P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]
TEF evaluation (PCB 118)
CAS Number: 31508-00-6

F1_R8

C Number:	C20304		
Lock Date:	10/12/2006		
Cage Range:	ALL		
Date Range:	ALL		
Reasons For Removal:	25022 ACCK	25021 TSAC	25020 NATD
	25019 MSAC	25018 DACC	
Removal Date Range:	ALL		
Treatment Groups:	Include 001 0 UG/KG	Include 004 100 UG/KG	Include 005 220 UG/KG
	Include 006 460 UG/KG	Include 007 1000 UG/KG	Include 008 4600 UG/KG
	Include 009 4600 UG/KG STOP		
Study Gender:	Female		
TDMSE Version:	2.0.0		

SPRAGUE-DAWLEY RATS FEMALE	0 UG/KG	100 UG/KG	220 UG/KG	460 UG/KG	1000 UG/KG	4600 UG/KG
Disposition Summary						
Animals Initially in Study	80	80	80	80	80	80
Early Deaths						
Accidently Killed						
Dosing Accident		1				
Moribund Sacrifice	27	22	22	17	16	16
Natural Death	4	9	5	5	8	11
Survivors						
Moribund Sacrifice						
Terminal Sacrifice	21	20	25	30	28	25
Animals Examined Microscopically	52	52	52	52	52	52
ALIMENTARY SYSTEM						
Esophagus	(51)	(52)	(52)	(52)	(52)	(52)
Ulcer				1 [2.0]		
Muscularis, Degeneration					1 [2.0]	
Muscularis, Inflammation		3 [1.7]		1 [3.0]		
Intestine Large, Cecum	(52)	(51)	(51)	(52)	(52)	(48)
Degeneration, Fatty					1 [3.0]	
Inflammation			1 [2.0]	1 [3.0]		
Ulcer			1 [2.0]			
Artery, Inflammation, Chronic Active				1 [3.0]	3 [2.3]	1 [3.0]
Intestine Large, Colon	(52)	(52)	(52)	(52)	(52)	(48)
Parasite Metazoan	1				1	1
Artery, Inflammation, Chronic Active				1 [3.0]	3 [2.7]	1 [2.0]
Intestine Large, Rectum	(52)	(52)	(52)	(52)	(52)	(50)
Inflammation		1 [2.0]				
Parasite Metazoan	2	2	3	2	1	3
Artery, Inflammation, Chronic Active	1 [3.0]			2 [2.5]	5 [2.8]	1 [3.0]
Intestine Small, Duodenum	(52)	(52)	(52)	(52)	(52)	(48)
Inflammation					1 [3.0]	
Ulcer					1 [3.0]	
Intestine Small, Ileum	(52)	(51)	(50)	(52)	(52)	(47)
Artery, Inflammation, Chronic Active					1 [2.0]	
Intestine Small, Jejunum	(52)	(52)	(50)	(52)	(52)	(48)
Inflammation, Chronic Active					1 [3.0]	

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SPRAGUE-DAWLEY RATS FEMALE	0 UG/KG	100 UG/KG	220 UG/KG	460 UG/KG	1000 UG/KG	4600 UG/KG
Artery, Inflammation, Chronic Active					1 [2.0]	
Liver	(52)	(51)	(52)	(52)	(52)	(49)
Angiectasis		1 [3.0]	1 [2.0]	2 [2.5]		2 [2.0]
Basophilic Focus	11	5	8	4	8	1
Basophilic Focus, Multiple	4	2	3	2	1	
Cholangiofibrosis		2 [1.0]	2 [1.5]	3 [1.7]	2 [1.5]	22 [2.5]
Clear Cell Focus	6	3	4	5	2	
Clear Cell Focus, Multiple	9	7	3	9	3	
Degeneration, Cystic	1 [1.0]		1 [1.0]		1 [1.0]	2 [1.0]
Eosinophilic Focus	5	5	4	4	5	
Eosinophilic Focus, Multiple		3	5	11	20	41
Fatty Change, Focal	2 [1.0]	1 [1.0]	6 [1.0]	4 [1.0]	3 [1.7]	
Fatty Change, Diffuse	1 [1.0]	2 [1.5]	1 [1.0]	9 [1.7]	39 [2.0]	48 [2.5]
Hematopoietic Cell Proliferation	19 [1.0]	20 [1.0]	21 [1.0]	28 [1.0]	19 [1.1]	21 [1.0]
Hepatodiaphragmatic Nodule		1	2	1		
Hyperplasia, Nodular					12	43
Inflammation	21 [1.0]	30 [1.0]	35 [1.1]	36 [1.1]	43 [1.3]	44 [1.3]
Mixed Cell Focus	6	5	7	6	1	1
Mixed Cell Focus, Multiple	15	14	22	30	30	6
Necrosis	1 [1.0]	2 [3.0]	1 [1.0]	2 [2.5]	20 [1.5]	22 [1.7]
Pigmentation	1 [1.0]	5 [1.2]	12 [1.3]	41 [1.4]	50 [2.2]	48 [1.7]
Toxic Hepatopathy			3 [1.0]	14 [1.0]	33 [1.4]	46 [3.4]
Bile Duct, Cyst	2 [2.5]	3 [2.3]	5 [2.8]	6 [2.3]	6 [2.2]	21 [2.1]
Bile Duct, Fibrosis	2 [1.5]	1 [2.0]		3 [1.0]	2 [1.0]	
Bile Duct, Hyperplasia	5 [1.0]	6 [1.2]	7 [1.3]	8 [1.4]	21 [1.5]	40 [1.9]
Capsule, Inflammation	1 [2.0]					
Centrilobular, Degeneration	1 [2.0]	2 [1.5]	4 [1.3]	3 [1.0]	6 [1.7]	1 [3.0]
Hepatocyte, Hypertrophy		12 [1.3]	15 [1.6]	20 [1.6]	44 [2.0]	48 [3.5]
Hepatocyte, Multinucleated		1 [1.0]	3 [1.0]	21 [1.2]	40 [1.3]	43 [1.7]
Oval Cell, Hyperplasia		12 [1.1]	9 [1.2]	29 [1.2]	40 [1.6]	46 [3.0]
Mesentery	(2)	(1)	(3)	(3)	(9)	(9)
Hemorrhage				1 [3.0]		
Artery, Inflammation, Chronic Active	1 [3.0]			2 [3.0]	5 [3.4]	8 [3.0]
Artery, Thrombosis						1 [3.0]
Fat, Necrosis					1 [3.0]	1 [3.0]
Oral Mucosa	(1)	(0)	(1)	(1)	(1)	(3)
Gingival, Cyst						1 [3.0]
Gingival, Hyperplasia, Squamous				1 [3.0]	1 [3.0]	
Pancreas	(52)	(52)	(52)	(52)	(52)	(47)
Amyloid Deposition						

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SPRAGUE-DAWLEY RATS FEMALE	0 UG/KG	100 UG/KG	220 UG/KG	460 UG/KG	1000 UG/KG	4600 UG/KG
Degeneration	1 [2.0]					
Inflammation, Chronic Active		1 [2.0]	2 [1.0]	2 [1.0]	3 [1.0]	2 [2.0]
Acinus, Atrophy, Focal	4 [1.3]	2 [1.5]	3 [1.3]	4 [1.3]	3 [2.0]	1 [1.0]
Acinus, Atrophy, Diffuse						1 [3.0]
Acinus, Hyperplasia		2 [2.0]			1 [2.0]	
Acinus, Vacuolization Cytoplasmic					4 [1.0]	42 [2.2]
Artery, Inflammation, Chronic Active	1 [3.0]	2 [2.0]	1 [2.0]	7 [2.4]	7 [2.4]	12 [2.1]
Duct, Dilatation						3 [4.0]
Duct, Inflammation						2 [3.0]
Duct, Necrosis						1 [3.0]
Salivary Glands	(51)	(51)	(52)	(51)	(52)	(51)
Degeneration					1 [2.0]	
Stomach, Forestomach	(52)	(52)	(52)	(52)	(52)	(51)
Hyperplasia, Squamous		3 [2.7]			2 [1.5]	3 [1.7]
Inflammation	2 [2.5]	1 [2.0]				1 [2.0]
Ulcer	2 [2.5]					
Artery, Inflammation, Chronic Active					1 [2.0]	1 [3.0]
Stomach, Glandular	(52)	(52)	(52)	(52)	(52)	(51)
Cyst	1 [2.0]					
Erosion		1 [2.0]		1 [1.0]		
Mineralization					1 [1.0]	
Artery, Inflammation, Chronic Active						1 [2.0]
Artery, Mineralization		1 [1.0]				
Glands, Cyst			1 [1.0]			
Tongue	(0)	(0)	(0)	(0)	(0)	(0)
Degeneration						
Tooth	(10)	(5)	(5)	(5)	(4)	(7)
Peridontal Tissue, Inflammation	7 [2.1]	5 [2.2]	5 [2.6]	5 [2.0]	4 [2.5]	6 [1.8]
CARDIOVASCULAR SYSTEM						
Blood Vessel	(52)	(52)	(52)	(52)	(52)	(51)
Aorta, Mineralization		1 [1.0]				
Heart	(52)	(52)	(52)	(52)	(52)	(50)
Cardiomyopathy	13 [1.0]	19 [1.2]	14 [1.1]	16 [1.2]	19 [1.2]	16 [1.1]
Inflammation					1 [2.0]	1 [1.0]
Artery, Inflammation, Chronic Active					1 [2.0]	1 [2.0]
Artery, Mineralization		1 [1.0]	1 [1.0]	1 [1.0]		
Coronary Artery, Thrombosis		1 [2.0]				1 [2.0]

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SPRAGUE-DAWLEY RATS FEMALE	0 UG/KG	100 UG/KG	220 UG/KG	460 UG/KG	1000 UG/KG	4600 UG/KG
Endocardium, Hyperplasia		1 [2.0]			1 [1.0]	2 [1.5]
Endocardium, Infiltration Cellular		1 [1.0]				
Epicardium, Fibrosis						1 [3.0]
Epicardium, Inflammation		1 [3.0]				
Myocardium, Mineralization		1 [1.0]				
ENDOCRINE SYSTEM						
Adrenal Cortex	(52)	(52)	(52)	(51)	(52)	(49)
Angiectasis				1 [3.0]		
Atrophy	1 [2.0]			2 [2.0]	9 [2.3]	35 [2.5]
Degeneration, Cystic	9 [2.1]	8 [2.1]	9 [2.1]	12 [2.4]	6 [2.3]	8 [2.5]
Fibrosis						
Hematopoietic Cell Proliferation	1 [1.0]				1 [1.0]	
Hyperplasia	14 [2.1]	18 [2.2]	13 [2.3]	16 [2.4]	13 [2.0]	13 [2.5]
Hypertrophy	37 [1.7]	37 [1.8]	39 [1.8]	43 [1.7]	44 [1.6]	34 [1.7]
Inflammation			1 [2.0]			
Necrosis		1 [2.0]	2 [3.0]		3 [2.7]	
Vacuolization Cytoplasmic	10 [1.4]	12 [1.4]	13 [1.5]	12 [1.6]	12 [1.4]	18 [1.8]
Adrenal Medulla	(52)	(52)	(52)	(52)	(52)	(49)
Hyperplasia	11 [1.7]	12 [1.8]	14 [1.4]	16 [1.8]	10 [1.4]	1 [1.0]
Necrosis					1 [3.0]	
Islets, Pancreatic	(52)	(52)	(52)	(52)	(52)	(47)
Hyperplasia		1 [3.0]				
Parathyroid Gland	(47)	(46)	(47)	(50)	(50)	(47)
Hyperplasia		1 [3.0]				
Pituitary Gland	(52)	(52)	(52)	(52)	(52)	(52)
Angiectasis	1 [3.0]	1 [1.0]			1 [3.0]	
Cyst		1 [2.0]				
Vacuolization Cytoplasmic						
Pars Distalis, Cyst					1 [2.0]	
Pars Distalis, Hyperplasia	10 [2.0]	6 [2.2]	13 [2.1]	13 [1.9]	16 [2.5]	10 [2.0]
Thyroid Gland	(51)	(51)	(51)	(51)	(52)	(49)
Infiltration Cellular, Lymphocyte					1 [2.0]	1 [3.0]
Inflammation	1 [1.0]					
C-cell, Hyperplasia	10 [1.6]	14 [2.0]	10 [1.8]	6 [2.3]	12 [2.0]	11 [2.5]
Follicular Cell, Hyperplasia					1 [3.0]	
Follicular Cell, Hypertrophy	6 [1.5]	7 [1.9]	13 [1.6]	18 [1.4]	21 [1.8]	23 [2.0]

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SPRAGUE-DAWLEY RATS FEMALE	0 UG/KG	100 UG/KG	220 UG/KG	460 UG/KG	1000 UG/KG	4600 UG/KG
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Clitoral Gland	(52)	(52)	(51)	(52)	(51)	(49)
Hyperplasia, Squamous			1 [3.0]			
Inflammation	41 [1.6]	38 [1.8]	39 [1.7]	40 [1.5]	35 [1.2]	13 [1.2]
Duct, Cyst	26 [2.0]	39 [2.0]	31 [1.9]	35 [2.2]	37 [2.2]	30 [1.9]
Ovary	(52)	(52)	(52)	(52)	(52)	(48)
Cyst	8 [2.5]	10 [2.0]	13 [2.3]	14 [2.2]	14 [2.4]	7 [2.3]
Fibrosis				1 [3.0]		
Inflammation				2 [3.5]	1 [3.0]	2 [3.5]
Pigmentation				1 [3.0]		
Bilateral, Cyst			1 [4.0]			
Uterus	(52)	(52)	(52)	(52)	(52)	(49)
Adenomyosis				1 [2.0]		1 [4.0]
Cyst			1 [3.0]	1 [3.0]		1 [3.0]
Hemorrhage					1 [2.0]	1 [2.0]
Inflammation	4 [1.8]	6 [2.0]	6 [2.3]	8 [2.3]	8 [2.1]	4 [2.8]
Metaplasia, Squamous	29 [1.9]	26 [1.7]	27 [2.0]	34 [1.8]	35 [2.3]	5 [1.4]
Thrombosis	1 [1.0]			2 [2.5]	1 [3.0]	
Ulcer					2 [2.0]	
Artery, Inflammation, Chronic Active				1 [3.0]		
Cervix, Cyst					1 [2.0]	
Endometrium, Hyperplasia, Cystic	28 [1.6]	27 [1.7]	22 [1.5]	23 [2.0]	13 [1.6]	9 [2.0]
Epithelium, Hyperplasia					1 [2.0]	
Vagina	(7)	(0)	(0)	(1)	(1)	(0)
HEMATOPOIETIC SYSTEM						
Bone Marrow	(52)	(52)	(52)	(52)	(52)	(52)
Atrophy	4 [2.5]	1 [2.0]	1 [2.0]		1 [2.0]	
Hyperplasia	31 [3.0]	30 [2.8]	30 [3.1]	32 [2.7]	34 [2.6]	47 [3.0]
Myelofibrosis			1 [1.0]			
Necrosis						1 [3.0]
Lymph Node	(0)	(2)	(1)	(1)	(0)	(2)
Bronchial, Ectasia						1 [2.0]

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SPRAGUE-DAWLEY RATS FEMALE	0 UG/KG	100 UG/KG	220 UG/KG	460 UG/KG	1000 UG/KG	4600 UG/KG
Bronchial, Hemorrhage						1 [1.0]
Mediastinal, Hemorrhage		1 [2.0]				
Lymph Node, Mandibular	(51)	(51)	(52)	(51)	(52)	(51)
Atrophy					1 [3.0]	1 [4.0]
Hyperplasia, Lymphoid			1 [2.0]	1 [2.0]	1 [2.0]	1 [3.0]
Hyperplasia, Plasma Cell	24 [2.0]	34 [1.8]	36 [1.6]	33 [1.7]	30 [1.9]	19 [1.7]
Lymph Node, Mesenteric	(52)	(51)	(52)	(52)	(52)	(47)
Atrophy	1 [3.0]	1 [2.0]			1 [3.0]	
Ectasia						1 [2.0]
Hemorrhage					1 [3.0]	
Hyperplasia, Plasma Cell	1 [2.0]					
Spleen	(52)	(52)	(52)	(52)	(52)	(47)
Hematopoietic Cell Proliferation	42 [2.0]	39 [2.0]	39 [1.9]	39 [1.7]	32 [1.7]	34 [1.6]
Hemorrhage	1 [3.0]					
Necrosis	1 [3.0]			1 [2.0]		
Pigmentation	39 [1.8]	35 [1.7]	31 [1.6]	36 [1.5]	40 [2.0]	28 [1.6]
Capsule, Hemorrhage				1 [3.0]		
Lymphoid Follicle, Atrophy	3 [2.0]	4 [2.5]	2 [1.5]	2 [2.0]	3 [2.7]	3 [2.0]
Red Pulp, Atrophy		2 [3.0]	2 [1.5]	1 [2.0]	1 [2.0]	3 [2.0]
Thymus	(51)	(51)	(51)	(50)	(50)	(49)
Atrophy	41 [2.6]	38 [2.7]	44 [2.6]	44 [2.8]	46 [3.0]	44 [3.3]
Cyst		2 [3.0]	1 [2.0]			
Hemorrhage		1 [3.0]	1 [3.0]		1 [2.0]	3 [2.0]
Inflammation		1 [2.0]				
Artery, Inflammation, Chronic Active						2 [3.0]
INTEGUMENTARY SYSTEM						
Mammary Gland	(52)	(51)	(52)	(52)	(52)	(50)
Cyst	1 [2.0]	2 [3.0]		2 [3.0]		
Hyperplasia	4 [2.0]	5 [1.6]	4 [1.3]	5 [1.4]		1 [2.0]
Inflammation, Granulomatous			2 [3.0]	1 [3.0]		
Inflammation, Chronic Active		1 [3.0]				
Skin	(52)	(51)	(52)	(52)	(52)	(51)
Cyst Epithelial Inclusion			1	1		
Hyperkeratosis		1 [2.0]				
Hyperplasia, Squamous		2 [2.0]				
Inflammation		3 [2.7]				

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MUSCULOSKELETAL SYSTEM						
Bone	(52)	(52)	(52)	(52)	(52)	(52)
Fracture						
Skeletal Muscle	(0)	(1)	(0)	(0)	(1)	(0)
NERVOUS SYSTEM						
Brain	(52)	(52)	(52)	(52)	(52)	(52)
Angiectasis			1 [1.0]			
Gliosis	1 [2.0]			1 [3.0]		
Hemorrhage	3 [2.0]			1 [2.0]		
Hydrocephalus	1 [2.0]	2 [1.5]	1 [1.0]			
Necrosis	2 [3.0]					
Vacuolization Cytoplasmic		1 [3.0]				
Meninges, Inflammation				1 [2.0]		
Spinal Cord	(0)	(0)	(1)	(0)	(0)	(1)
Nerve, Degeneration						1 [3.0]
RESPIRATORY SYSTEM						
Lung	(51)	(52)	(52)	(52)	(52)	(50)
Congestion					1 [3.0]	
Hemorrhage				1 [2.0]		1 [2.0]
Inflammation	5 [1.0]	3 [1.7]	5 [1.4]	3 [1.0]	2 [3.0]	2 [1.5]
Metaplasia, Squamous	1 [1.0]			1 [1.0]	1 [1.0]	13 [2.2]
Pigmentation			1 [1.0]			1 [1.0]
Proteinosis	1 [1.0]					
Alveolar Epithelium, Hyperplasia	4 [1.5]	2 [1.0]				
Alveolar Epithelium, Metaplasia, Bronchiolar	6 [1.2]	7 [1.4]	14 [1.3]	18 [1.4]	24 [1.4]	40 [2.0]
Alveolus, Infiltration Cellular, Histiocyte	36 [1.8]	35 [1.7]	37 [1.6]	39 [1.6]	34 [1.6]	40 [1.5]
Artery, Mediastinum, Inflammation, Chronic Active						1 [2.0]
Serosa, Inflammation		1 [3.0]				
Nose	(52)	(52)	(52)	(52)	(52)	(52)
Cyst	1 [2.0]					
Inflammation	1 [2.0]	5 [2.0]	5 [1.8]	3 [1.7]	5 [1.6]	23 [1.7]
Glands, Cyst						

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Nasolacrimal Duct, Inflammation, Suppurative						1 [3.0]
Olfactory Epithelium, Degeneration	1 [2.0]	1 [3.0]				1 [2.0]
Olfactory Epithelium, Metaplasia						1 [2.0]
Respiratory Epithelium, Degeneration, Focal	1 [2.0]					
Respiratory Epithelium, Hyperplasia	5 [1.2]	5 [1.4]	7 [1.4]	7 [1.3]	14 [1.1]	27 [1.3]
Respiratory Epithelium, Metaplasia, Squamous						
Respiratory Epithelium, Necrosis				1 [2.0]		
Trachea	(51)	(52)	(52)	(52)	(52)	(52)
Inflammation						1 [1.0]
SPECIAL SENSES SYSTEM						
Eye	(52)	(52)	(52)	(52)	(52)	(52)
Cornea, Inflammation	1 [3.0]	1 [1.0]	1 [3.0]	1 [3.0]		
Retina, Atrophy	1 [2.0]				1 [2.0]	6 [2.0]
Harderian Gland	(52)	(52)	(52)	(52)	(52)	(52)
Hyperplasia		1 [1.0]	2 [2.0]			
Infiltration Cellular, Mononuclear Cell	7 [1.0]	10 [1.0]	3 [1.3]	10 [1.0]	4 [1.0]	13 [1.0]
Vacuolization Cytoplasmic					1 [2.0]	
URINARY SYSTEM						
Kidney	(52)	(52)	(52)	(52)	(52)	(50)
Accumulation, Hyaline Droplet	1 [2.0]		1 [1.0]			
Amyloid Deposition						
Calculus Micro Observation Only	3			2	1	
Cyst		2 [2.5]				1 [3.0]
Dilatation				1 [3.0]		
Inflammation					1 [2.0]	
Mineralization	25 [1.0]	28 [1.1]	30 [1.1]	18 [1.1]	22 [1.0]	25 [1.0]
Necrosis			1 [3.0]			
Nephropathy	42 [1.5]	40 [1.6]	46 [1.3]	44 [1.6]	44 [1.7]	46 [2.2]
Pigmentation	2 [1.0]	3 [1.0]	3 [1.3]	4 [1.3]	6 [1.0]	42 [2.2]
Artery, Inflammation, Chronic Active	1 [2.0]				1 [2.0]	
Capsule, Inflammation, Chronic Active					1 [2.0]	
Pelvis, Dilatation		1 [2.0]		1 [3.0]	1 [2.0]	

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

SPRAGUE-DAWLEY RATS FEMALE	0 UG/KG	100 UG/KG	220 UG/KG	460 UG/KG	1000 UG/KG	4600 UG/KG
Pelvis, Inflammation		1 [1.0]			2 [1.5]	2 [1.5]
Renal Tubule, Hyperplasia				1 [2.0]		
Transitional Epithelium, Hyperplasia					3 [1.7]	3 [2.3]
Ureter	(0)	(0)	(0)	(0)	(1)	(0)
Cyst						
Urinary Bladder	(52)	(52)	(52)	(52)	(52)	(50)
Hyperplasia		1 [2.0]				
Inflammation		1 [2.0]			1 [3.0]	

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SPRAGUE-DAWLEY RATS FEMALE **4600 UG/KG STOP**

Disposition Summary

Animals Initially in Study	50
Early Deaths	
Accidently Killed	1
Dosing Accident	
Moribund Sacrifice	18
Natural Death	6
Survivors	
Moribund Sacrifice	1
Terminal Sacrifice	24
Animals Examined Microscopically	50

ALIMENTARY SYSTEM

Esophagus	(50)
Ulcer	
Muscularis, Degeneration	
Muscularis, Inflammation	1 [2.0]
Intestine Large, Cecum	(49)
Degeneration, Fatty	
Inflammation	
Ulcer	
Artery, Inflammation, Chronic Active	2 [1.5]
Intestine Large, Colon	(49)
Parasite Metazoan	1
Artery, Inflammation, Chronic Active	2 [3.0]
Intestine Large, Rectum	(49)
Inflammation	
Parasite Metazoan	2
Artery, Inflammation, Chronic Active	5 [2.8]
Intestine Small, Duodenum	(49)
Inflammation	
Ulcer	
Intestine Small, Ileum	(49)
Artery, Inflammation, Chronic Active	
Intestine Small, Jejunum	(49)
Inflammation, Chronic Active	

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SPRAGUE-DAWLEY RATS FEMALE	4600 UG/KG STOP
Artery, Inflammation, Chronic Active	
Liver	(49)
Angiectasis	1 [3.0]
Basophilic Focus	5
Basophilic Focus, Multiple	4
Cholangiofibrosis	10 [2.0]
Clear Cell Focus	3
Clear Cell Focus, Multiple	10
Degeneration, Cystic	4 [2.3]
Eosinophilic Focus	7
Eosinophilic Focus, Multiple	13
Fatty Change, Focal	9 [1.2]
Fatty Change, Diffuse	8 [1.8]
Hematopoietic Cell Proliferation	31 [1.1]
Hepatodiaphragmatic Nodule	1
Hyperplasia, Nodular	4
Inflammation	47 [1.1]
Mixed Cell Focus	2
Mixed Cell Focus, Multiple	34
Necrosis	14 [1.8]
Pigmentation	43 [1.4]
Toxic Hepatopathy	36 [1.7]
Bile Duct, Cyst	14 [2.3]
Bile Duct, Fibrosis	7 [1.1]
Bile Duct, Hyperplasia	25 [1.9]
Capsule, Inflammation	
Centrilobular, Degeneration	2 [2.5]
Hepatocyte, Hypertrophy	30 [2.0]
Hepatocyte, Multinucleated	32 [1.3]
Oval Cell, Hyperplasia	29 [1.7]
Mesentery	(9)
Hemorrhage	
Artery, Inflammation, Chronic Active	5 [2.6]
Artery, Thrombosis	
Fat, Necrosis	
Oral Mucosa	(0)
Gingival, Cyst	
Gingival, Hyperplasia, Squamous	
Pancreas	(49)
Amyloid Deposition	1 [2.0]

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SPRAGUE-DAWLEY RATS FEMALE	4600 UG/KG STOP
Degeneration	
Inflammation, Chronic Active	4 [1.3]
Acinus, Atrophy, Focal	4 [2.0]
Acinus, Atrophy, Diffuse	
Acinus, Hyperplasia	
Acinus, Vacuolization Cytoplasmic	10 [1.0]
Artery, Inflammation, Chronic Active	5 [1.8]
Duct, Dilatation	
Duct, Inflammation	
Duct, Necrosis	
Salivary Glands	(50)
Degeneration	
Stomach, Forestomach	(49)
Hyperplasia, Squamous	5 [2.2]
Inflammation	4 [2.3]
Ulcer	3 [2.3]
Artery, Inflammation, Chronic Active	1 [3.0]
Stomach, Glandular	(49)
Cyst	
Erosion	2 [2.0]
Mineralization	1 [1.0]
Artery, Inflammation, Chronic Active	
Artery, Mineralization	
Glands, Cyst	
Tongue	(1)
Degeneration	1 [2.0]
Tooth	(7)
Peridontal Tissue, Inflammation	7 [2.0]
CARDIOVASCULAR SYSTEM	
Blood Vessel	(50)
Aorta, Mineralization	
Heart	(50)
Cardiomyopathy	19 [1.1]
Inflammation	
Artery, Inflammation, Chronic Active	
Artery, Mineralization	
Coronary Artery, Thrombosis	

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SPRAGUE-DAWLEY RATS FEMALE	4600 UG/KG STOP
Endocardium, Hyperplasia	
Endocardium, Infiltration Cellular	
Epicardium, Fibrosis	
Epicardium, Inflammation	
Myocardium, Mineralization	
ENDOCRINE SYSTEM	
Adrenal Cortex	(49)
Angiectasis	
Atrophy	4 [2.0]
Degeneration, Cystic	12 [2.0]
Fibrosis	1 [2.0]
Hematopoietic Cell Proliferation	
Hyperplasia	21 [2.3]
Hypertrophy	38 [1.7]
Inflammation	
Necrosis	4 [2.3]
Vacuolization Cytoplasmic	21 [1.4]
Adrenal Medulla	(49)
Hyperplasia	16 [1.5]
Necrosis	
Islets, Pancreatic	(49)
Hyperplasia	
Parathyroid Gland	(49)
Hyperplasia	
Pituitary Gland	(50)
Angiectasis	
Cyst	
Vacuolization Cytoplasmic	1 [2.0]
Pars Distalis, Cyst	
Pars Distalis, Hyperplasia	10 [2.2]
Thyroid Gland	(50)
Infiltration Cellular, Lymphocyte	
Inflammation	
C-cell, Hyperplasia	9 [1.8]
Follicular Cell, Hyperplasia	
Follicular Cell, Hypertrophy	12 [2.3]

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SPRAGUE-DAWLEY RATS FEMALE	**4600 UG/KG STOP**

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Clitoral Gland	(48)
Hyperplasia, Squamous	1 [2.0]
Inflammation	29 [1.3]
Duct, Cyst	28 [1.8]
Ovary	(49)
Cyst	10 [2.5]
Fibrosis	
Inflammation	1 [3.0]
Pigmentation	
Bilateral, Cyst	
Uterus	(49)
Adenomyosis	
Cyst	
Hemorrhage	2 [2.5]
Inflammation	10 [2.1]
Metaplasia, Squamous	23 [1.6]
Thrombosis	
Ulcer	
Artery, Inflammation, Chronic Active	
Cervix, Cyst	
Endometrium, Hyperplasia, Cystic	21 [2.7]
Epithelium, Hyperplasia	
Vagina	(0)

HEMATOPOIETIC SYSTEM

Bone Marrow	(50)
Atrophy	
Hyperplasia	43 [2.9]
Myelofibrosis	
Necrosis	
Lymph Node	(1)
Bronchial, Ectasia	

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SPRAGUE-DAWLEY RATS FEMALE	4600 UG/KG STOP
Bronchial, Hemorrhage	
Mediastinal, Hemorrhage	
Lymph Node, Mandibular	(50)
Atrophy	
Hyperplasia, Lymphoid	
Hyperplasia, Plasma Cell	22 [1.7]
Lymph Node, Mesenteric	(49)
Atrophy	1 [3.0]
Ectasia	
Hemorrhage	2 [2.0]
Hyperplasia, Plasma Cell	
Spleen	(49)
Hematopoietic Cell Proliferation	43 [2.1]
Hemorrhage	
Necrosis	
Pigmentation	31 [1.9]
Capsule, Hemorrhage	
Lymphoid Follicle, Atrophy	1 [2.0]
Red Pulp, Atrophy	
Thymus	(50)
Atrophy	46 [3.0]
Cyst	
Hemorrhage	
Inflammation	
Artery, Inflammation, Chronic Active	
INTEGUMENTARY SYSTEM	
Mammary Gland	(50)
Cyst	5 [2.8]
Hyperplasia	4 [1.5]
Inflammation, Granulomatous	4 [2.0]
Inflammation, Chronic Active	
Skin	(50)
Cyst Epithelial Inclusion	
Hyperkeratosis	
Hyperplasia, Squamous	
Inflammation	

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SPRAGUE-DAWLEY RATS FEMALE	**4600 UG/KG STOP**
MUSCULOSKELETAL SYSTEM	
Bone	(50)
Fracture	1
Skeletal Muscle	(2)
NERVOUS SYSTEM	
Brain	(50)
Angiectasis	
Gliosis	
Hemorrhage	1 [2.0]
Hydrocephalus	
Necrosis	
Vacuolization Cytoplasmic	
Meninges, Inflammation	
Spinal Cord	(0)
Nerve, Degeneration	
RESPIRATORY SYSTEM	
Lung	(50)
Congestion	
Hemorrhage	
Inflammation	2 [3.0]
Metaplasia, Squamous	
Pigmentation	
Proteinosis	
Alveolar Epithelium, Hyperplasia	3 [1.7]
Alveolar Epithelium, Metaplasia, Bronchiolar	32 [1.8]
Alveolus, Infiltration Cellular, Histiocyte	40 [1.7]
Artery, Mediastinum, Inflammation, Chronic Active	
Serosa, Inflammation	
Nose	(50)
Cyst	
Inflammation	8 [1.5]
Glands, Cyst	1 [2.0]

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SPRAGUE-DAWLEY RATS FEMALE	4600 UG/KG STOP
Nasolacrimal Duct, Inflammation, Suppurative	
Olfactory Epithelium, Degeneration	
Olfactory Epithelium, Metaplasia	1 [3.0]
Respiratory Epithelium, Degeneration, Focal	
Respiratory Epithelium, Hyperplasia	11 [1.2]
Respiratory Epithelium, Metaplasia, Squamous	1 [2.0]
Respiratory Epithelium, Necrosis	
Trachea	(50)
Inflammation	
SPECIAL SENSES SYSTEM	
Eye	(50)
Cornea, Inflammation	
Retina, Atrophy	
Harderian Gland	(50)
Hyperplasia	
Infiltration Cellular, Mononuclear Cell	11 [1.0]
Vacuolization Cytoplasmic	
URINARY SYSTEM	
Kidney	(49)
Accumulation, Hyaline Droplet	2 [2.5]
Amyloid Deposition	1 [2.0]
Calculus Micro Observation Only	
Cyst	1 [3.0]
Dilatation	
Inflammation	
Mineralization	28 [1.0]
Necrosis	
Nephropathy	48 [2.0]
Pigmentation	6 [1.2]
Artery, Inflammation, Chronic Active	1 [3.0]
Capsule, Inflammation, Chronic Active	
Pelvis, Dilatation	3 [2.7]

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SPRAGUE-DAWLEY RATS FEMALE	4600 UG/KG STOP
Pelvis, Inflammation	2 [1.0]
Renal Tubule, Hyperplasia	
Transitional Epithelium, Hyperplasia	
Ureter	(2)
Cyst	2 [2.0]
Urinary Bladder	(49)
Hyperplasia	
Inflammation	1 [2.0]

*** END OF REPORT ***

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