

**TDMSE No.** 99013 - 05

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

**Date Report Requested:** 09/23/2010

**Test Type:** Chronic PN

Styrene-acrylonitrile trimer

**Time Report Requested:** 12:12:35

**Route:** DOSED FEED

**CAS Number:** SANTRIMER2

**First Dose M/F:** 05/12/05 / 05/13/05

**Species/Strain:** RATS/F 344/N

**Lab:** BAT

F2\_R2

**C Number:** C99013  
**Lock Date:** 03/27/2008  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 2.2.0

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Lab: BAT

FISCHER 344 RATS MALE	0 PPM	400 PPM	800 PPM	1600 PPM
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**Disposition Summary**

Animals Initially In Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	9	8	7	4
Natural Death	5	3	4	2
Survivors				
Terminal Sacrifice	36	39	39	44
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(50)	(50)	(50)	(50)
Inflammation	1 [2.0]			
Intestine Large, Cecum	(49)	(50)	(50)	(50)
Inflammation	1 [3.0]			
Necrosis	1 [1.0]			
Intestine Large, Colon	(50)	(50)	(50)	(50)
Mineralization	1 [2.0]			
Parasite Metazoan	9	9	2	5
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Inflammation	1 [4.0]			
Intestine Small, Duodenum	(50)	(50)	(50)	(50)
Intestine Small, Ileum	(50)	(50)	(50)	(50)
Intestine Small, Jejunum	(50)	(50)	(50)	(50)
Liver	(50)	(50)	(50)	(50)
Angiectasis	1 [2.0]	5 [1.0]	1 [1.0]	9 [1.1]
Basophilic Focus	27	29	25	34
Clear Cell Focus	25	25	27	33
Degeneration, Cystic	7 [1.3]	9 [1.3]	11 [1.2]	9 [1.1]
Eosinophilic Focus	17	19	22	33
Fatty Change, Diffuse	1 [2.0]	6 [1.5]	3 [2.3]	
Fibrosis	1 [1.0]	1 [1.0]	1 [1.0]	1 [1.0]
Hematopoietic Cell Proliferation	2 [1.0]	3 [1.0]	4 [1.0]	1 [1.0]
Hepatodiaphragmatic Nodule	4	5	3	2
Inflammation, Chronic Active	34 [1.0]	40 [1.1]	38 [1.1]	43 [1.0]

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)

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Lab: BAT

FISCHER 344 RATS MALE	0 PPM	400 PPM	800 PPM	1600 PPM
Mixed Cell Focus	6	19	12	20
Necrosis	3 [1.7]	1 [2.0]	5 [1.6]	4 [1.5]
Pigmentation, Hemosiderin	3 [1.3]		1 [1.0]	
Regeneration		1 [2.0]		
Bile Duct, Cyst	1 [1.0]			
Bile Duct, Hyperplasia	41 [1.3]	46 [1.3]	42 [1.4]	48 [1.3]
Bile Duct, Inflammation, Suppurative				1 [2.0]
Mesentery	(3)	(5)	(7)	(4)
Fat, Necrosis	3 [2.0]	4 [1.3]	5 [1.6]	4 [1.8]
Oral Mucosa	(1)	(0)	(0)	(1)
Hyperplasia				1 [4.0]
Inflammation, Chronic Active				1 [4.0]
Pharyngeal, Hyperplasia, Squamous	1 [3.0]			
Pancreas	(50)	(50)	(50)	(50)
Inflammation	2 [2.5]		1 [3.0]	
Necrosis			1 [3.0]	
Acinus, Atrophy	19 [1.2]	33 [1.4]	26 [1.4]	28 [1.4]
Acinus, Hyperplasia		2 [2.5]	1 [1.0]	
Duct, Inflammation			1 [2.0]	
Salivary Glands	(50)	(49)	(50)	(50)
Atrophy		1 [2.0]		
Fibrosis			1 [1.0]	
Duct, Cyst				1 [4.0]
Stomach, Forestomach	(50)	(50)	(50)	(50)
Dysplasia	2 [1.5]			1 [1.0]
Erosion		1 [1.0]		
Fibrosis				1 [2.0]
Inflammation	6 [2.3]	4 [2.3]	2 [2.0]	2 [1.5]
Mineralization	1 [2.0]			
Ulcer	6 [3.2]	2 [2.0]	2 [2.5]	1 [3.0]
Epithelium, Hyperplasia	7 [2.1]	3 [2.0]	2 [1.5]	2 [2.0]
Stomach, Glandular	(50)	(50)	(50)	(50)
Erosion	1 [1.0]	1 [2.0]	1 [3.0]	1 [2.0]
Inflammation	1 [1.0]	1 [2.0]	3 [1.0]	
Mineralization	1 [4.0]			
Ulcer	4 [2.3]			

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FISCHER 344 RATS MALE	0 PPM	400 PPM	800 PPM	1600 PPM
Tooth	(4)	(4)	(1)	(5)
Malformation	3 [1.0]	4 [1.0]	1 [1.0]	5 [1.0]
Pulp, Inflammation	1 [3.0]			

## CARDIOVASCULAR SYSTEM

Blood Vessel	(50)	(50)	(50)	(50)
Inflammation			2 [1.0]	
Mineralization	1 [3.0]			
Thrombosis		1 [2.0]		
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	50 [2.3]	49 [2.3]	48 [2.3]	49 [2.1]
Infiltration Cellular		1 [3.0]		
Artery, Hypertrophy		1 [3.0]		
Atrium, Thrombosis	1 [2.0]		1 [1.0]	1 [2.0]
Epicardium, Inflammation			1 [1.0]	

## ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(50)	(50)	(50)
Degeneration, Cystic			1 [1.0]	2 [1.0]
Hyperplasia	1 [1.0]	2 [1.0]	4 [1.0]	1 [1.0]
Hypertrophy	2 [1.5]	1 [1.0]	2 [1.0]	
Necrosis	2 [1.5]		2 [2.0]	
Vacuolization Cytoplasmic	2 [3.0]	3 [3.0]	2 [3.0]	1 [3.0]
Adrenal Medulla	(50)	(50)	(50)	(50)
Hyperplasia	2 [1.0]	11 [3.0]	3 [1.0]	3 [2.7]
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia	1 [3.0]	1 [2.0]	1 [3.0]	
Parathyroid Gland	(35)	(49)	(49)	(37)
Hyperplasia	2 [2.0]			
Pituitary Gland	(50)	(50)	(50)	(50)
Pars Distalis, Angiectasis		1 [2.0]		
Pars Distalis, Hyperplasia	17 [1.8]	25 [1.7]	13 [1.6]	13 [1.4]
Thyroid Gland	(50)	(50)	(50)	(50)

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C-cell, Hyperplasia	14 [1.6]	14 [1.5]	13 [1.4]	14 [1.2]
Follicle, Cyst	1 [1.0]			1 [1.0]
Follicular Cell, Hypertrophy		1 [1.0]		

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Epididymis	(50)	(50)	(50)	(50)
Inflammation		3 [1.7]		
Preputial Gland	(50)	(50)	(50)	(50)
Hyperplasia		1 [1.0]		1 [2.0]
Inflammation	1 [3.0]		1 [3.0]	1 [3.0]
Duct, Ectasia				1 [4.0]
Prostate	(50)	(50)	(50)	(50)
Inflammation	37 [1.5]	29 [1.4]	22 [1.8]	18 [1.1]
Epithelium, Hyperplasia	9 [1.6]	3 [1.7]	9 [1.4]	6 [1.0]
Seminal Vesicle	(50)	(50)	(50)	(50)
Testes	(50)	(50)	(50)	(50)
Germinal Epithelium, Degeneration	5 [3.4]	3 [3.3]	4 [2.8]	
Interstitial Cell, Hyperplasia	12 [2.8]	4 [2.0]	8 [2.5]	
Rete Testes, Cyst		1 [4.0]		

## HEMATOPOIETIC SYSTEM

Bone Marrow	(50)	(50)	(50)	(50)
Fibrosis	1 [1.0]			
Hyperplasia	24 [1.9]	24 [1.8]	24 [1.8]	37 [1.6]
Inflammation		1 [1.0]		
Inflammation, Granulomatous				3 [2.0]
Myelofibrosis	1 [3.0]	1 [2.0]		
Necrosis			2 [1.5]	

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Lymph Node	(7)	(5)	(3)	(3)
Deep Cervical, Ectasia	1 [2.0]		1 [2.0]	
Mediastinal, Infiltration Cellular, Plasma Cell		1 [2.0]	1 [2.0]	
Pancreatic, Inflammation	1 [2.0]			1 [1.0]
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Atrophy				1 [3.0]
Ectasia	1 [2.0]	1 [3.0]		
Hyperplasia, Histiocytic	1 [1.0]			
Spleen	(50)	(50)	(50)	(50)
Accessory Spleen				1
Hematopoietic Cell Proliferation	4 [1.8]	6 [2.0]	4 [2.8]	3 [2.0]
Hyperplasia, Histiocytic	1 [4.0]	1 [2.0]	6 [2.2]	2 [3.0]
Hyperplasia, Lymphoid	2 [2.5]	1 [2.0]	4 [2.3]	3 [2.0]
Necrosis	1 [3.0]		1 [2.0]	
Pigmentation, Hemosiderin	8 [1.1]	4 [1.0]	4 [1.3]	5 [1.0]
Lymphoid Follicle, Atrophy	3 [2.7]	1 [4.0]	1 [2.0]	1 [4.0]
Thymus	(48)	(50)	(50)	(50)
Atrophy	44 [3.1]	46 [3.2]	47 [3.3]	49 [3.2]
Hyperplasia, Lymphoid		1 [2.0]		
Necrosis	1 [4.0]		1 [2.0]	1 [3.0]

## INTEGUMENTARY SYSTEM

Mammary Gland	(50)	(50)	(50)	(50)
Fibrosis	2 [2.0]	1 [2.0]		
Hyperplasia	1 [1.0]	1 [2.0]	3 [1.7]	3 [1.3]
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion	1		1	2
Cyst Epithelial Inclusion, Multifocal				1
Fibrosis	1 [2.0]			
Inflammation	1 [2.0]	1 [3.0]		
Ulcer	2 [3.0]	1 [1.0]		
Epidermis, Hyperkeratosis				1 [3.0]

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## MUSCULOSKELETAL SYSTEM

Bone	(50)	(50)	(50)	(50)
Hypertrophy		1 [2.0]		
Osteopetrosis	1 [2.0]			
Skeletal Muscle	(1)	(1)	(0)	(0)

## NERVOUS SYSTEM

Brain	(50)	(50)	(50)	(50)
Demyelination	2 [1.0]			
Gliosis, Focal				1 [2.0]
Hemorrhage	5 [1.0]	3 [2.7]	3 [2.3]	1 [3.0]
Infiltration Cellular, Mononuclear Cell				1 [1.0]
Mineralization	1 [1.0]	1 [1.0]		
Necrosis		1 [2.0]	1 [1.0]	
Spinal Cord	(1)	(0)	(0)	(1)
Meninges, Infiltration Cellular, Mononuclear Cell	1 [1.0]			

## RESPIRATORY SYSTEM

Lung	(50)	(50)	(50)	(50)
Atelectasis			1	
Fibrosis		1 [2.0]		1 [1.0]
Inflammation, Chronic Active	7 [1.6]	4 [1.3]	4 [1.0]	2 [2.0]
Mineralization	1 [3.0]			
Thrombosis		1 [1.0]		
Alveolar Epithelium, Hyperplasia	13 [1.3]	11 [1.3]	5 [1.8]	7 [1.4]
Alveolar Epithelium, Metaplasia, Squamous				1 [1.0]
Alveolus, Infiltration Cellular, Histiocyte	2 [1.5]	5 [1.6]	4 [1.0]	2 [1.0]
Nose	(50)	(50)	(50)	(50)
Foreign Body		2		
Inflammation	24 [1.3]	19 [1.9]	20 [1.4]	19 [1.4]
Olfactory Epithelium, Metaplasia				2 [1.5]

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Olfactory Epithelium, Necrosis		1 [2.0]		
Respiratory Epithelium, Hyperplasia	1 [1.0]	1 [3.0]	1 [2.0]	5 [1.4]
Respiratory Epithelium, Necrosis		1 [3.0]		

## SPECIAL SENSES SYSTEM

Eye	(50)	(50)	(50)	(50)
Cornea, Inflammation	1 [1.0]			
Lens, Cataract	1 [2.0]	2 [3.5]	1 [4.0]	
Retina, Degeneration	3 [2.0]	3 [3.0]	1 [4.0]	2 [2.5]
Retina, Gliosis	2 [2.0]			
Harderian Gland	(50)	(50)	(50)	(50)
Degeneration				1 [3.0]
Hyperplasia	1 [2.0]	2 [1.5]		
Zymbal's Gland	(1)	(0)	(1)	(0)

## URINARY SYSTEM

Kidney	(50)	(50)	(50)	(50)
Accumulation, Hyaline Droplet	3 [1.3]	1 [4.0]		
Infarct	1 [1.0]	2 [1.0]		1 [1.0]
Mineralization	1 [4.0]			
Nephropathy	47 [2.2]	50 [2.4]	48 [2.4]	49 [2.2]
Cortex, Cyst			1 [2.0]	
Papilla, Necrosis	1 [3.0]			
Pelvis, Dilatation	1 [4.0]			
Pelvis, Inflammation		1 [2.0]	2 [1.5]	
Pelvis, Transitional Epithelium, Hyperplasia	1 [1.0]		1 [1.0]	1 [1.0]
Renal Tubule, Dilatation	1 [3.0]			
Renal Tubule, Necrosis	1 [2.0]			
Urinary Bladder	(50)	(50)	(50)	(50)
Inflammation			2 [2.0]	
Necrosis			1 [3.0]	
Transitional Epithelium, Hyperplasia		1 [1.0]		

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Lab: BAT

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FISCHER 344 RATS MALE

0 PPM

400 PPM

800 PPM

1600 PPM

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

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FISCHER 344 RATS FEMALE	0 PPM	400 PPM	800 PPM	1600 PPM
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**Disposition Summary**

Animals Initially In Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	4	10	6	3
Natural Death	5	2	7	1
Survivors				
Terminal Sacrifice	41	38	37	46
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Intestine Large, Cecum	(50)	(50)	(50)	(50)
Hemorrhage				1 [3.0]
Intestine Large, Colon	(50)	(50)	(50)	(50)
Parasite Metazoan	5	5	1	4
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Intestine Small, Ileum	(50)	(50)	(50)	(50)
Liver	(50)	(50)	(50)	(50)
Angiectasis	5 [1.8]	5 [1.4]	3 [1.0]	5 [2.2]
Basophilic Focus	45	46	43	45
Clear Cell Focus	9	5	9	6
Degeneration, Cystic		1 [2.0]	1 [1.0]	
Eosinophilic Focus	23	31	30	29
Fatty Change, Diffuse	3 [2.0]	4 [2.0]	3 [2.0]	1 [4.0]
Fibrosis	1 [1.0]			
Hematopoietic Cell Proliferation	3 [1.0]	3 [1.0]	2 [1.0]	
Hepatodiaphragmatic Nodule	4	5	5	11
Inflammation, Chronic Active	41 [1.0]	45 [1.0]	43 [1.0]	47 [1.0]
Mixed Cell Focus	4	8	7	13
Necrosis	2 [2.0]	1 [1.0]	3 [1.3]	1 [2.0]
Tension Lipidosis		1 [1.0]	1 [2.0]	
Bile Duct, Cyst				3 [2.0]
Bile Duct, Hyperplasia	12 [1.1]	19 [1.1]	20 [1.1]	20 [1.1]
Oval Cell, Hyperplasia	1 [2.0]			1 [1.0]
Mesentery	(11)	(7)	(11)	(4)

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Fat, Necrosis	11 [1.8]	6 [1.8]	11 [1.5]	4 [1.5]
Oral Mucosa	(2)	(0)	(0)	(1)
Cyst	1 [2.0]			
Hyperplasia				1 [4.0]
Inflammation	1 [2.0]			
Pancreas	(50)	(50)	(50)	(50)
Inflammation		1 [2.0]		
Metaplasia, Hepatocyte		1 [1.0]	1 [1.0]	
Acinus, Atrophy	16 [1.1]	11 [1.3]	17 [1.2]	23 [1.2]
Acinus, Hyperplasia	1 [1.0]			
Duct, Cyst			1 [3.0]	
Salivary Glands	(50)	(50)	(50)	(50)
Atrophy	1 [2.0]			
Stomach, Forestomach	(50)	(50)	(50)	(50)
Inflammation	3 [3.0]	2 [3.0]	3 [3.7]	1 [1.0]
Ulcer	2 [2.5]	1 [3.0]	3 [3.3]	
Epithelium, Hyperplasia	3 [2.7]	4 [1.8]	3 [2.0]	
Stomach, Glandular	(50)	(50)	(50)	(50)
Erosion	1 [2.0]			
Inflammation	1 [2.0]			
Ulcer		1 [1.0]		
Tongue	(0)	(0)	(1)	(0)
Inflammation			1 [2.0]	
Tooth	(5)	(5)	(3)	(1)
Malformation	5 [1.0]	5 [1.0]	3 [1.0]	1 [1.0]

## CARDIOVASCULAR SYSTEM

Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	47 [1.7]	49 [1.8]	46 [1.8]	48 [1.6]

## ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(50)	(50)	(50)
Atrophy			1 [3.0]	1 [3.0]

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Degeneration, Cystic	6 [1.2]	9 [1.6]	1 [2.0]	1 [1.0]
Hyperplasia	14 [1.2]	9 [1.2]	3 [1.0]	3 [1.7]
Hypertrophy	1 [1.0]		1 [1.0]	3 [2.0]
Necrosis		1 [1.0]		1 [2.0]
Thrombosis		1 [1.0]		
Vacuolization Cytoplasmic	1 [3.0]	3 [2.0]	1 [3.0]	2 [3.0]
Adrenal Medulla	(50)	(50)	(50)	(50)
Hyperplasia	3 [1.3]		1 [2.0]	1 [1.0]
Necrosis	1 [1.0]			
Islets, Pancreatic	(50)	(50)	(50)	(50)
Pituitary Gland	(50)	(50)	(50)	(50)
Cyst	1 [1.0]	2 [1.0]	3 [1.7]	4 [2.0]
Pars Distalis, Angiectasis	1 [2.0]	1 [4.0]		1 [2.0]
Pars Distalis, Hyperplasia	24 [2.0]	21 [2.2]	21 [2.4]	24 [1.9]
Thyroid Gland	(50)	(50)	(50)	(50)
C-cell, Hyperplasia	25 [1.6]	27 [1.6]	26 [1.6]	17 [1.2]

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Clitoral Gland	(50)	(50)	(50)	(50)
Hyperplasia		4 [3.0]	1 [3.0]	1 [3.0]
Duct, Cyst		1 [4.0]		
Ovary	(50)	(50)	(50)	(50)
Atrophy	4 [2.3]	2 [1.5]	3 [2.7]	2 [1.0]
Cyst	3 [3.3]	6 [3.2]	6 [3.3]	4 [2.0]
Oviduct	(1)	(0)	(0)	(0)
Cyst	1 [3.0]			
Uterus	(50)	(50)	(50)	(50)
Decidual Reaction			1 [2.0]	
Hemorrhage		1 [2.0]		
Inflammation		4 [3.5]	1 [3.0]	1 [2.0]

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Test Type: Chronic PN

Styrene-acrylonitrile trimer

Time Report Requested: 12:12:35

Route: DOSED FEED

CAS Number: SANTRIMER2

First Dose M/F: 05/12/05 / 05/13/05

Species/Strain: RATS/F 344/N

Lab: BAT

FISCHER 344 RATS FEMALE	0 PPM	400 PPM	800 PPM	1600 PPM
Metaplasia, Squamous Cervix, Cyst		4 [2.5]	1 [3.0]	1 [2.0]
Endometrium, Hyperplasia, Adenomatous				1 [2.0]
Endometrium, Hyperplasia, Cystic	2 [1.0]	7 [1.1]	5 [1.6]	3 [2.0]
Venule, Hyperplasia		1 [2.0]		
<b>HEMATOPOIETIC SYSTEM</b>				
Bone Marrow	(50)	(50)	(50)	(50)
Atrophy			1 [2.0]	
Hyperplasia	16 [1.8]	25 [1.8]	25 [2.0]	38 [1.5]
Inflammation				1 [2.0]
Inflammation, Granulomatous			6 [1.2]	2 [1.5]
Myelofibrosis	1 [2.0]	2 [3.5]		1 [2.0]
Lymph Node	(2)	(1)	(1)	(2)
Deep Cervical, Ectasia			1 [3.0]	
Deep Cervical, Infiltration Cellular, Histiocyte				1 [1.0]
Mediastinal, Hyperplasia, Lymphoid	1 [2.0]			1 [2.0]
Lymph Node, Mandibular	(0)	(1)	(0)	(0)
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Atrophy		1 [2.0]	2 [3.5]	
Hyperplasia, Lymphoid			1 [2.0]	1 [3.0]
Spleen	(50)	(50)	(50)	(50)
Accessory Spleen		1		
Hematopoietic Cell Proliferation	1 [3.0]	8 [1.3]	7 [1.1]	3 [1.7]
Hyperplasia, Histiocytic	2 [3.5]	1 [4.0]	1 [3.0]	1 [3.0]
Hyperplasia, Lymphoid		2 [2.0]		
Infarct				1 [2.0]
Necrosis		1 [2.0]		
Pigmentation, Hemosiderin	43 [1.1]	47 [1.0]	42 [1.2]	38 [1.1]
Lymphoid Follicle, Atrophy		1 [2.0]	3 [4.0]	1 [4.0]
Thymus	(50)	(50)	(50)	(50)
Atrophy	46 [3.0]	46 [3.0]	50 [3.1]	49 [3.0]
Hyperplasia, Lymphoid		1 [3.0]		

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## INTEGUMENTARY SYSTEM

Mammary Gland	(50)	(50)	(50)	(50)
Galactocele	1 [4.0]			
Hyperplasia	2 [2.0]	1 [3.0]		
Inflammation	2 [4.0]			
Skin	(50)	(50)	(50)	(50)

## MUSCULOSKELETAL SYSTEM

Bone	(50)	(50)	(50)	(50)
Fracture				1
Osteopetrosis	1 [3.0]			1 [2.0]
Skeletal Muscle	(0)	(0)	(2)	(0)

## NERVOUS SYSTEM

Brain	(50)	(50)	(50)	(50)
Gliosis, Focal	1 [1.0]			
Hemorrhage	2 [1.0]	1 [3.0]	3 [2.0]	1 [2.0]
Infiltration Cellular, Mononuclear Cell	1 [1.0]			
Mineralization	2 [1.0]			
Necrosis		2 [2.0]	1 [3.0]	
Pigmentation, Focal	1 [1.0]			
Neuron, Depletion Cellular	1 [1.0]			
White Matter, Vacuolization Cytoplasmic	1 [1.0]			

## RESPIRATORY SYSTEM

Lung	(50)	(50)	(50)	(50)
Atelectasis	1			
Congestion			1 [4.0]	
Foreign Body		1		
Inflammation, Chronic Active		5 [1.2]	3 [1.0]	2 [1.0]

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FISCHER 344 RATS FEMALE	0 PPM	400 PPM	800 PPM	1600 PPM
Necrosis				1 [1.0]
Alveolar Epithelium, Hyperplasia	15 [1.1]	13 [1.3]	9 [1.6]	15 [1.1]
Alveolar Epithelium, Metaplasia, Squamous				2 [1.0]
Alveolus, Infiltration Cellular, Histiocyte	16 [1.0]	12 [1.1]	11 [1.0]	13 [1.0]
Nose	(50)	(50)	(50)	(50)
Foreign Body		2		
Inflammation	8 [1.3]	11 [1.4]	6 [1.2]	9 [1.0]
Thrombosis	1 [3.0]			
Glands, Respiratory Epithelium, Hyperplasia				1 [3.0]
Respiratory Epithelium, Hyperplasia				1 [1.0]

**SPECIAL SENSES SYSTEM**

Eye	(50)	(50)	(50)	(50)
Cornea, Inflammation				1 [2.0]
Lens, Cataract	1 [2.0]	2 [3.0]	2 [2.5]	5 [2.6]
Retina, Degeneration	2 [3.0]	3 [2.0]	2 [3.0]	3 [4.0]
Retina, Gliosis		1 [1.0]	1 [2.0]	4 [1.5]
Zymbal's Gland	(0)	(1)	(0)	(0)

**URINARY SYSTEM**

Kidney	(50)	(50)	(50)	(50)
Accumulation, Hyaline Droplet	1 [2.0]	1 [3.0]		
Infarct	3 [2.3]	2 [1.5]	1 [3.0]	2 [1.5]
Infiltration Cellular, Lymphoid				1 [3.0]
Inflammation, Chronic Active				1 [3.0]
Nephropathy	41 [1.2]	42 [1.3]	40 [1.1]	45 [1.2]
Papilla, Necrosis	1 [2.0]	2 [1.5]		1 [1.0]
Pelvis, Dilatation				1 [2.0]
Pelvis, Inflammation	2 [2.0]	1 [1.0]	2 [2.0]	
Pelvis, Transitional Epithelium, Hyperplasia	1 [2.0]		2 [1.0]	1 [1.0]
Renal Tubule, Dilatation	1 [3.0]		1 [2.0]	
Urinary Bladder	(50)	(50)	(50)	(50)
Infiltration Cellular, Histiocyte				1 [2.0]

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Lab: BAT

FISCHER 344 RATS FEMALE	0 PPM	400 PPM	800 PPM	1600 PPM
Inflammation, Chronic Active	1 [1.0]		1 [1.0]	
Transitional Epithelium, Hyperplasia	1 [1.0]			12 [2.3]
Transitional Epithelium, Metaplasia, Squamous				1 [2.0]

\*\*\* END OF REPORT \*\*\*

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