
Atrophy	40 [2.0]	23 [2.0]	37 [2.0]	30 [1.9]
Cyst	17 [2.0]	13 [2.4]	16 [2.5]	16 [2.3]
Inflammation, Acute			1 [3.0]	1 [2.0]
Inflammation, Chronic				1 [2.0]
Inflammation, Chronic Active	1 [2.0]	1 [3.0]		1 [1.0]
Necrosis, Fibrinoid			1 [4.0]	
Uterus	(50)	(50)	(50)	(50)
Cyst			2 [2.5]	
Dilatation	9 [2.6]	9 [3.4]	7 [3.6]	5 [2.8]
Inflammation, Histiocytic, Focal	1 [1.0]			
Inflammation, Acute	5 [1.2]	12 [2.1]	6 [1.8]	9 [1.8]
Thrombosis			1 [2.0]	1 [3.0]
Endometrium, Hyperplasia, Cystic	29 [1.8]	28 [1.6]	29 [2.0]	21 [1.9]
Endometrium, Metaplasia, Squamous	12 [1.9]	18 [2.2]	20 [2.1]	11 [1.8]
Vagina	(2)	(1)	(0)	(2)

HEMATOPOIETIC SYSTEM

Bone Marrow	(50)	(50)	(50)	(50)
Atrophy		1 [3.0]	1 [2.0]	
Hyperplasia	21 [2.4]	20 [2.0]	23 [2.2]	17 [1.9]
Lymph Node	(7)	(6)	(4)	(3)
Axillary, Hyperplasia, Lymphoid				1 [3.0]
Iliac, Hyperplasia, Lymphoid		1 [2.0]		
Iliac, Infiltration Cellular, Histiocyte				1 [3.0]
Inguinal, Hemorrhage		1 [3.0]		
Inguinal, Hyperplasia, Lymphoid	1 [3.0]		1 [2.0]	

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Harlan Sprague Dawley RATS FEMALE	0 mg/kg	75 mg/kg	150 mg/kg	300 mg/kg
Lumbar, Hemorrhage	2 [3.0]	1 [3.0]		
Lumbar, Hyperplasia, Lymphoid	1 [3.0]	1 [3.0]		
Lumbar, Infiltration Cellular, Histiocyte		1 [2.0]	1 [3.0]	
Mediastinal, Ectasia			1 [3.0]	
Mediastinal, Hemorrhage	2 [3.5]		1 [3.0]	
Mediastinal, Infiltration Cellular, Histiocyte	1 [2.0]			
Lymph Node, Mandibular	(50)	(49)	(49)	(50)
Lymph Node, Mesenteric	(50)	(50)	(50)	(48)
Hemorrhage				1 [3.0]
Pigmentation, Hemosiderin	1 [2.0]			
Lymphatic, Ectasia			1 [1.0]	15 [1.7]
Spleen	(50)	(50)	(50)	(48)
Hematopoietic Cell Proliferation	36 [2.5]	32 [2.4]	40 [2.3]	33 [2.2]
Thymus	(47)	(50)	(49)	(50)
Atrophy	38 [2.2]	31 [2.3]	34 [2.2]	38 [2.3]
Hemorrhage				1 [2.0]
Inflammation		1 [3.0]	1 [2.0]	
Epithelial Cell, Hyperplasia	1 [3.0]	4 [3.3]	3 [2.0]	

INTEGUMENTARY SYSTEM

Mammary Gland	(50)	(50)	(50)	(50)
Galactocele	1			
Hyperplasia	8 [1.3]	3 [1.0]	7 [1.4]	7 [1.4]
Inflammation	1 [4.0]	1 [3.0]		
Inflammation, Chronic	1 [3.0]			
Duct, Dilatation	1 [3.0]			
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion		1		1 [1.0]
Fibrosis				1 [1.0]

MUSCULOSKELETAL SYSTEM

Bone	(50)	(50)	(50)	(50)
Fibrous Osteodystrophy		1 [3.0]	1 [3.0]	

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Skeletal Muscle Degeneration	(1)	(0)	(1) 1 [1.0]	(1)

NERVOUS SYSTEM

Brain	(50)	(50)	(50)	(50)
Gliosis		1 [2.0]		
Hemorrhage				1 [2.0]
Inflammation		1 [2.0]		
Necrosis	1 [3.0]			1 [2.0]
Meninges, Pigmentation, Lipofuscin		1 [1.0]		
Peripheral Nerve	(0)	(2)	(0)	(0)
Spinal Cord	(0)	(1)	(0)	(0)
Hemorrhage		1 [2.0]		
Necrosis		1 [2.0]		

RESPIRATORY SYSTEM

Lung	(50)	(50)	(50)	(49)
Atelectasis		1		
Foreign Body		2		
Inflammation, Granulomatous	1 [1.0]			
Inflammation, Chronic	34 [2.3]	30 [2.2]	38 [2.3]	35 [2.3]
Alveolar Epithelium, Hyperplasia				1 [1.0]
Alveolar Epithelium, Metaplasia, Squamous				1 [1.0]
Alveolus, Infiltration Cellular, Histiocyte	13 [1.5]	16 [1.5]	11 [1.5]	9 [1.1]
Bronchiole, Hyperplasia		1 [3.0]	1 [1.0]	
Mediastinum, Inflammation		1 [3.0]		
Pleura, Inflammation, Chronic Active		1 [2.0]		
Nose	(49)	(50)	(49)	(50)
Angiectasis			1 [2.0]	
Foreign Body	3	2	3	3
Inflammation, Chronic Active	5 [1.4]	4 [1.8]	5 [1.6]	6 [1.3]
Glands, Olfactory Epithelium, Hyperplasia		1 [1.0]		
Olfactory Epithelium, Atrophy			2 [1.0]	5 [1.6]

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Olfactory Epithelium, Degeneration	1 [1.0]		1 [1.0]	
Respiratory Epithelium, Hyperplasia			3 [2.0]	2 [1.0]
Respiratory Epithelium, Metaplasia, Squamous			1 [1.0]	1 [1.0]
Trachea Epithelium, Necrosis	(50)	(50)	(50)	(50)
		1 [2.0]		

SPECIAL SENSES SYSTEM

Eye	(50)	(50)	(50)	(50)
Cataract	1 [2.0]			
Inflammation		1 [3.0]	1 [3.0]	
Harderian Gland	(50)	(50)	(50)	(50)
Hyperplasia, Focal			1 [1.0]	
Inflammation		1 [2.0]		

URINARY SYSTEM

Kidney	(50)	(50)	(50)	(48)
Nephropathy	45 [1.7]	41 [2.0]	42 [2.2]	43 [2.0]
Pelvis, Inflammation				1 [3.0]
Urinary Bladder	(49)	(50)	(50)	(50)
Hyperplasia			1 [3.0]	

*** END OF REPORT ***

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