Species/Strain: RATS/SD

Route: GAVAGE

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

Time Report Requested: 12:05:16 First Dose M/F: NA / 03/26/04

Date Report Requested: 06/26/2008

Lab: BAT

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

Route: GAVAGE

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

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CAS Number: 31508-00-6

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Lab: BAT

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 Early Deaths Accidently Killed	80	80	80	80	80	80
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 52
Animais Examined Microscopically	32	32	32	JZ	32	32
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	4			1 [3.0]	3 [2.3]	1 [3.0]
Intestine Large, Colon	(52)	(52)	(52)	(52)	(52)	(48)
Parasite Metazoan	1			4 [0 0]	1	1
Artery, Inflammation, Chronic Active	(50)	(50)	(52)	1 [3.0]	3 [2.7]	1 [2.0]
Intestine Large, Rectum Inflammation	(52)	(52)	(52)	(52)	(52)	(50)
Parasite Metazoan	2	1 [2.0] 2	3	2	1	3
Artery, Inflammation, Chronic Active	1 [3.0]	۷	3	2 [2.5]	5 [2.8]	1 [3.0]
Intestine Small, Duodenum	(52)	(52)	(52)	(52)	(52)	(48)
Inflammation	(32)	(32)	(32)	(32)	1 [3.0]	(40)
Ulcer					1 [3.0]	
Intestine Small, Ileum	(52)	(51)	(50)	(52)	(52)	(47)
Artery, Inflammation, Chronic Active	(32)	(31)	(30)	(32)	1 [2.0]	(' ' /
Intestine Small, Jejunum	(52)	(52)	(50)	(52)	(52)	(48)
Inflammation, Chronic Active	ν- /	(- /	(/	ν- /	1 [3.0]	(- /

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)

Route: GAVAGE

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

Time Report Requested: 12:05:16

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First Dose M/F: NA / 03/26/04

Lab: BAT

		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	o	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	10 [1.0]	1	2	1	10 [111]	21[1.0]
Hyperplasia, Nodular			2	ı	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	1 [1.0]	0 [1.2]	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 [Z.0]	3 [1.0]	2 [1.0]	21 [2.1]
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]	0 [1.2]	7 [1.5]	0 [1.4]	21 [1.0]	40[1.9]
Centrilobular, Degeneration	1 [2.0]	2 [1.5]	4 [1.3]	3 [1.0]	6 [1.7]	1 [3.0]
Hepatocyte, Hypertrophy	1 [2.0]	12 [1.3]	15 [1.6]	20 [1.6]	44 [2.0]	48 [3.5]
Hepatocyte, Multinucleated		1 [1.0]	3 [1.0]	20 [1.0]	40 [1.3]	43 [1.7]
Oval Cell, Hyperplasia		12 [1.1]	9 [1.2]	29 [1.2]	40 [1.5] 40 [1.6]	46 [3.0]
Mesentery	(2)	(1)	(3)	(3)	40 [1.6] (9)	46 [3.0] (9)
Hemorrhage	(2)	(1)	(3)	1 [3.0]	(9)	(9)
Artery, Inflammation, Chronic Active	1 [3.0]			2 [3.0]	E [2 4]	8 [3.0]
Artery, Thrombosis	1 [3.0]			[3.0]	5 [3.4]	6 [3.0] 1 [3.0]
Fat, Necrosis					1 [2 0]	
Oral Mucosa	(1)	(0)	(1)	(1)	1 [3.0]	1 [3.0] (3)
	(1)	(0)	(1)	(1)	(1)	
Gingival, Hyperplacia, Squamous				1 [2 0]	1 [2 0]	1 [3.0]
Gingival, Hyperplasia, Squamous	(FO)	(FO)	(EO)	1 [3.0]	1 [3.0]	/ A 📆 \
Pancreas Amyloid Deposition	(52)	(52)	(52)	(52)	(52)	(47)

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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

Time Report Requested: 12:05:16 First Dose M/F: NA / 03/26/04

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Lab: BAT

Route: GAVAGE Species/Strain: RATS/SD

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

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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

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Date Report Requested: 06/26/2008

Lab: BAT

Route: GAVAGE Species/Strain: RATS/SD

SPRAGUE-DAWLEY RATS FEMALE	0 UG/KG	100 UG/KG	220 UG/KG	460 UG/KG	1000 UG/KG	4600 UG/KG
Endocardium, Hyperplasia Endocardium, Infiltration Cellular		1 [2.0] 1 [1.0]			1 [1.0]	2 [1.5]
Epicardium, Fibrosis		1 [1.0]				1 [3.0]
Epicardium, Inflammation		1 [3.0]				1 [0.0]
Myocardium, Mineralization		1 [1.0]				
ENDOCRINE SYSTEM						
Adrenal Cortex	(52)	(52)	(52)	(51)	(52)	(49)
Angiectasis	4 [0 0]			1 [3.0]	0 [0 0]	25 [2 5]
Atrophy Degeneration, Cystic	1 [2.0]	0 [0 4]	0 [0 4]	2 [2.0]	9 [2.3]	35 [2.5]
Fibrosis	9 [2.1]	8 [2.1]	9 [2.1]	12 [2.4]	6 [2.3]	8 [2.5]
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]		4	4	
Parathyroid Gland	(47)	(46)	(47)	(50)	(50)	(47)
Hyperplasia	(50)	1 [3.0]	(50)	(50)	(50)	(50)
Pituitary Gland	(52)	(52)	(52)	(52)	(52)	(52)
Angiectasis	1 [3.0]	1 [1.0]			1 [3.0]	
Cyst Vacuolization Cytoplasmic		1 [2.0]				
Pars Distalis, Cyst					1 [2.0]	
Pars Distalis, Cyst 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	(01)	(31)	(31)	(31)	1 [2.0]	1 [3.0]
Inflammation	1 [1.0]				. []	. [0.0]
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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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

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Lab: BAT

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	(-)	4-1	4-1	4.1	1 [2.0]	4-1
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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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

First Dose M/F: NA / 03/26/04

Lab: BAT

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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]	4 50 01
Ectasia					4 50 01	1 [2.0]
Hemorrhage	4 50 01				1 [3.0]	
Hyperplasia, Plasma Cell	1 [2.0]	(50)	(50)	(50)	(50)	(47)
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]			4 [0 0]		
Necrosis	1 [3.0]	05 [4 7]	04 [4 0]	1 [2.0]	40 [0 0]	00.14.01
Pigmentation	39 [1.8]	35 [1.7]	31 [1.6]	36 [1.5]	40 [2.0]	28 [1.6]
Capsule, Hemorrhage	2 (2 0)	4 [0 5]	2 [4 5]	1 [3.0]	2 [2 7]	0.00
Lymphoid Follicle, Atrophy Red Pulp, Atrophy	3 [2.0]	4 [2.5]	2 [1.5] 2 [1.5]	2 [2.0]	3 [2.7]	3 [2.0]
	(51)	2 [3.0] (51)	2 [1.5] (51)	1 [2.0] (50)	1 [2.0] (50)	3 [2.0] (49)
Thymus Atrophy	41 [2.6]	38 [2.7]	(51) 44 [2.6]	(50) 44 [2.8]	(50) 46 [3.0]	
Cyst	41 [2.0]	2 [3.0]	44 [2.6] 1 [2.0]	44 [2.0]	46 [3.0]	44 [3.3]
Hemorrhage		2 [3.0] 1 [3.0]	1 [2.0] 1 [3.0]		1 [2.0]	3 [2.0]
Inflammation		1 [3.0] 1 [2.0]	1 [3.0]		1 [2.0]	3 [2.0]
Artery, Inflammation, Chronic Active		1 [2.0]				2 [3.0]
Artery, irinamination, Chronic Active						2 [3.0]
NTEGUMENTARY SYSTEM						
Mammary Gland	(52)	(51)	(52)	(52)	(52)	(50)
Cyst	1 [2.0]	2 [3.0]	4.54.03	2 [3.0]		4 50 01
Hyperplasia	4 [2.0]	5 [1.6]	4 [1.3]	5 [1.4]		1 [2.0]
Inflammation, Granulomatous		4 [0 0]	2 [3.0]	1 [3.0]		
Inflammation, Chronic Active	(50)	1 [3.0]	(50)	(50)	(50)	(54)
Skin	(52)	(51)	(52)	(52)	(52)	(51)
Cyst Epithelial Inclusion		4 [0 0]	1	1		
Hyperkeratosis		1 [2.0]				
Hyperplasia, Squamous Inflammation		2 [2.0]				
miammation		3 [2.7]				

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Route: GAVAGE

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

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Lab: BAT

SPRAGUE-DAWLEY RATS FEMALE	0 UG/KG	100 UG/KG	220 UG/KG	460 UG/KG	1000 UG/KG	4600 UG/KG
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 Gliosis	1 [2.0]		1 [1.0]	1 [3.0]		
Hemorrhage	3 [2.0]			1 [3.0] 1 [2.0]		
Hydrocephalus	1 [2.0]	2 [1.5]	1 [1.0]	. [=.0]		
Necrosis	2 [3.0]					
Vacuolization Cytoplasmic		1 [3.0]		4 [0 0]		
Meninges, Inflammation Spinal Cord	(0)	(0)	(1)	1 [2.0] (0)	(0)	(1)
Nerve, Degeneration	(0)	(0)	(1)	(0)	(0)	1 [3.0]
RESPIRATORY SYSTEM						
Lung	(51)	(52)	(52)	(52)	(52)	(50)
Congestion				4 50 01	1 [3.0]	4 50 01
Hemorrhage Inflammation	5 [1.0]	3 [1.7]	5 [1.4]	1 [2.0] 3 [1.0]	2 [3.0]	1 [2.0] 2 [1.5]
Metaplasia, Squamous	3 [1.0] 1 [1.0]	3[1.7]	5 [1. 4]	3 [1.0] 1 [1.0]	2 [3.0] 1 [1.0]	2 [1.5] 13 [2.2]
Pigmentation	1 [1.0]		1 [1.0]	1 [1.0]	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 Artery, Mediastinum, Inflammation, Chronic Active	36 [1.8]	35 [1.7]	37 [1.6]	39 [1.6]	34 [1.6]	40 [1.5] 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						

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)

Route: GAVAGE

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

Time Report Requested: 12:05:16 First Dose M/F: NA / 03/26/04

Date Report Requested: 06/26/2008

Lab: BAT

SPRAGUE-DAWLEY RATS FEMALE	0 UG/KG	100 UG/KG	220 UG/KG	460 UG/KG	1000 UG/KG	4600 UG/KG
Nasolacrimal Duct, Inflammation,						1 [3.0]
Suppurative Olfactory Epithelium, Degeneration Olfactory Epithelium, Metaplasia	1 [2.0]	1 [3.0]				1 [2.0] 1 [2.0]
Respiratory Epithelium, Degeneration, Focal	1 [2.0]					
Respiratory Epithelium, Hyperplasia Respiratory Epithelium, Metaplasia, Squamous	5 [1.2]	5 [1.4]	7 [1.4]	7 [1.3]	14 [1.1]	27 [1.3]
Respiratory Epithelium, Necrosis Trachea Inflammation	(51)	(52)	(52)	1 [2.0] (52)	(52)	(52) 1 [1.0]
SPECIAL SENSES SYSTEM						
Eye Cornea, Inflammation	(52) 1 [3.0]	(52) 1 [1.0]	(52) 1 [3.0]	(52) 1 [3.0]	(52)	(52)
Retina, Atrophy Harderian Gland	1 [2.0] (52)	(52)	(52)	(52)	1 [2.0] (52)	6 [2.0] (52)
Hyperplasia Infiltration Cellular, Mononuclear Cell Vacuolization Cytoplasmic	7 [1.0]	1 [1.0] 10 [1.0]	2 [2.0] 3 [1.3]	10 [1.0]	4 [1.0] 1 [2.0]	13 [1.0]
JRINARY SYSTEM						
Kidney Accumulation, Hyaline Droplet Amyloid Deposition	(52) 1 [2.0]	(52)	(52) 1 [1.0]	(52)	(52)	(50)
Calculus Micro Observation Only Cyst	3	2 [2.5]		2	1	1 [3.0]
Dilatation Inflammation		ر2.5]		1 [3.0]	1 [2.0]	1 [3.0]
Mineralization Necrosis	25 [1.0]	28 [1.1]	30 [1.1] 1 [3.0]	18 [1.1]	22 [1.0]	25 [1.0]
Nephropathy Pigmentation Artery, Inflammation, Chronic Active	42 [1.5] 2 [1.0] 1 [2.0]	40 [1.6] 3 [1.0]	46 [1.3] 3 [1.3]	44 [1.6] 4 [1.3]	44 [1.7] 6 [1.0] 1 [2.0]	46 [2.2] 42 [2.2]
Capsule, Inflammation, Chronic Active Pelvis, Dilatation		1 [2.0]		1 [3.0]	1 [2.0] 1 [2.0]	

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)

Species/Strain: RATS/SD

Route: GAVAGE

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

Time Report Requested: 12:05:16

Date Report Requested: 06/26/2008

First Dose M/F: NA / 03/26/04

Lab: BAT

SPRAGUE-DAWLEY RATS FEMALE	0 UG/KG	100 UG/KG	220 UG/KG	460 UG/KG	1000 UG/KG	4600 UG/KG
Pelvis, Inflammation Renal Tubule, Hyperplasia		1 [1.0]		1 [2.0]	2 [1.5]	2 [1.5]
Transitional Epithelium, Hyperplasia				1 [2.0]	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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Route: GAVAGE

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

Date Report Requested: 06/26/2008

Time Report Requested: 12:05:16 First Dose M/F: NA / 03/26/04

Lab: BAT

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 Ulcer	(50)
Muscularis, Degeneration	
Muscularis, Inflammation Intestine Large, Cecum	1 [2.0] (49)
Degeneration, Fatty	(49)
Inflammation Ulcer	
Artery, Inflammation, Chronic Active	2 [1.5]
Intestine Large, Colon Parasite Metazoan	(49) 1
Artery, Inflammation, Chronic Active	2 [3.0]
Intestine Large, Rectum Inflammation	(49)
Parasite Metazoan	2
Artery, Inflammation, Chronic Active Intestine Small, Duodenum	5 [2.8] (49)
Inflammation	(10)
Ulcer Intestine Small, Ileum	(49)
Artery, Inflammation, Chronic Active	
Intestine Small, Jejunum Inflammation, Chronic Active	(49)

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

Test Type: CHRONIC

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

Time Report Requested: 12:05:16

Date Report Requested: 06/26/2008

First Dose M/F: NA / 03/26/04 **Lab:** BAT

Route: GAVAGE Species/Strain: RATS/SD

SPRAGUE-DAWLEY RATS FEMALE	4600 UG/KG STOP
Artery, Inflammation, Chronic Active	
Liver	(49)
Angiectasis	1 [3.0]
Basophilic Focus	1 [3.0] 5
Basophilic Focus, Multiple	4
Cholangiofibrosis	10 [2.0]
Clear Cell Focus	10 [2.0] 3
Clear Cell Focus, Multiple	3 10
	• •
Degeneration, Cystic	4 [2.3] 7
Eosinophilic Focus 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]
	= =

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)

Test Type: CHRONIC

Species/Strain: RATS/SD

Route: GAVAGE

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

Time Report Requested: 12:05:16

First Dose M/F: NA / 03/26/04

Date Report Requested: 06/26/2008

Lab: BAT

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	4>	
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	2 [2 0]	
Erosion Mineralization	2 [2.0]	
Artery, Inflammation, Chronic Active	1 [1.0]	
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

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)

Test Type: CHRONIC

Species/Strain: RATS/SD

Route: GAVAGE

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

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Time Report Requested: 12:05:16 First Dose M/F: NA / 03/26/04

Date Report Requested: 06/26/2008

Lab: BAT

SPRAGUE-DAWLEY RATS FEMALE

4600 UG/KG STOP

Endocardium, Hyperplasia Endocardium, Infiltration Cellular Epicardium, Fibrosis Epicardium, Inflammation Myocardium, Mineralization

ENDOCRINE SYSTEM

Adrenal Cortex Angiectasis	(49)
Atrophy	4 [2.0]
Degeneration, Cystic	12 [2.0]
Fibrosis	1 [2.0]
Hematopoietic Cell Proliferation	0.4.10.03
Hyperplasia	21 [2.3]
Hypertrophy Inflammation	38 [1.7]
Necrosis	4 [2 2]
Vacuolization Cytoplasmic	4 [2.3] 21 [1.4]
Adrenal Medulla	(49)
Hyperplasia	16 [1.5]
Necrosis	
Islets, Pancreatic	(49)
Hyperplasia	
Parathyroid Gland	(49)
Hyperplasia	(50)
Pituitary Gland	(50)
Angiectasis	
Cyst Vacuolization Cytoplasmic	1 [2.0]
Pars Distalis, Cyst	1 [2.0]
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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b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Species/Strain: RATS/SD

Route: GAVAGE

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

Time Report Requested: 12:05:16

First Dose M/F: NA / 03/26/04

Date Report Requested: 06/26/2008

Lab: BAT

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	(5)	
Vagina	(0)	
HEMATOPOIETIC SYSTEM		
Bone Marrow	(50)	
Atrophy		
Hyperplasia	43 [2.9]	
Myelofibrosis		
Necrosis		
Lymph Node	(1)	
Dranabial Catacia		

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

Bronchial, Ectasia

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

Route: GAVAGE

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

Time Report Requested: 12:05:16 First Dose M/F: NA / 03/26/04

Date Report Requested: 06/26/2008

Lab: BAT

SPRAGUE-DAWLEY RATS FEMALE	4600 UG/KG STOP
Bronchial, Hemorrhage	
Mediastinal, Hemorrhage	(50)
Lymph Node, Mandibular Atrophy	(50)
Hyperplasia, Lymphoid	
Hyperplasia, Plasma Cell	22 [1.7]
Lymph Node, Mesenteric	(49)
Atrophy Ectasia	1 [3.0]
Hemorrhage	2 [2.0]
Hyperplasia, Plasma Cell	2 [2.0]
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	.0 [0.0]
Hemorrhage	
Inflammation	
Artery, Inflammation, Chronic Active	
INTEGUMENTARY SYSTEM	
Mammary Gland	(50)
Cyst	5 [2.8]
Hyperplasia	4 [1.5]
Inflammation, Granulomatous Inflammation, Chronic Active	4 [2.0]
Skin	(50)
Cyst Epithelial Inclusion	,
Hyperkeratosis	
Hyperplasia, Squamous Inflammation	
a.iiiaiiaii	

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Test Type: CHRONIC

Route: GAVAGE

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

Lab: BAT

Date Report Requested: 06/26/2008

Time Report Requested: 12:05:16

First Dose M/F: NA / 03/26/04

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

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Test Type: CHRONIC

Species/Strain: RATS/SD

Route: GAVAGE

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

Time Report Requested: 12:05:16

Date Report Requested: 06/26/2008

First Dose M/F: NA / 03/26/04

Lab: BAT

SPRAGUE-DAWLEY RATS FEMALE	4600 UG/KG STOP
Nasolacrimal Duct, Inflammation,	
Suppurative	
Olfactory Epithelium, Degeneration Olfactory Epithelium, Metaplasia	1 [3.0]
Respiratory Epithelium, Degeneration,	1 [3.0]
Focal	
Respiratory Epithelium, Hyperplasia	11 [1.2]
Respiratory Epithelium, Metaplasia,	1 [2.0]
Squamous	
Respiratory Epithelium, Necrosis Trachea	(50)
Inflammation	(50)
SPECIAL SENSES SYSTEM	
Eye	(50)
Cornea, Inflammation	, ,
Retina, Atrophy	4
Harderian Gland	(50)
Hyperplasia Infiltration Cellular, Mononuclear Cell	11 [1.0]
Vacuolization Cytoplasmic	11[1.0]
URINARY SYSTEM	
Kidney	(49)
Accumulation, Hyaline Droplet	2 [2.5]
Amyloid Deposition	1 [2.0]
Calculus Micro Observation Only Cyst	1 [2 0]
Dilatation	1 [3.0]
Inflammation	
Mineralization	28 [1.0]
Necrosis	
Nephropathy	48 [2.0]
Pigmentation	6 [1.2]
Artery, Inflammation, Chronic Active Capsule, Inflammation, Chronic Active	1 [3.0]
Pelvis, Dilatation	3 [2.7]
	o [=···]

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Test Type: CHRONIC

Route: GAVAGE

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

Species/Strain: RATS/SD

Time Report Requested: 12:05:16

Date Report Requested: 06/26/2008

First Dose M/F: NA / 03/26/04

Lab: BAT

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

*** END OF REPORT ***

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