Final 2 - Data Changes through 12-15-17 CDMA Core Rats Only

NTP Study Number:	C20105B
Lock Date:	12/29/2015
Cage Range:	ALL
Date Range:	ALL
Reasons For Removal:	25022 ACCK 25021 TSAC 25020 NATD 25019 MSAC
Removal Date Range:	ALL
Treatment Groups:	Include ALL
Study Gender:	Both
TDMSE Version:	3.0.2.3_002
PWG Approval Date:	NONE

Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Disposition Summary				
Animals Initially In Study	**105**	**105**	**105**	**105**
Early Deaths				
Accidentally Killed	**1**			
Moribund Sacrifice	**44**	**24**	**13**	**6**
Natural Death	**20**	**23**	**21**	**41**
Survivors				
Natural Death			**1**	
Terminal Sacrifice	**25**	**43**	**55**	**43**
Animals Examined Microscopically	**90**	**90**	**90**	**90**
ALIMENTARY SYSTEM				
Esophagus	(90)	(90)	(90)	(90)
Dilation	2 (2%)			
Hyperplasia	1 (1%)			
Intestine Large, Cecum	(75)	(76)	(74)	(68)
Edema	11 (15%)			
Erosion	10 (13%)	1 (1%)	1 (1%)	1 (1%)
Hemorrhage		1 (1%)		
Inflammation, Acute	10 (13%)	1 (1%)		1 (1%)
Inflammation, Chronic Active	1 (1%)	1 (1%)		
Necrosis			1 (1%)	
Ulcer	6 (8%)			
Artery, Inflammation, Chronic Active	20 (27%)	8 (11%)	7 (9%)	2 (3%)
Artery, Mineral	1 (1%)			
Artery, Thrombus			1 (1%)	
Epithelium, Regeneration	14 (19%)	1 (1%)		1 (1%)
Intestine Large, Colon	(81)	(83)	(82)	(76)
Cyst		1 (1%)		
Erosion	1 (1%)	1 (1%)		
Inflammation, Acute	1 (1%)			
Ulcer	1 (1%)			
Artery, Inflammation, Chronic Active	12 (15%)	4 (5%)	5 (6%)	1 (1%)
Artery, Mineral	2 (2%)			

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

Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Epithelium, Regeneration	5 (6%)			
Intestine Large, Rectum	(83)	(81)	(80)	(76)
Edema	1 (1%)			
Erosion	1 (1%)			
Hyperplasia, Lymphocyte	1 (1%)			
Inflammation, Acute	2 (2%)			
Inflammation, Chronic Active		1 (1%)		
Artery, Inflammation, Chronic Active	4 (5%)	1 (1%)	1 (1%)	1 (1%)
Epithelium, Regeneration	3 (4%)			
Intestine Small, Duodenum	(81)	(84)	(83)	(66)
Dilation		1 (1%)		
Ectopic Tissue		1 (1%)		
Erosion	1 (1%)			
Ulcer	1 (1%)	1 (1%)		
Artery, Inflammation, Chronic Active			3 (4%)	
Intestine Small, Ileum	(78)	(76)	(77)	(63)
Congestion		1 (1%)		
Hemorrhage			1 (1%)	
Inflammation, Acute		1 (1%)		
Artery, Inflammation, Chronic Active	2 (3%)		1 (1%)	
Epithelium, Regeneration	1 (1%)			
Intestine Small, Jejunum	(73)	(73)	(75)	(62)
Artery, Inflammation, Chronic Active			1 (1%)	
Liver	(90)	(90)	(89)	(88)
Angiectasis	1 (1%)	1 (1%)		1 (1%)
Basophilic Focus	1 (1%)		2 (2%)	
Clear Cell Focus	8 (9%)	4 (4%)	5 (6%)	5 (6%)
Eosinophilic Focus	12 (13%)	5 (6%)	11 (12%)	4 (5%)
Extramedullary Hematopoiesis	5 (6%)	4 (4%)	3 (3%)	1 (1%)
Hepatodiaphragmatic Nodule	1 (1%)	1 (1%)		1 (1%)
Infiltration Cellular, Mixed Cell	3 (3%)	1 (1%)	3 (3%)	2 (2%)
Mixed Cell Focus	32 (36%)	51 (57%)	47 (53%)	37 (42%)
Artery, Inflammation, Chronic Active	2 (2%)	1 (1%)		
Artery, Mineral	1 (1%)	1 (1%)		
Bile Duct, Cyst	3 (3%)	5 (6%)	2 (2%)	1 (1%)
Bile Duct, Fibrosis				1 (1%)

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Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Bile Duct, Hyperplasia	41 (46%)	33 (37%)	26 (29%)	14 (16%)
Hepatocyte, Degeneration	1 (1%)		1 (1%)	1 (1%)
Hepatocyte, Necrosis	5 (6%)	6 (7%)	6 (7%)	6 (7%)
Hepatocyte, Vacuolation, Cytoplasmic	6 (7%)	6 (7%)	7 (8%)	7 (8%)
Kupffer Cell, Pigment	1 (1%)			
Periductal, Cholangiofibrosis	2 (2%)	2 (2%)	2 (2%)	
Mesentery	(39)	(19)	(17)	(6)
Fibrosis		1 (5%)		
Hemorrhage	1 (3%)			1 (17%)
Inflammation, Chronic	2 (5%)			
Necrosis	2 (5%)	1 (5%)	1 (6%)	1 (17%)
Neovascularization	1 (3%)	2 (11%)	3 (18%)	
Artery, Inflammation, Chronic Active	32 (82%)	16 (84%)	13 (76%)	3 (50%)
Artery, Mineral	21 (54%)	5 (26%)	2 (12%)	
Vein, Degeneration	1 (3%)			
Vein, Inflammation, Chronic Active	1 (3%)	2 (11%)	1 (6%)	
Oral Mucosa	(0)	(1)	(1)	(0)
Ulcer		1 (100%)		
Pancreas	(90)	(88)	(87)	(78)
Cyst	1 (1%)			1 (1%)
Inflammation, Chronic Active		1 (1%)		
Thrombus	1 (1%)	1 (1%)		
Acinus, Atrophy	13 (14%)	9 (10%)	10 (11%)	8 (10%)
Acinus, Hyperplasia	63 (70%)	55 (63%)	49 (56%)	28 (36%)
Artery, Inflammation, Chronic Active	48 (53%)	28 (32%)	23 (26%)	5 (6%)
Artery, Mineral	11 (12%)	2 (2%)		
Duct, Crystals			1 (1%)	
Duct, Inflammation, Acute			1 (1%)	
Salivary Glands	(90)	(90)	(90)	(86)
Artery, Inflammation, Chronic Active	11 (12%)	6 (7%)	2 (2%)	1 (1%)
Artery, Mineral	2 (2%)	1 (1%)	1 (1%)	
Duct, Parotid Gland, Dilation	5 (6%)	1 (1%)	1 (1%)	
Duct, Parotid Gland, Inflammation, Acute	1 (1%)	1 (1%)		
Parotid Gland, Atrophy	18 (20%)	15 (17%)	8 (9%)	3 (3%)
Parotid Gland, Inflammation, Acute	2 (2%)	4 (4%)	2 (2%)	
Parotid Gland, Vacuolation, Cytoplasmic	1 (1%)	2 (2%)		

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Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Sublingual Gland, Atrophy			1 (1%)	1 (1%)
Sublingual Gland, Mineral				1 (1%)
Submandibular Gland, Atrophy		2 (2%)		
Stomach, Forestomach	(90)	(90)	(89)	(90)
Cyst		1 (1%)		
Edema	5 (6%)	5 (6%)	1 (1%)	1 (1%)
Erosion		1 (1%)		
Inflammation, Acute	1 (1%)	1 (1%)	1 (1%)	
Inflammation, Chronic				1 (1%)
Inflammation, Chronic Active	7 (8%)	4 (4%)	10 (11%)	1 (1%)
Mineral	1 (1%)	1 (1%)		
Ulcer	6 (7%)	8 (9%)	4 (4%)	1 (1%)
Artery, Inflammation, Chronic Active		1 (1%)		
Epithelium, Hyperplasia	11 (12%)	17 (19%)	11 (12%)	6 (7%)
Epithelium, Hyperplasia, Atypical	1 (1%)			
Epithelium, Hyperplasia, Basal Cell			1 (1%)	1 (1%)
Stomach, Glandular	(86)	(86)	(85)	(78)
Erosion	3 (3%)	2 (2%)	3 (4%)	
Inflammation, Acute	1 (1%)			
Inflammation, Chronic Active	1 (1%)			
Mineral	31 (36%)	9 (10%)	6 (7%)	1 (1%)
Necrosis			3 (4%)	
Artery, Inflammation, Chronic Active	3 (3%)			
Artery, Mineral			1 (1%)	
Epithelium, Hyperplasia, Focal				1 (1%)
CARDIOVASCULAR SYSTEM				
Aorta	(90)	(90)	(90)	(90)
Dilation		5 (6%)	1 (1%)	
Mineral	30 (33%)	8 (9%)	6 (7%)	2 (2%)
Blood Vessel	(1)	(2)	(1)	(0)
Inflammation, Chronic Active			1 (100%)	
Mineral	1 (100%)			
Pulmonary Artery, Mineral		1 (50%)		

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Pulmonary Artery, Necrosis		1 (50%)		
Heart	(90)	(90)	(90)	(90)
Cardiomyopathy	79 (88%)	84 (93%)	83 (92%)	85 (94%)
Congestion	1 (1%)			
Hemorrhage				1 (1%)
Inflammation, Suppurative			1 (1%)	
Thrombus	1 (1%)		3 (3%)	
Artery, Degeneration		1 (1%)		
Artery, Inflammation, Chronic Active			2 (2%)	
Artery, Mineral	20 (22%)	7 (8%)	2 (2%)	1 (1%)
Artery, Pericardium, Inflammation, Chronic Active				1 (1%)
Artery, Pericardium, Pigment		1 (1%)		
Atrium, Dilation	3 (3%)	1 (1%)		4 (4%)
Atrium, Thrombus	1 (1%)	5 (6%)		1 (1%)
Atrium, Myocardium, Hypertrophy	1 (1%)	1 (1%)		1 (1%)
Atrium, Myocardium, Necrosis		1 (1%)		
Atrium Left, Mineral			1 (1%)	
Endocardium, Hyperplasia, Schwann Cell				3 (3%)
Myocardium, Mineral	9 (10%)	2 (2%)	1 (1%)	
Myocardium, Necrosis	1 (1%)	1 (1%)		1 (1%)
Pericardium, Hemorrhage			1 (1%)	
Valve, Inflammation, Chronic Active	1 (1%)			
Ventricle Right, Cardiomyopathy	54 (60%)	45 (50%)	62 (69%)	74 (82%)
Ventricle Right, Dilation			1 (1%)	
ENDOCRINE SYSTEM				
Adrenal Cortex	(90)	(90)	(90)	(89)
Accessory Adrenal Cortical Nodule	6 (7%)	4 (4%)	7 (8%)	7 (8%)
Angiectasis		1 (1%)		
Atrophy		1 (1%)		1 (1%)
Degeneration	3 (3%)	1 (1%)	1 (1%)	2 (2%)
Degeneration, Cystic		3 (3%)		1 (1%)
Extramedullary Hematopoiesis			1 (1%)	

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Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Hyperplasia	47 (52%)	42 (47%)	45 (50%)	44 (49%)
Hypertrophy	35 (39%)	42 (47%)	55 (61%)	44 (49%)
Necrosis	5 (6%)	5 (6%)	1 (1%)	1 (1%)
Pigment				1 (1%)
Thrombus	2 (2%)	2 (2%)	1 (1%)	
Vacuolation, Cytoplasmic	20 (22%)	18 (20%)	21 (23%)	12 (13%)
Adrenal Medulla	(88)	(90)	(90)	(90)
Hyperplasia	42 (48%)	34 (38%)	32 (36%)	21 (23%)
Thrombus	1 (1%)			
Islets, Pancreatic	(90)	(88)	(87)	(79)
Hyperplasia	12 (13%)	15 (17%)	13 (15%)	12 (15%)
Parathyroid Gland	(83)	(83)	(83)	(82)
Fibrosis			3 (4%)	
Hyperplasia	51 (61%)	35 (42%)	32 (39%)	17 (21%)
Hyperplasia, Focal		1 (1%)		
Pituitary Gland	(89)	(90)	(90)	(90)
Craniopharyngeal Duct, Cyst	1 (1%)			1 (1%)
Pars Distalis, Angiectasis				1 (1%)
Pars Distalis, Atrophy				1 (1%)
Pars Distalis, Cyst	5 (6%)	15 (17%)	7 (8%)	6 (7%)
Pars Distalis, Hyperplasia	32 (36%)	32 (36%)	34 (38%)	27 (30%)
Pars Distalis, Necrosis		1 (1%)		
Pars Intermedia, Angiectasis	1 (1%)	1 (1%)		
Pars Intermedia, Cyst	6 (7%)	1 (1%)	5 (6%)	7 (8%)
Pars Intermedia, Hyperplasia	1 (1%)	3 (3%)		2 (2%)
Pars Nervosa, Cyst		1 (1%)		
Thyroid Gland	(89)	(87)	(86)	(85)
C-cell, Hyperplasia	16 (18%)	17 (20%)	17 (20%)	22 (26%)
Follicle, Cyst		2 (2%)		1 (1%)
Follicle, Hyperplasia, Cystic	1 (1%)			
GENERAL BODY SYSTEM				
Tissue NOS	(3)	(1)	(3)	(3)
Abdominal, Fat, Hemorrhage	1 (33%)			

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Fat, Hemorrhage			1 (33%)	
Fat, Necrosis	2 (67%)		1 (33%)	1 (33%)
GENITAL SYSTEM				
Bulbourethral Gland	(1)	(1)	(0)	(0)
Coagulating Gland	(0)	(2)	(3)	(0)
Inflammation, Suppurative			1 (33%)	
Inflammation, Chronic Active		2 (100%)	2 (67%)	
Ductus Deferens	(1)	(0)	(1)	(0)
Granuloma	1 (100%)			
Epididymis	(90)	(90)	(90)	(90)
Exfoliated Germ Cell	51 (57%)	33 (37%)	33 (37%)	17 (19%)
Granuloma Sperm	1 (1%)	1 (1%)		
Hypospermia	28 (31%)	24 (27%)	13 (14%)	13 (14%)
Inflammation, Chronic				1 (1%)
Inflammation, Chronic Active			1 (1%)	
Artery, Inflammation, Chronic Active	2 (2%)	3 (3%)	3 (3%)	3 (3%)
Artery, Thrombus				1 (1%)
Tail, Developmental Malformation		1 (1%)		
Penis	(0)	(4)	(2)	(1)
Concretion		3 (75%)	2 (100%)	1 (100%)
Prolapse		1 (25%)		
Preputial Gland	(88)	(88)	(89)	(89)
Atrophy	1 (1%)	1 (1%)		
Fibrosis			2 (2%)	
Hyperplasia	1 (1%)			
Inflammation, Suppurative		1 (1%)		
Inflammation, Granulomatous	1 (1%)			
Inflammation, Acute	1 (1%)			1 (1%)
Inflammation, Chronic Active	46 (52%)	53 (60%)	46 (52%)	49 (55%)
Metaplasia, Squamous			1 (1%)	
Artery, Inflammation, Chronic Active	1 (1%)			
Duct, Dilation	51 (58%)	54 (61%)	50 (56%)	48 (54%)
Duct, Hyperplasia		1 (1%)		1 (1%)

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Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Prostate	(90)	(90)	(90)	(85)
Decreased Secretory Fluid	4 (4%)	5 (6%)	7 (8%)	3 (4%)
Hemorrhage	1 (1%)		1 (1%)	
Infiltration Cellular, Mononuclear Cell	1 (1%)			1 (1%)
Inflammation, Acute	7 (8%)	9 (10%)	4 (4%)	2 (2%)
Inflammation, Chronic Active	6 (7%)	10 (11%)	10 (11%)	5 (6%)
Artery, Inflammation, Chronic Active	1 (1%)		3 (3%)	
Artery, Thrombus		1 (1%)		
Epithelium, Hyperplasia	5 (6%)	11 (12%)	9 (10%)	15 (18%)
Seminal Vesicle	(90)	(90)	(90)	(90)
Decreased Secretory Fluid	35 (39%)	34 (38%)	18 (20%)	7 (8%)
Developmental Malformation			1 (1%)	
Dilation			1 (1%)	
Hemorrhage	1 (1%)		1 (1%)	
Hyperplasia, Atypical				1 (1%)
Inflammation, Acute	4 (4%)	1 (1%)	3 (3%)	1 (1%)
Inflammation, Chronic Active	1 (1%)	4 (4%)		
Artery, Inflammation, Chronic Active	1 (1%)			
Epithelium, Hyperplasia	1 (1%)			
Lumen, Hemorrhage			1 (1%)	
Testis	(90)	(89)	(90)	(90)
Cyst	1 (1%)			
Edema		2 (2%)		
Inflammation, Chronic Active	2 (2%)			
Pigment	1 (1%)			
Artery, Inflammation, Chronic Active	52 (58%)	37 (42%)	30 (33%)	12 (13%)
Germ Cell, Degeneration	51 (57%)	37 (42%)	31 (34%)	24 (27%)
Germinal Epithelium, Mineral		1 (1%)		
Interstitial Cell, Hyperplasia	1 (1%)	2 (2%)		1 (1%)
Rete Testis, Dilation	1 (1%)			
Seminiferous Tubule, Dilation	1 (1%)	1 (1%)	1 (1%)	
HEMATOPOIETIC SYSTEM				
Bone Marrow	(90)	(90)	(90)	(90)

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Hemorrhage		5 (6%)	3 (3%)	
Hypercellularity	15 (17%)	25 (28%)	18 (20%)	13 (14%)
Hypocellularity			1 (1%)	1 (1%)
Lymph Node	(25)	(23)	(24)	(16)
Bronchial, Erythrophagocytosis		2 (9%)		
Bronchial, Hyperplasia, Lymphocyte		1 (4%)		
Iliac, Erythrophagocytosis	2 (8%)	2 (9%)	1 (4%)	
Iliac, Hyperplasia, Lymphocyte	2 (8%)		2 (8%)	
Iliac, Infiltration Cellular, Histiocyte	2 (8%)	1 (4%)		
Iliac, Pigment			1 (4%)	
Iliac, Proliferation, Plasma Cell	3 (12%)		1 (4%)	
Iliac, Lymphatic Sinus, Ectasia	5 (20%)	3 (13%)	1 (4%)	
Inguinal, Hyperplasia, Lymphocyte			1 (4%)	
Inguinal, Lymphatic Sinus, Ectasia			1 (4%)	
Lumbar, Erythrophagocytosis	2 (8%)	2 (9%)	1 (4%)	1 (6%)
Lumbar, Proliferation, Plasma Cell		1 (4%)		
Lumbar, Lymphatic Sinus, Ectasia		2 (9%)	1 (4%)	2 (13%)
Lymphatic Sinus, Mediastinal, Ectasia	1 (4%)	1 (4%)	1 (4%)	1 (6%)
Lymphatic Sinus, Popliteal, Ectasia		1 (4%)		
Lymphatic Sinus, Renal, Ectasia		4 (17%)	3 (13%)	
Mediastinal, Erythrophagocytosis	6 (24%)	7 (30%)	7 (29%)	3 (19%)
Mediastinal, Extramedullary Hematopoiesis			1 (4%)	
Mediastinal, Hemorrhage	1 (4%)	1 (4%)	1 (4%)	1 (6%)
Mediastinal, Hyperplasia, Lymphocyte			1 (4%)	
Mediastinal, Infiltration Cellular, Histiocyte		1 (4%)	1 (4%)	
Mediastinal, Inflammation, Acute		1 (4%)		
Mediastinal, Pigment		1 (4%)		
Mediastinal, Proliferation, Plasma Cell			1 (4%)	
Pancreatic, Erythrophagocytosis	3 (12%)	1 (4%)	4 (17%)	3 (19%)
Pancreatic, Hemorrhage	1 (4%)			
Pancreatic, Hyperplasia, Lymphocyte	1 (4%)			
Pancreatic, Infiltration Cellular, Mixed Cell				1 (6%)
Renal, Erythrophagocytosis	8 (32%)	6 (26%)	4 (17%)	
Renal, Hyperplasia, Lymphocyte		1 (4%)		
Renal, Infiltration Cellular, Mixed Cell				1 (6%)
Renal, Proliferation, Plasma Cell	2 (8%)			

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Lymph Node, Mandibular	(89)	(90)	(90)	(88)
Congestion		1 (1%)	2 (2%)	
Erythrophagocytosis		3 (3%)	2 (2%)	1 (1%)
Hemorrhage			1 (1%)	
Hyperplasia, Lymphocyte	41 (46%)	50 (56%)	52 (58%)	40 (45%)
Infiltration Cellular, Histiocyte		2 (2%)		1 (1%)
Infiltration Cellular, Polymorphonuclear	2 (2%)			
Necrosis, Lymphocyte		1 (1%)		
Proliferation, Plasma Cell	49 (55%)	61 (68%)	62 (69%)	57 (65%)
Lymphatic Sinus, Ectasia	16 (18%)	24 (27%)	29 (32%)	14 (16%)
Lymph Node, Mesenteric	(90)	(89)	(88)	(88)
Erythrophagocytosis	17 (19%)	5 (6%)	5 (6%)	9 (10%)
Hyperplasia, Lymphocyte	2 (2%)	3 (3%)	3 (3%)	3 (3%)
Infiltration Cellular, Histiocyte	1 (1%)			
Infiltration Cellular, Polymorphonuclear	2 (2%)			1 (1%)
Proliferation, Plasma Cell		1 (1%)		
Lymphatic Sinus, Ectasia		2 (2%)	3 (3%)	1 (1%)
Lymphocyte, Depletion	2 (2%)			
Spleen	(90)	(90)	(90)	(85)
Congestion			1 (1%)	
Developmental Malformation	1 (1%)			
Extramedullary Hematopoiesis	45 (50%)	60 (67%)	56 (62%)	48 (56%)
Hemorrhage		1 (1%)	1 (1%)	
Hyperplasia, Lymphocyte	5 (6%)			
Necrosis			2 (2%)	
Pigment	57 (63%)	54 (60%)	64 (71%)	63 (74%)
Thrombus		1 (1%)		
Arteriole, Mineral	1 (1%)			
Red Pulp, Atrophy	26 (29%)	14 (16%)	12 (13%)	13 (15%)
White Pulp, Atrophy	30 (33%)	11 (12%)	10 (11%)	24 (28%)
Thymus	(88)	(85)	(87)	(82)
Atrophy	79 (90%)	76 (89%)	80 (92%)	65 (79%)
Cyst	10 (11%)	10 (12%)	10 (11%)	17 (21%)
Ectopic Parathyroid Gland	6 (7%)	6 (7%)	7 (8%)	5 (6%)
Ectopic Thyroid	1 (1%)			
Hemorrhage	2 (2%)	2 (2%)	2 (2%)	20 (24%)

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Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Hyperplasia, Epithelial	2 (2%)	2 (2%)	4 (5%)	4 (5%)
Artery, Inflammation, Chronic Active	6 (7%)	3 (4%)	2 (2%)	1 (1%)
INTEGUMENTARY SYSTEM				
Mammary Gland	(82)	(77)	(80)	(80)
Atrophy	1 (1%)	2 (3%)	3 (4%)	
Galactocele	1 (1%)	1 (1%)	2 (3%)	
Duct, Dilation	3 (4%)	8 (10%)	9 (11%)	3 (4%)
Skin	(90)	(90)	(90)	(90)
Cyst Epithelial Inclusion	3 (3%)	12 (13%)	3 (3%)	2 (2%)
Inflammation, Suppurative		2 (2%)		
Inflammation, Chronic Active	1 (1%)	2 (2%)	2 (2%)	1 (1%)
Ulcer	2 (2%)	2 (2%)	4 (4%)	
Adnexa, Atrophy				1 (1%)
Artery, Subcutaneous Tissue, Inflammation, Chronic Active	1 (1%)			
Dermis, Fibrosis				1 (1%)
Epidermis, Hyperplasia	1 (1%)	1 (1%)		1 (1%)
Hair Follicle, Congestion				1 (1%)
Hair Follicle, Degeneration			1 (1%)	
Prepuce, Hyperplasia		2 (2%)		1 (1%)
Prepuce, Inflammation, Acute				1 (1%)
Prepuce, Inflammation, Chronic Active		1 (1%)		
Prepuce, Ulcer		2 (2%)		1 (1%)
Subcutaneous Tissue, Hemorrhage		1 (1%)		
Subcutaneous Tissue, Inflammation, Suppurative	1 (1%)		1 (1%)	2 (2%)
Subcutaneous Tissue, Inflammation, Chronic	1 (1%)		1 (1%)	
Subcutaneous Tissue, Inflammation, Chronic Active			2 (2%)	
Subcutaneous Tissue, Necrosis			1 (1%)	
MUSCULOSKELETAL SYSTEM				

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

Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Bone	(90)	(90)	(90)	(90)
Fibrous Osteodystrophy	46 (51%)	20 (22%)	15 (17%)	5 (6%)
Cranium, Inflammation, Chronic Active			1 (1%)	
Bone, Vertebra	(0)	(0)	(1)	(0)
Developmental Malformation			1 (100%)	
Skeletal Muscle	(90)	(90)	(90)	(90)
Degeneration	34 (38%)	35 (39%)	30 (33%)	26 (29%)
Inflammation, Chronic Active			1 (1%)	
Mineral	2 (2%)		1 (1%)	
Diaphragm, Hernia		1 (1%)		
NERVOUS SYSTEM				
Brain	(90)	(90)	(90)	(90)
Compression	7 (8%)	12 (13%)	6 (7%)	3 (3%)
Edema		1 (1%)		
Hemorrhage	2 (2%)	3 (3%)		
Infiltration Cellular, Mononuclear Cell	1 (1%)			
Inflammation, Suppurative			1 (1%)	
Mineral	5 (6%)	3 (3%)	4 (4%)	4 (4%)
Necrosis	7 (8%)	7 (8%)	3 (3%)	
Choroid Plexus, Degeneration	1 (1%)			
Choroid Plexus, Mineral	3 (3%)	1 (1%)		
Glial Cell, Hyperplasia		2 (2%)		2 (2%)
Hypothalamus, Cyst		3 (3%)		
Meninges, Fibrosis		1 (1%)		
Meninges, Hyperplasia	1 (1%)		1 (1%)	
Meninges, Hyperplasia, Granular Cell	1 (1%)	1 (1%)		
Meninges, Mineral		1 (1%)		
Pineal Gland, Mineral	3 (3%)	3 (3%)	2 (2%)	
Pineal Gland, Vacuolation, Cytoplasmic	12 (13%)	6 (7%)	9 (10%)	4 (4%)
Nerve Trigeminal	(84)	(90)	(88)	(90)
Degeneration	63 (75%)	66 (73%)	67 (76%)	49 (54%)
Peripheral Nerve, Sciatic	(90)	(90)	(90)	(90)
Degeneration	86 (96%)	90 (100%)	88 (98%)	84 (93%)

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

Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Infiltration Cellular, Histiocyte			1 (1%)	
Infiltration Cellular, Mononuclear Cell	1 (1%)			
Peripheral Nerve, Tibial	(88)	(90)	(90)	(89)
Degeneration	84 (95%)	90 (100%)	89 (99%)	81 (91%)
Spinal Cord, Cervical	(90)	(90)	(90)	(90)
Degeneration	30 (33%)	36 (40%)	42 (47%)	35 (39%)
Meninges, Inflammation, Suppurative			1 (1%)	
Spinal Cord, Lumbar	(90)	(90)	(90)	(90)
Degeneration	21 (23%)	15 (17%)	21 (23%)	24 (27%)
Nerve, Degeneration	79 (88%)	85 (94%)	83 (92%)	76 (84%)
Spinal Cord, Thoracic	(90)	(90)	(90)	(90)
Degeneration	58 (64%)	69 (77%)	74 (82%)	62 (69%)
Hemorrhage, Focal	1 (1%)			
Meninges, Inflammation, Suppurative			1 (1%)	
Trigeminal Ganglion	(75)	(77)	(79)	(83)
Degeneration	23 (31%)	22 (29%)	21 (27%)	16 (19%)
RESPIRATORY SYSTEM				
Lung	(90)	(90)	(90)	(90)
Congestion	13 (14%)	13 (14%)	11 (12%)	33 (37%)
Foreign Body	4 (4%)	2 (2%)	1 (1%)	1 (1%)
Hemorrhage	3 (3%)	5 (6%)	2 (2%)	4 (4%)
Inflammation, Suppurative	3 (3%)		1 (1%)	2 (2%)
Inflammation, Granulomatous		6 (7%)	1 (1%)	
Inflammation, Chronic		1 (1%)	1 (1%)	
Inflammation, Chronic Active	2 (2%)	1 (1%)	1 (1%)	
Inflammation, Subacute	2 (2%)			
Metaplasia, Osseous			1 (1%)	
Alveolus, Infiltration Cellular, Histiocyte	37 (41%)	38 (42%)	42 (47%)	47 (52%)
Artery, Inflammation, Chronic Active	3 (3%)	3 (3%)	1 (1%)	
Artery, Mineral	1 (1%)			
Artery, Mediastinum, Inflammation, Chronic Active	2 (2%)			
Epithelium Alveolus, Hyperplasia	3 (3%)	2 (2%)	1 (1%)	1 (1%)

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

Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Interstitium, Inflammation, Chronic		5 (6%)		
Interstitium, Inflammation, Chronic Active		1 (1%)		
Interstitium, Mineral	1 (1%)	1 (1%)	1 (1%)	
Mediastinum, Inflammation, Suppurative			1 (1%)	
Perivascular, Infiltration Cellular, Lymphocyte			1 (1%)	
Perivascular, Inflammation, Chronic Active	1 (1%)			
Nose	(89)	(90)	(90)	(87)
Foreign Body	5 (6%)	2 (2%)	3 (3%)	8 (9%)
Hyperplasia, Lymphocyte		1 (1%)		
Inflammation, Suppurative	10 (11%)	6 (7%)	10 (11%)	17 (20%)
Inflammation, Chronic Active				2 (2%)
Mineral				1 (1%)
Nasopharyngeal Duct, Respiratory Epithelium, Hyperplasia	1 (1%)			
Olfactory Epithelium, Accumulation, Hyaline Droplet	79 (89%)	88 (98%)	90 (100%)	76 (87%)
Olfactory Epithelium, Hyperplasia		1 (1%)		
Olfactory Epithelium, Metaplasia, Respiratory	3 (3%)	2 (2%)	1 (1%)	4 (5%)
Respiratory Epithelium, Accumulation, Hyaline Droplet	3 (3%)	1 (1%)	2 (2%)	3 (3%)
Respiratory Epithelium, Hyperplasia	3 (3%)	4 (4%)	8 (9%)	7 (8%)
Respiratory Epithelium, Hyperplasia, Goblet Cell	1 (1%)			
Respiratory Epithelium, Mineral	1 (1%)			
Trachea	(90)	(88)	(88)	(72)
Artery, Inflammation, Chronic Active		1 (1%)		
Artery, Mineral	1 (1%)			
Epithelium, Hyperplasia	1 (1%)			
Epithelium, Metaplasia, Squamous	1 (1%)			
SPECIAL SENSES SYSTEM				
Eye	(85)	(83)	(81)	(72)
Phthisis Bulbi			1 (1%)	
Retinal Detachment	1 (1%)		1 (1%)	
Anterior Chamber, Inflammation, Acute	4 (5%)	8 (10%)	5 (6%)	1 (1%)

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Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Cornea, Fibrosis	1 (1%)	2 (2%)	2 (2%)	4 (6%)
Cornea, Inflammation, Acute	28 (33%)	18 (22%)	19 (23%)	17 (24%)
Cornea, Neovascularization	10 (12%)	14 (17%)	14 (17%)	21 (29%)
Cornea, Ulcer	6 (7%)	1 (1%)		
Cornea, Epithelium, Degeneration			1 (1%)	2 (3%)
Cornea, Epithelium, Hyperplasia	13 (15%)	15 (18%)	17 (21%)	20 (28%)
Lens, Cataract		1 (1%)		
Retina, Atrophy	6 (7%)	17 (20%)	17 (21%)	8 (11%)
Retina, Degeneration	1 (1%)			
Retina, Dysplasia				1 (1%)
Harderian Gland	(90)	(90)	(90)	(89)
Atrophy	1 (1%)	4 (4%)	2 (2%)	3 (3%)
Degeneration			1 (1%)	1 (1%)
Degeneration, Cystic	2 (2%)	4 (4%)	1 (1%)	
Hyperplasia				2 (2%)
Infiltration Cellular, Lymphocyte		3 (3%)		3 (3%)
Inflammation, Suppurative		1 (1%)		
Inflammation, Granulomatous		5 (6%)	2 (2%)	
Inflammation, Acute	2 (2%)	1 (1%)		
Inflammation, Chronic		1 (1%)		1 (1%)
Inflammation, Chronic Active	2 (2%)	2 (2%)	1 (1%)	1 (1%)
Lacrimal Gland	(2)	(1)	(1)	(1)
Metaplasia, Harderian Gland	2 (100%)	1 (100%)	1 (100%)	1 (100%)
Zymbal's Gland	(0)	(0)	(1)	(1)
URINARY SYSTEM				
Kidney	(90)	(90)	(90)	(87)
Mineral	1 (1%)		2 (2%)	
Necrosis			1 (1%)	
Nephropathy, Chronic Progressive	88 (98%)	90 (100%)	90 (100%)	86 (99%)
Thrombus	1 (1%)	1 (1%)	1 (1%)	
Artery, Inflammation, Chronic Active			1 (1%)	
Artery, Mineral	2 (2%)			
Pelvis, Dilation	1 (1%)		1 (1%)	1 (1%)

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Harlan Sprague Dawley RATS MALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Pelvis, Inflammation, Suppurative		1 (1%)	1 (1%)	
Pelvis, Urothelium, Hyperplasia		3 (3%)	1 (1%)	
Perirenal Tissue, Hemorrhage				1 (1%)
Perirenal Tissue, Thrombus			1 (1%)	
Renal Tubule, Accumulation, Hyaline Droplet				1 (1%)
Renal Tubule, Cyst	18 (20%)	17 (19%)	9 (10%)	6 (7%)
Renal Tubule, Hyperplasia, Atypical	2 (2%)	1 (1%)	3 (3%)	
Renal Tubule, Hyperplasia, Oncocytic	2 (2%)			
Renal Tubule, Inflammation, Suppurative			1 (1%)	
Renal Tubule, Necrosis				1 (1%)
Urothelium, Hyperplasia	1 (1%)		1 (1%)	
Urinary Bladder	(89)	(83)	(83)	(78)
Dilation		1 (1%)		
Hemorrhage	2 (2%)	1 (1%)	2 (2%)	1 (1%)
Inflammation, Acute	2 (2%)	1 (1%)	1 (1%)	
Inflammation, Chronic Active		2 (2%)		
Necrosis	1 (1%)		1 (1%)	
Artery, Inflammation, Chronic Active		1 (1%)		1 (1%)
Muscularis, Degeneration	1 (1%)			
Serosa, Inflammation, Chronic Active			1 (1%)	
Urothelium, Hyperplasia	1 (1%)	4 (5%)	2 (2%)	1 (1%)

*** END OF MALE ***

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

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Disposition Summary				
Animals Initially In Study	**105**	**105**	**105**	**105**
Early Deaths				
Accidentally Killed	**1**			
Moribund Sacrifice	**30**	**29**	**28**	**16**
Natural Death	**11**	**15**	**12**	**13**
Survivors				
Moribund Sacrifice	**1**	**2**		
Terminal Sacrifice	**47**	**44**	**50**	**61**
Animals Examined Microscopically	**90**	**90**	**90**	**90**
ALIMENTARY SYSTEM				
Esophagus	(90)	(90)	(90)	(90)
Dilation		2 (2%)		
Inflammation, Acute				1 (1%)
Muscularis, Degeneration		1 (1%)		
Intestine Large, Cecum	(84)	(82)	(86)	(80)
Ulcer			1 (1%)	
Artery, Inflammation, Chronic Active		2 (2%)		
Intestine Large, Colon	(89)	(89)	(88)	(88)
Diverticulum			1 (1%)	
Artery, Inflammation, Chronic Active		1 (1%)		
Intestine Large, Rectum	(90)	(88)	(87)	(88)
Hyperplasia, Lymphocyte			3 (3%)	
Artery, Inflammation, Chronic Active		1 (1%)		
Intestine Small, Duodenum	(88)	(86)	(87)	(85)
Intestine Small, Ileum	(86)	(83)	(84)	(83)
Hyperplasia, Lymphocyte	1 (1%)			
Intestine Small, Jejunum	(83)	(81)	(84)	(79)
Liver	(90)	(90)	(90)	(90)
Angiectasis	6 (7%)	3 (3%)	9 (10%)	3 (3%)
Basophilic Focus	11 (12%)	11 (12%)	7 (8%)	15 (17%)
Clear Cell Focus	2 (2%)	4 (4%)	7 (8%)	3 (3%)
Congestion				1 (1%)

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

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Eosinophilic Focus	9 (10%)	17 (19%)	10 (11%)	9 (10%)
Extramedullary Hematopoiesis	15 (17%)	11 (12%)	13 (14%)	13 (14%)
Hepatodiaphragmatic Nodule	1 (1%)			3 (3%)
Infiltration Cellular, Histiocyte		1 (1%)		
Infiltration Cellular, Mixed Cell	1 (1%)	2 (2%)	4 (4%)	2 (2%)
Inflammation, Granulomatous		1 (1%)		
Mitotic Alteration				1 (1%)
Mixed Cell Focus	29 (32%)	17 (19%)	29 (32%)	35 (39%)
Pigment		1 (1%)		
Artery, Inflammation, Chronic Active		1 (1%)		
Bile Duct, Cyst	11 (12%)	14 (16%)	6 (7%)	9 (10%)
Bile Duct, Fibrosis	1 (1%)	1 (1%)	4 (4%)	
Bile Duct, Hyperplasia	9 (10%)	10 (11%)	12 (13%)	7 (8%)
Hepatocyte, Hypertrophy	2 (2%)	2 (2%)	1 (1%)	1 (1%)
Hepatocyte, Increased Mitoses	2 (2%)			
Hepatocyte, Necrosis	4 (4%)	9 (10%)	7 (8%)	4 (4%)
Hepatocyte, Vacuolation, Cytoplasmic	1 (1%)	5 (6%)	5 (6%)	9 (10%)
Kupffer Cell, Hyperplasia	3 (3%)			1 (1%)
Kupffer Cell, Hypertrophy	2 (2%)			
Kupffer Cell, Pigment			1 (1%)	1 (1%)
Periductal, Cholangiofibrosis	1 (1%)	1 (1%)	1 (1%)	1 (1%)
Serosa, Inflammation, Chronic Active	1 (1%)			
Mesentery	(4)	(3)	(11)	(4)
Hemorrhage			1 (9%)	
Inflammation, Chronic Active	1 (25%)			1 (25%)
Necrosis	1 (25%)	1 (33%)	5 (45%)	2 (50%)
Artery, Inflammation, Chronic Active		2 (67%)	2 (18%)	
Vein, Degeneration			1 (9%)	
Vein, Inflammation, Chronic Active			1 (9%)	1 (25%)
Oral Mucosa	(1)	(1)	(0)	(0)
Inflammation, Chronic Active		1 (100%)		
Pancreas	(90)	(90)	(90)	(89)
Ectopic Liver	1 (1%)		1 (1%)	
Inflammation, Chronic Active	1 (1%)			3 (3%)
Necrosis				1 (1%)
Acinus, Atrophy	5 (6%)	2 (2%)	6 (7%)	2 (2%)

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Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Acinus, Hyperplasia	1 (1%)	4 (4%)	2 (2%)	2 (2%)
Artery, Inflammation, Chronic Active		5 (6%)		1 (1%)
Periductal, Cholangiofibrosis		3 (3%)	2 (2%)	1 (1%)
Salivary Glands	(90)	(90)	(90)	(90)
Degeneration		1 (1%)		
Artery, Inflammation, Chronic Active		3 (3%)		
Duct, Parotid Gland, Dilation	1 (1%)	1 (1%)	2 (2%)	
Duct, Parotid Gland, Fibrosis			1 (1%)	
Parotid Gland, Atrophy	4 (4%)	7 (8%)	9 (10%)	1 (1%)
Parotid Gland, Fibrosis			2 (2%)	3 (3%)
Parotid Gland, Inflammation, Suppurative		1 (1%)		
Parotid Gland, Inflammation, Acute		1 (1%)	1 (1%)	
Parotid Gland, Mineral				1 (1%)
Parotid Gland, Vacuolation, Cytoplasmic			1 (1%)	
Sublingual Gland, Atrophy		2 (2%)	3 (3%)	
Sublingual Gland, Fibrosis			1 (1%)	
Sublingual Gland, Metaplasia		1 (1%)		1 (1%)
Submandibular Gland, Atrophy			1 (1%)	1 (1%)
Stomach, Forestomach	(90)	(90)	(90)	(90)
Cyst, Squamous				1 (1%)
Edema	2 (2%)	2 (2%)	2 (2%)	3 (3%)
Erosion	2 (2%)	1 (1%)		
Fibrosis	1 (1%)	1 (1%)	1 (1%)	
Inflammation, Acute				1 (1%)
Inflammation, Chronic Active	4 (4%)	5 (6%)	2 (2%)	1 (1%)
Ulcer	1 (1%)	3 (3%)	3 (3%)	3 (3%)
Epithelium, Hyperplasia	10 (11%)	11 (12%)	8 (9%)	8 (9%)
Epithelium, Hyperplasia, Basal Cell	1 (1%)	1 (1%)	2 (2%)	
Stomach, Glandular	(90)	(90)	(89)	(88)
Cyst		1 (1%)		
Erosion	1 (1%)		1 (1%)	1 (1%)
Artery, Inflammation, Chronic Active		1 (1%)		
Tongue	(1)	(0)	(0)	(0)

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Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
CARDIOVASCULAR SYSTEM				
Aorta	(90)	(90)	(90)	(90)
Blood Vessel	(0)	(0)	(0)	(1)
Pulmonary Artery, Degeneration				1 (100%)
Heart	(90)	(90)	(90)	(90)
Cardiomyopathy	40 (44%)	43 (48%)	33 (37%)	45 (50%)
Artery, Inflammation, Chronic		1 (1%)		
Artery, Mineral		1 (1%)		
Artery, Necrosis		1 (1%)		
Atrium, Endocardium, Hyperplasia, Schwann Cell			1 (1%)	
Endocardium, Hyperplasia, Schwann Cell		1 (1%)		1 (1%)
Epicardium, Inflammation, Acute			1 (1%)	
Ventricle Right, Cardiomyopathy	4 (4%)	7 (8%)	9 (10%)	9 (10%)
ENDOCRINE SYSTEM				
Adrenal Cortex	(90)	(90)	(90)	(90)
Accessory Adrenal Cortical Nodule	5 (6%)	7 (8%)	6 (7%)	12 (13%)
Atrophy	1 (1%)		2 (2%)	
Degeneration, Cystic	22 (24%)	19 (21%)	18 (20%)	19 (21%)
Extramedullary Hematopoiesis			1 (1%)	
Hyperplasia	14 (16%)	31 (34%)	26 (29%)	19 (21%)
Hypertrophy	52 (58%)	55 (61%)	56 (62%)	50 (56%)
Necrosis	2 (2%)	2 (2%)	2 (2%)	4 (4%)
Pigment	1 (1%)		1 (1%)	
Vacuolation, Cytoplasmic	18 (20%)	17 (19%)	11 (12%)	14 (16%)
Adrenal Medulla	(86)	(89)	(87)	(88)
Hyperplasia	13 (15%)	20 (22%)	20 (23%)	18 (20%)
Hypertrophy				1 (1%)
Necrosis	1 (1%)			1 (1%)
Islets, Pancreatic	(90)	(89)	(90)	(88)
Hyperplasia	15 (17%)	12 (13%)	14 (16%)	13 (15%)
Parathyroid Gland	(87)	(80)	(85)	(85)

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

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Cyst			2 (2%)	
Fibrosis	13 (15%)	11 (14%)	6 (7%)	10 (12%)
Hyperplasia		2 (3%)		3 (4%)
Hyperplasia, Focal	3 (3%)		2 (2%)	
Hypertrophy, Focal				1 (1%)
Pituitary Gland	(90)	(89)	(89)	(90)
Angiectasis		1 (1%)		
Atrophy			1 (1%)	
Cyst	1 (1%)		1 (1%)	
Fibrosis			1 (1%)	
Pigment			2 (2%)	
Pars Distalis, Angiectasis	2 (2%)			
Pars Distalis, Cyst	7 (8%)	5 (6%)	3 (3%)	1 (1%)
Pars Distalis, Hyperplasia	20 (22%)	22 (25%)	26 (29%)	22 (24%)
Pars Distalis, Vacuolation, Cytoplasmic			1 (1%)	
Pars Intermedia, Cyst	3 (3%)	3 (3%)	1 (1%)	3 (3%)
Pars Intermedia, Hyperplasia	1 (1%)		1 (1%)	
Pars Nervosa, Developmental Malformation				1 (1%)
Thyroid Gland	(90)	(90)	(90)	(89)
C-cell, Hyperplasia	28 (31%)	30 (33%)	34 (38%)	38 (43%)
C-cell, Hypoplasia				1 (1%)
Follicle, Cyst	1 (1%)		1 (1%)	
Follicular Cell, Hyperplasia		1 (1%)		
GENERAL BODY SYSTEM				
Tissue NOS	(8)	(11)	(8)	(6)
Cyst		1 (9%)		
Inflammation, Chronic Active	1 (13%)	1 (9%)		
Abdominal, Fat, Necrosis		5 (45%)	3 (38%)	2 (33%)
Fat, Necrosis	6 (75%)	4 (36%)	4 (50%)	3 (50%)
Mediastinum, Cyst				1 (17%)
Mediastinum, Hemorrhage		1 (9%)		
Mediastinum, Inflammation, Chronic		1 (9%)		

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

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
GENITAL SYSTEM				
Clitoral Gland	(87)	(88)	(89)	(86)
Hyperplasia		1 (1%)		
Inflammation, Suppurative	1 (1%)	1 (1%)		
Inflammation, Granulomatous				1 (1%)
Inflammation, Acute		1 (1%)		
Inflammation, Chronic			1 (1%)	1 (1%)
Inflammation, Chronic Active	28 (32%)	43 (49%)	35 (39%)	42 (49%)
Duct, Dilation	47 (54%)	64 (73%)	65 (73%)	60 (70%)
Duct, Hyperplasia		3 (3%)	4 (4%)	1 (1%)
Ovary	(90)	(90)	(89)	(90)
Atrophy	72 (80%)	69 (77%)	56 (63%)	77 (86%)
Congestion	1 (1%)			
Cyst	22 (24%)	27 (30%)	23 (26%)	34 (38%)
Fibrosis		1 (1%)	1 (1%)	1 (1%)
Hemorrhage				1 (1%)
Inflammation, Chronic		1 (1%)	1 (1%)	
Inflammation, Chronic Active			1 (1%)	
Pigment				1 (1%)
Bursa, Dilation	4 (4%)	4 (4%)	2 (2%)	1 (1%)
Follicle, Cyst				1 (1%)
Periovarian Tissue, Cyst			1 (1%)	
Rete Ovarii, Cyst			1 (1%)	
Rete Ovarii, Hyperplasia	15 (17%)	17 (19%)	14 (16%)	11 (12%)
Oviduct	(1)	(0)	(0)	(0)
Cyst	1 (100%)			
Uterus	(90)	(90)	(90)	(90)
Adenomyosis		2 (2%)	2 (2%)	
Angiectasis	1 (1%)			
Cyst	5 (6%)	6 (7%)	7 (8%)	11 (12%)
Dilation	8 (9%)	10 (11%)	11 (12%)	8 (9%)
Fibrosis	1 (1%)		1 (1%)	
Hemorrhage			1 (1%)	4 (4%)
Infiltration Cellular, Plasma Cell		1 (1%)		
Inflammation, Suppurative	4 (4%)	11 (12%)	8 (9%)	12 (13%)

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

Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Inflammation, Acute	1 (1%)	1 (1%)	1 (1%)	1 (1%)
Inflammation, Chronic Active			4 (4%)	1 (1%)
Thrombus	1 (1%)	1 (1%)		
Cervix, Hyperplasia, Stromal	2 (2%)	1 (1%)	1 (1%)	1 (1%)
Cervix, Thrombus		1 (1%)		
Cervix, Epithelium, Hyperplasia		1 (1%)		
Cervix, Serosa, Fibrosis	1 (1%)			
Endometrium, Hyperplasia, Cystic	37 (41%)	43 (48%)	35 (39%)	46 (51%)
Epithelium, Metaplasia, Squamous	48 (53%)	39 (43%)	28 (31%)	46 (51%)
Glands, Dilation		1 (1%)		
Vagina	(2)	(1)	(0)	(1)
Cyst				1 (100%)
HEMATOPOIETIC SYSTEM				
Bone Marrow	(90)	(90)	(90)	(90)
Fibrosis		2 (2%)		
Hypercellularity	56 (62%)	52 (58%)	43 (48%)	43 (48%)
Lymph Node	(13)	(8)	(11)	(20)
Erythrophagocytosis		1 (13%)		
Axillary, Erythrophagocytosis				1 (5%)
Axillary, Proliferation, Plasma Cell	1 (8%)			
Bronchial, Erythrophagocytosis			1 (9%)	
Bronchial, Proliferation, Plasma Cell			1 (9%)	
Deep Cervical, Erythrophagocytosis				1 (5%)
Iliac, Erythrophagocytosis	3 (23%)	3 (38%)	1 (9%)	3 (15%)
Iliac, Hyperplasia, Lymphocyte	1 (8%)		1 (9%)	6 (30%)
Iliac, Infiltration Cellular, Histiocyte				1 (5%)
Iliac, Inflammation, Acute	1 (8%)			
Iliac, Pigment	1 (8%)			3 (15%)
Iliac, Proliferation, Plasma Cell	6 (46%)	1 (13%)	2 (18%)	5 (25%)
Iliac, Lymphatic Sinus, Ectasia		1 (13%)	1 (9%)	5 (25%)
Inguinal, Erythrophagocytosis	1 (8%)			
Inguinal, Hyperplasia, Lymphocyte			1 (9%)	
Inguinal, Pigment			1 (9%)	

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Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Inguinal, Proliferation, Plasma Cell	1 (8%)			
Inguinal, Lymphatic Sinus, Ectasia	1 (8%)	1 (13%)	1 (9%)	
Lumbar, Erythrophagocytosis	1 (8%)	2 (25%)		
Lumbar, Hyperplasia, Lymphocyte				1 (5%)
Lumbar, Lymphatic Sinus, Ectasia				1 (5%)
Lymphatic Sinus, Renal, Ectasia		1 (13%)		
Mediastinal, Congestion	1 (8%)			
Mediastinal, Erythrophagocytosis		2 (25%)	4 (36%)	4 (20%)
Mediastinal, Proliferation, Plasma Cell	1 (8%)			
Pancreatic, Erythrophagocytosis	1 (8%)		1 (9%)	
Pancreatic, Infiltration Cellular, Histiocyte				1 (5%)
Renal, Erythrophagocytosis		2 (25%)		
Lymph Node, Mandibular	(90)	(90)	(89)	(90)
Congestion		2 (2%)		1 (1%)
Erythrophagocytosis		1 (1%)	2 (2%)	3 (3%)
Hemorrhage	1 (1%)			
Hyperplasia, Lymphocyte	46 (51%)	49 (54%)	45 (51%)	43 (48%)
Infiltration Cellular, Histiocyte				1 (1%)
Pigment				1 (1%)
Proliferation, Plasma Cell	68 (76%)	68 (76%)	58 (65%)	56 (62%)
Lymphatic Sinus, Ectasia	1 (1%)	2 (2%)	2 (2%)	3 (3%)
Lymph Node, Mesenteric	(90)	(90)	(90)	(89)
Atrophy	1 (1%)			
Erythrophagocytosis	1 (1%)	3 (3%)	2 (2%)	
Hyperplasia, Lymphocyte			1 (1%)	
Infiltration Cellular, Histiocyte	2 (2%)			1 (1%)
Lymphatic Sinus, Ectasia			1 (1%)	1 (1%)
Spleen	(90)	(90)	(90)	(90)
Accessory Spleen		1 (1%)		
Extramedullary Hematopoiesis	80 (89%)	74 (82%)	79 (88%)	82 (91%)
Fibrosis		1 (1%)		
Hemorrhage		1 (1%)		1 (1%)
Hyperplasia, Lymphocyte		1 (1%)		
Hyperplasia, Stromal	1 (1%)		1 (1%)	
Pigment	74 (82%)	79 (88%)	77 (86%)	79 (88%)
Red Pulp, Atrophy	7 (8%)	11 (12%)	13 (14%)	6 (7%)

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Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
White Pulp, Atrophy	3 (3%)	3 (3%)	4 (4%)	1 (1%)
Thymus	(87)	(83)	(87)	(87)
Atrophy	75 (86%)	67 (81%)	74 (85%)	63 (72%)
Cyst	39 (45%)	34 (41%)	34 (39%)	45 (52%)
Ectopic Parathyroid Gland	1 (1%)	2 (2%)	2 (2%)	2 (2%)
Hemorrhage	2 (2%)	5 (6%)	5 (6%)	3 (3%)
Hyperplasia, Epithelial	55 (63%)	59 (71%)	54 (62%)	38 (44%)
Hyperplasia, Lymphocyte			1 (1%)	
Artery, Inflammation, Chronic Active		2 (2%)	1 (1%)	
INTEGUMENTARY SYSTEM				
Mammary Gland	(90)	(90)	(90)	(90)
Galactocele	24 (27%)	17 (19%)	17 (19%)	10 (11%)
Hyperplasia	49 (54%)	50 (56%)	46 (51%)	34 (38%)
Inflammation, Granulomatous			2 (2%)	
Inflammation, Acute				1 (1%)
Inflammation, Chronic Active			2 (2%)	1 (1%)
Duct, Dilation	56 (62%)	61 (68%)	51 (57%)	70 (78%)
Skin	(90)	(90)	(90)	(90)
Cyst Epithelial Inclusion	1 (1%)	1 (1%)	3 (3%)	1 (1%)
Hyperkeratosis		1 (1%)		
Inflammation, Chronic Active	1 (1%)			1 (1%)
Ulcer			1 (1%)	
Epidermis, Hyperplasia	2 (2%)			
Lymphatic, Subcutaneous Tissue, Angiectasis				1 (1%)
Subcutaneous Tissue, Inflammation, Chronic Active		1 (1%)		
MUSCULOSKELETAL SYSTEM				
Bone	(90)	(90)	(90)	(90)
Fibrous Osteodystrophy		1 (1%)		
Cranium, Fracture	1 (1%)			
Mandible, Fracture	1 (1%)			

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Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Maxilla, Fracture	1 (1%)			
Skeletal Muscle	(90)	(90)	(90)	(90)
Degeneration	3 (3%)	7 (8%)	10 (11%)	2 (2%)
Diaphragm, Hernia				1 (1%)
NERVOUS SYSTEM				
Brain	(90)	(90)	(90)	(90)
Compression	26 (29%)	31 (34%)	16 (18%)	20 (22%)
Congestion	1 (1%)			
Cyst		1 (1%)		
Edema	2 (2%)	1 (1%)		
Hemorrhage		1 (1%)		
Mineral		1 (1%)	1 (1%)	
Pigment			1 (1%)	
Cerebrum, Degeneration			1 (1%)	
Choroid Plexus, Mineral		1 (1%)		
Glial Cell, Hyperplasia			1 (1%)	1 (1%)
Meninges, Hyperplasia	1 (1%)		1 (1%)	
Meninges, Hyperplasia, Granular Cell	1 (1%)			1 (1%)
Meninges, Mineral			1 (1%)	
Neuron, Necrosis		1 (1%)		
Pineal Gland, Infiltration Cellular, Mononuclear Cell		1 (1%)		
Pineal Gland, Mineral	1 (1%)			
Pineal Gland, Vacuolation, Cytoplasmic	1 (1%)		2 (2%)	
Nerve Trigeminal	(84)	(84)	(85)	(84)
Degeneration	64 (76%)	70 (83%)	64 (75%)	72 (86%)
Gliosis			1 (1%)	
Peripheral Nerve, Sciatic	(90)	(90)	(90)	(90)
Degeneration	80 (89%)	83 (92%)	83 (92%)	89 (99%)
Infiltration Cellular, Mixed Cell	1 (1%)			
Peripheral Nerve, Tibial	(90)	(90)	(89)	(89)
Degeneration	77 (86%)	77 (86%)	83 (93%)	86 (97%)
Spinal Cord, Cervical	(90)	(90)	(90)	(90)

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Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Degeneration	24 (27%)	29 (32%)	22 (24%)	35 (39%)
Spinal Cord, Lumbar	(90)	(90)	(89)	(90)
Degeneration	10 (11%)	11 (12%)	15 (17%)	12 (13%)
Nerve, Degeneration	74 (82%)	77 (86%)	77 (87%)	80 (89%)
Spinal Cord, Thoracic	(90)	(90)	(90)	(90)
Degeneration	59 (66%)	64 (71%)	59 (66%)	70 (78%)
Trigeminal Ganglion	(81)	(77)	(81)	(75)
Degeneration	33 (41%)	21 (27%)	22 (27%)	28 (37%)
RESPIRATORY SYSTEM				
Lung	(90)	(90)	(90)	(90)
Congestion	3 (3%)	12 (13%)	9 (10%)	5 (6%)
Foreign Body		1 (1%)		1 (1%)
Hemorrhage	1 (1%)	6 (7%)		1 (1%)
Inflammation, Suppurative	2 (2%)			1 (1%)
Inflammation, Granulomatous	1 (1%)	5 (6%)	1 (1%)	2 (2%)
Inflammation, Chronic Active	6 (7%)	6 (7%)	6 (7%)	11 (12%)
Alveolar Epithelium, Hyperplasia		1 (1%)		
Alveolar Epithelium, Metaplasia, Squamous		1 (1%)		2 (2%)
Alveolus, Infiltration Cellular, Histiocyte	71 (79%)	77 (86%)	84 (93%)	81 (90%)
Artery, Inflammation, Chronic Active	1 (1%)			
Artery, Muscularis, Hyperplasia				1 (1%)
Bronchus, Hyperplasia		1 (1%)		
Epithelium Alveolus, Hyperplasia	2 (2%)	2 (2%)	3 (3%)	1 (1%)
Pleura, Inflammation, Acute			1 (1%)	
Nose	(90)	(89)	(90)	(89)
Foreign Body		1 (1%)	1 (1%)	2 (2%)
Inflammation, Suppurative	1 (1%)	3 (3%)	1 (1%)	3 (3%)
Inflammation, Acute		1 (1%)		
Inflammation, Chronic Active		1 (1%)		
Nerve, Degeneration		1 (1%)		
Olfactory Epithelium, Accumulation, Hyaline Droplet	89 (99%)	89 (100%)	86 (96%)	86 (97%)
Olfactory Epithelium, Hyperplasia			1 (1%)	

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Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Olfactory Epithelium, Metaplasia, Respiratory	1 (1%)			2 (2%)
Olfactory Epithelium, Metaplasia, Squamous		1 (1%)		
Respiratory Epithelium, Accumulation, Hyaline Droplet	12 (13%)	19 (21%)	22 (24%)	11 (12%)
Respiratory Epithelium, Hyperplasia		1 (1%)		3 (3%)
Respiratory Epithelium, Metaplasia, Squamous				1 (1%)
Trachea	(89)	(88)	(89)	(89)
Inflammation, Chronic Active	1 (1%)	1 (1%)		
Epithelium, Hyperplasia		1 (1%)		
Epithelium, Metaplasia, Squamous		1 (1%)		
Glands, Cyst	1 (1%)	1 (1%)		2 (2%)
SPECIAL SENSES SYSTEM				
Ear	(0)	(0)	(1)	(1)
Eye	(88)	(86)	(88)	(86)
Anterior Chamber, Exudate		1 (1%)		
Anterior Chamber, Inflammation, Acute			1 (1%)	2 (2%)
Anterior Chamber, Iris, Synechia		1 (1%)		
Choroid, Inflammation, Chronic Active			1 (1%)	
Cornea, Fibrosis		1 (1%)		
Cornea, Inflammation, Acute	1 (1%)	2 (2%)	1 (1%)	2 (2%)
Cornea, Inflammation, Chronic Active		1 (1%)		
Cornea, Neovascularization		1 (1%)		
Cornea, Ulcer				1 (1%)
Cornea, Epithelium, Hyperplasia	1 (1%)	2 (2%)		1 (1%)
Lens, Cataract	1 (1%)	3 (3%)		
Retina, Atrophy	18 (20%)	17 (20%)	18 (20%)	18 (21%)
Retina, Dysplasia	1 (1%)	1 (1%)	1 (1%)	3 (3%)
Harderian Gland	(90)	(90)	(90)	(90)
Atrophy	13 (14%)	15 (17%)	16 (18%)	17 (19%)
Cyst				1 (1%)
Hyperplasia				1 (1%)
Hypertrophy				1 (1%)
Infiltration Cellular, Lymphocyte	2 (2%)			1 (1%)

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Harlan Sprague Dawley RATS FEMALE	0.0W/kg(CDMA)chr	1.5W/kg(CDMA)chr	3.0W/kg(CDMA)chr	6.0W/kg(CDMA)chr
Inflammation, Granulomatous	7 (8%)	6 (7%)	4 (4%)	9 (10%)
Inflammation, Chronic	7 (8%)	1 (1%)	1 (1%)	2 (2%)
Inflammation, Chronic Active	1 (1%)	4 (4%)	2 (2%)	
URINARY SYSTEM				
Kidney	(90)	(90)	(90)	(89)
Inflammation, Acute	1 (1%)			
Nephropathy, Chronic Progressive	74 (82%)	76 (84%)	76 (84%)	65 (73%)
Artery, Inflammation, Chronic Active	1 (1%)			
Pelvis, Dilation	3 (3%)		2 (2%)	
Pelvis, Inflammation, Suppurative		2 (2%)		
Pelvis, Mineral				1 (1%)
Pelvis, Urothelium, Hyperplasia		1 (1%)		
Renal Tubule, Cyst	3 (3%)	2 (2%)		
Renal Tubule, Hyperplasia			1 (1%)	
Renal Tubule, Necrosis		1 (1%)		
Urinary Bladder	(88)	(88)	(90)	(90)
Dilation	1 (1%)			
Edema		3 (3%)		
Fibrosis			1 (1%)	
Hemorrhage		1 (1%)	1 (1%)	
Infiltration Cellular, Histiocyte		1 (1%)	1 (1%)	
Inflammation, Acute	3 (3%)	2 (2%)		
Inflammation, Chronic Active		1 (1%)		
Necrosis	1 (1%)			
Artery, Inflammation, Chronic Active		1 (1%)		
Urothelium, Hyperplasia	1 (1%)			

*** END OF REPORT ***

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