

TDMS No. 88006 - 03

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

**Date Report Requested:** 02/02/2006

**Test Type:** CHRONIC

ALPHA-METHYLSTYRENE

**Time Report Requested:** 13:44:41

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**CAS Number:** 98-83-9

**First Dose M/F:** 08/06/01 / 08/06/01

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

**Pathologist:** RENNE, R.

**Lab:** BNW

Revised F1

**C Number:** C88006B  
**Lock Date:** 03/26/2004  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL

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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First Dose M/F: 08/06/01 / 08/06/01

Species/Strain: RATS/F 344

Pathologist: RENNE, R.

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	100 PPM	300 PPM	1000 PPM
<b>Disposition Summary</b>				
Animals Initially in Study	50	50	50	50
Early Deaths				
Accidentally Killed			1	1
Moribund Sacrifice	19	15	21	25
Natural Death	4	3	5	2
Survivors				
Natural Death				1
Terminal Sacrifice	27	32	23	21
Animals Examined Microscopically	50	50	50	50
<b>ALIMENTARY SYSTEM</b>				
Intestine Large, Cecum	(48)	(47)	(46)	(47)
Ulcer		1 [3.0]		
Epithelium, Atrophy		1 [3.0]		
Intestine Small, Duodenum	(49)	(48)	(47)	(47)
Ulcer		1 [4.0]		
Intestine Small, Jejunum	(46)	(47)	(44)	(47)
Inflammation, Chronic Active		1 [3.0]		
Epithelium, Ulcer		1 [4.0]		
Liver	(50)	(50)	(50)	(50)
Angiectasis		1 [4.0]	1 [3.0]	4 [3.8]
Basophilic Focus	2	8	3	1
Basophilic Focus, Multiple		1		
Bile Stasis		1 [4.0]		
Clear Cell Focus	8	7	5	3
Clear Cell Focus, Multiple	1			
Degeneration, Cystic	2 [2.5]	2 [2.5]	3 [2.3]	1 [3.0]
Hemorrhage				1 [4.0]
Hepatodiaphragmatic Nodule		2 [4.0]	5 [4.0]	10 [4.0]
Necrosis	2 [3.5]	2 [2.5]	3 [3.3]	4 [3.3]
Thrombosis		1 [3.0]	1 [3.0]	1 [4.0]
Vacuolization Cytoplasmic	3 [3.3]	1 [2.0]	4 [2.5]	
Bile Duct, Dilatation		2 [4.0]		
Bile Duct, Hyperplasia	30 [1.6]	42 [1.7]	39 [1.9]	30 [2.1]
Mesentery	(15)	(15)	(8)	(5)

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

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Pathologist: RENNE, R.

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	100 PPM	300 PPM	1000 PPM
Necrosis	15 [2.9]	14 [2.9]	8 [3.1]	5 [3.0]
Fat, Hemorrhage		1 [3.0]		
Oral Mucosa	(1)	(0)	(0)	(1)
Gingival, Hyperplasia, Squamous, Focal	1 [3.0]			1 [4.0]
Pancreas	(50)	(50)	(50)	(50)
Acinus, Atrophy	2 [3.0]	2 [3.0]	1 [3.0]	
Stomach, Forestomach	(50)	(50)	(49)	(50)
Hyperplasia, Squamous	1 [3.0]		1 [4.0]	1 [4.0]
Inflammation, Suppurative				1 [3.0]
Necrosis	1 [4.0]			
Ulcer	4 [4.0]	1 [4.0]	2 [4.0]	
Epithelium, Mineralization		1 [3.0]		
Stomach, Glandular	(50)	(50)	(49)	(50)
Erosion	2 [1.5]		2 [2.5]	3 [1.3]
Ulcer	1 [4.0]			
Epithelium, Mineralization		1 [3.0]		
Tongue	(0)	(1)	(0)	(1)
Epithelium, Hyperplasia				1 [3.0]
Tooth	(0)	(0)	(2)	(0)
Inflammation, Suppurative			1 [4.0]	
Peridontal Tissue, Inflammation			1 [4.0]	
<b>CARDIOVASCULAR SYSTEM</b>				
Blood Vessel	(0)	(1)	(2)	(0)
Pulmonary Artery, Infiltration Cellular, Polymorphonuclear			1 [4.0]	
Pulmonary Artery, Mineralization			1 [3.0]	
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	7 [1.9]	3 [1.7]	4 [1.5]	6 [2.8]
Atrium, Myocardium, Hypertrophy		1 [3.0]		
Atrium, Necrosis				1 [4.0]
Atrium, Thrombosis	3 [4.0]	1 [4.0]	5 [3.8]	5 [3.8]
Myocardium, Hypertrophy		1 [3.0]		
Valve, Thrombosis	1 [3.0]			
<b>ENDOCRINE SYSTEM</b>				
Adrenal Cortex	(50)	(50)	(50)	(50)

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

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Pathologist: RENNE, R.

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	100 PPM	300 PPM	1000 PPM
Atrophy	1 [4.0]	1 [4.0]		
Hyperplasia	14 [2.4]	10 [2.7]	12 [2.8]	9 [2.8]
Hypertrophy	2 [2.0]	2 [2.5]		
Mineralization	1 [3.0]			
Necrosis			1 [2.0]	
Vacuolization Cytoplasmic	9 [2.2]	21 [2.0]	10 [2.2]	5 [2.8]
Adrenal Medulla	(50)	(50)	(50)	(50)
Atrophy	1 [4.0]			
Hyperplasia	15 [3.0]	13 [2.5]	9 [2.7]	14 [3.3]
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia	1 [3.0]	3 [4.0]		
Parathyroid Gland	(47)	(49)	(48)	(47)
Hyperplasia	1 [2.0]		1 [3.0]	
Pituitary Gland	(49)	(49)	(49)	(49)
Cyst		1 [4.0]	1 [2.0]	1 [4.0]
Hemorrhage		1 [4.0]		
Hyperplasia	9 [2.6]	8 [3.4]	6 [2.5]	14 [3.0]
Thyroid Gland	(49)	(50)	(50)	(50)
Cyst				1 [3.0]
C-cell, Hyperplasia	8 [1.9]	9 [2.7]	9 [1.8]	6 [1.8]
Follicle, Cyst				1 [3.0]
Follicular Cell, Hyperplasia		3 [2.3]	1 [1.0]	2 [2.0]
<b>GENERAL BODY SYSTEM</b>				
Peritoneum	(0)	(2)	(0)	(3)
<b>GENITAL SYSTEM</b>				
Epididymis	(50)	(50)	(50)	(50)
Penis	(1)	(0)	(0)	(0)
Inflammation, Chronic Active	1 [3.0]			
Preputial Gland	(50)	(50)	(50)	(50)
Cyst	1 [4.0]	2 [3.5]	2 [4.0]	1 [4.0]
Hyperplasia	2 [3.5]	4 [3.8]	1 [4.0]	2 [3.5]
Inflammation, Suppurative			1 [4.0]	
Prostate	(50)	(50)	(50)	(50)
Cyst			1 [4.0]	
Hyperplasia	6 [2.0]		1 [1.0]	2 [1.0]

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FISCHER 344 RATS MALE	CONTROL	100 PPM	300 PPM	1000 PPM
Inflammation, Suppurative Seminal Vesicle	34 [1.6] (50)	35 [1.6] (50)	31 [1.7] (50)	24 [1.5] (50)
Cyst			1 [4.0]	
Dilatation			1 [4.0]	
Inflammation, Suppurative Testes	(50)	1 [3.0] (50)	1 [4.0] (50)	(50)
Artery, Inflammation, Chronic Active			1 [3.0]	
Germinal Epithelium, Atrophy	5 [3.6]	5 [4.0]	8 [4.0]	6 [3.3]
Germinal Epithelium, Mineralization		1 [4.0]		
Interstitial Cell, Hyperplasia	6 [2.2]	7 [1.6]	10 [1.9]	7 [1.9]
<b>HEMATOPOIETIC SYSTEM</b>				
Bone Marrow	(50)	(50)	(50)	(50)
Lymph Node	(6)	(3)	(6)	(12)
Deep Cervical, Hemorrhage				1 [3.0]
Lymph Node, Bronchial	(10)	(8)	(14)	(15)
Hyperplasia, Histiocytic			1 [3.0]	
Infiltration Cellular, Histiocyte			1 [3.0]	
Lymph Node, Mediastinal	(17)	(25)	(20)	(18)
Angiectasis	1 [3.0]		1 [4.0]	
Hemorrhage		1 [4.0]		
Hyperplasia, Lymphoid		2 [2.5]		1 [2.0]
Infiltration Cellular, Histiocyte			1 [3.0]	
Pigmentation			1 [3.0]	1 [3.0]
Lymph Node, Mesenteric	(50)	(49)	(49)	(50)
Spleen	(50)	(50)	(49)	(50)
Accessory Spleen	1		1 [4.0]	1
Fibrosis	2 [3.5]	1 [3.0]	1 [3.0]	1 [3.0]
Hematopoietic Cell Proliferation	1 [4.0]	1 [3.0]		
Hemorrhage		1 [4.0]		2 [4.0]
Hyperplasia, Lymphoid		1 [2.0]		1 [4.0]
Necrosis	3 [3.3]	3 [3.7]	5 [4.0]	8 [3.9]
Thymus	(42)	(49)	(47)	(47)
Cyst		1 [3.0]		
Inflammation			1 [4.0]	
Thrombosis			1 [4.0]	
<b>INTEGUMENTARY SYSTEM</b>				

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Pathologist: RENNE, R.

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FISCHER 344 RATS MALE	CONTROL	100 PPM	300 PPM	1000 PPM
Mammary Gland	(48)	(49)	(50)	(50)
Galactocele	2 [4.0]	1 [4.0]	3 [4.0]	2 [4.0]
Hyperplasia		1 [2.0]		
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion	2 [4.0]	3 [4.0]		
Hyperkeratosis		2 [3.5]	1 [3.0]	2 [4.0]
Hyperplasia, Squamous		1 [3.0]		
Inflammation, Chronic		1 [3.0]	1 [4.0]	
Ulcer	1 [4.0]	2 [4.0]	2 [3.0]	3 [3.7]
Subcutaneous Tissue, Metaplasia, Osseous			1 [3.0]	
Subcutaneous Tissue, Mineralization	1 [3.0]			
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone	(50)	(50)	(50)	(50)
Hyperostosis	1 [3.0]			
Maxilla, Fracture			1	
Skeletal Muscle	(2)	(1)	(1)	(0)
<b>NERVOUS SYSTEM</b>				
Brain	(50)	(50)	(50)	(50)
Compression	11 [3.9]	11 [3.6]	8 [2.6]	2 [2.5]
Gliosis				1 [2.0]
Hemorrhage	7 [3.3]	2 [3.5]	4 [3.0]	2 [4.0]
Cerebrum, Demyelination, Focal				1 [4.0]
Cerebrum, Necrosis, Focal	1 [3.0]			
Choroid Plexus, Hemorrhage			1 [4.0]	
Meninges, Hemorrhage				1 [1.0]
<b>RESPIRATORY SYSTEM</b>				
Larynx	(50)	(49)	(50)	(50)
Foreign Body	4 [2.8]	5 [4.0]	2 [4.0]	5 [4.0]
Inflammation, Suppurative	6 [1.2]		4 [1.5]	2 [2.0]
Inflammation, Chronic	4 [1.8]	11 [1.5]	6 [1.3]	10 [2.1]
Epiglottis, Hyperplasia				1 [1.0]

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FISCHER 344 RATS MALE	CONTROL	100 PPM	300 PPM	1000 PPM
Respiratory Epithelium, Hyperplasia		2 [2.0]		
Respiratory Epithelium, Metaplasia, Squamous	1 [2.0]			
Lung	(50)	(50)	(50)	(50)
Hemorrhage	7 [2.1]	3 [2.7]	1 [2.0]	7 [2.9]
Inflammation, Suppurative			1 [4.0]	
Inflammation, Chronic	4 [2.0]	1 [2.0]	3 [1.7]	2 [2.0]
Thrombosis	1 [3.0]			
Alveolar Epithelium, Degeneration, Mucoid, Focal			1 [3.0]	
Alveolar Epithelium, Hyperplasia	3 [2.3]	6 [2.7]	6 [3.3]	3 [3.0]
Alveolus, Emphysema		2 [2.0]	1 [4.0]	
Alveolus, Infiltration Cellular, Histiocyte	11 [1.4]	12 [1.5]	10 [2.0]	4 [1.8]
Interstitialium, Fibrosis	3 [1.7]		2 [2.5]	1 [2.0]
Mediastinum, Inflammation, Suppurative			1 [4.0]	
Nose	(50)	(50)	(50)	(49)
Foreign Body	6	4	3	2
Hemorrhage			1 [2.0]	
Inflammation, Suppurative	10 [2.0]	8 [2.1]	7 [2.4]	5 [2.4]
Inflammation, Chronic		1 [1.0]	2 [2.0]	
Glands, Dilatation	3 [2.0]	7 [2.1]	6 [2.0]	
Goblet Cell, Hyperplasia	5 [2.2]	5 [1.8]	5 [2.4]	5 [2.2]
Nasolacrimal Duct, Inflammation, Suppurative	2 [1.5]	1 [2.0]	1 [2.0]	
Nerve, Olfactory Epithelium, Degeneration				1 [2.0]
Olfactory Epithelium, Degeneration	1 [2.0]	3 [1.3]	3 [1.7]	16 [1.0]
Olfactory Epithelium, Degeneration, Hyaline	1 [2.0]	1 [1.0]	1 [2.0]	
Olfactory Epithelium, Hyperplasia, Basal Cell		17 [1.0]	18 [1.2]	43 [1.8]
Olfactory Epithelium, Metaplasia	2 [1.5]	1 [2.0]	3 [1.7]	2 [2.0]
Respiratory Epithelium, Degeneration, Hyaline	2 [1.5]		2 [1.5]	
Respiratory Epithelium, Hyperplasia		1 [2.0]		2 [1.0]
Respiratory Epithelium, Metaplasia, Squamous				1 [3.0]
Pleura	(6)	(5)	(6)	(5)
Inflammation, Chronic	5 [1.8]	5 [1.2]	6 [2.0]	5 [1.6]
Mesothelium, Hyperplasia		1 [1.0]		

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Species/Strain: RATS/F 344

Pathologist: RENNE, R.

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	100 PPM	300 PPM	1000 PPM
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(49)	(49)	(50)	(49)
Atrophy			1 [4.0]	1 [4.0]
Cornea, Fibrosis				1 [3.0]
Cornea, Hyperplasia, Squamous		1 [1.0]		1 [2.0]
Cornea, Mineralization	1 [4.0]			
Lens, Cataract	3 [3.0]		5 [3.4]	1 [4.0]
Retina, Atrophy	1 [4.0]		1 [4.0]	
Sclera, Metaplasia, Osseous	32 [1.8]	32 [1.8]	32 [1.9]	25 [2.2]
Harderian Gland	(50)	(50)	(50)	(50)
Inflammation, Chronic			2 [2.0]	
Zymbal's Gland	(0)	(1)	(2)	(2)
Inflammation			1 [3.0]	
<b>URINARY SYSTEM</b>				
Kidney	(50)	(50)	(50)	(50)
Cyst	2	2	2	
Infarct	3			5
Nephropathy	41 [2.2]	46 [2.3]	46 [2.4]	45 [2.4]
Thrombosis				1 [4.0]
Bilateral, Pelvis, Dilatation		1 [2.0]	1 [2.0]	
Bilateral, Infarct				1
Bilateral, Infarct, Multiple				1
Cortex, Renal Tubule, Accumulation, Hyaline Droplet			1 [4.0]	1 [3.0]
Glomerulus, Fibrosis	1 [4.0]			
Papilla, Mineralization	12 [1.1]	16 [1.0]	10 [1.0]	33 [1.4]
Pelvis, Transitional Epithelium, Hyperplasia	1 [3.0]	2 [2.5]	1 [2.0]	1 [1.0]
Pelvis, Transitional Epithelium, Mineralization	1 [3.0]			
Pelvis, Dilatation		1 [2.0]	1 [2.0]	
Pelvis, Hemorrhage			1 [3.0]	
Renal Tubule, Casts		1 [1.0]		
Renal Tubule, Mineralization		1 [4.0]		
Urinary Bladder	(50)	(50)	(50)	(50)

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FISCHER 344 RATS MALE	CONTROL	100 PPM	300 PPM	1000 PPM
Calculus Micro Observation Only	2 [3.0]	1 [3.0]	1 [3.0]	1
Cyst			1 [4.0]	
Hemorrhage	1 [4.0]	2 [4.0]	2 [4.0]	1 [4.0]
Inflammation, Suppurative	1 [3.0]			
Inflammation, Chronic		1 [3.0]		
Necrosis			2 [4.0]	
Transitional Epithelium, Hyperplasia	1 [2.0]	2 [3.0]	1 [2.0]	2 [2.0]

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

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FISCHER 344 RATS FEMALE	CONTROL	100 PPM	300 PPM	1000 PPM
<b>Disposition Summary</b>				
Animals Initially in Study	50	50	50	50
Early Deaths				
Accidentally Killed	2			
Moribund Sacrifice	15	21	12	20
Natural Death	6	5	2	4
Survivors				
Terminal Sacrifice	27	24	36	26
Animals Examined Microscopically	50	50	50	50
<b>ALIMENTARY SYSTEM</b>				
Intestine Large, Rectum	(49)	(48)	(50)	(50)
Intestine Small, Ileum	(45)	(46)	(48)	(47)
Necrosis		1 [4.0]		
Intestine Small, Jejunum	(45)	(46)	(48)	(48)
Diverticulum		2 [4.0]		
Liver	(50)	(50)	(50)	(50)
Angiectasis	3 [3.3]	1 [4.0]	2 [3.5]	1 [4.0]
Basophilic Focus	21	23	21	21
Basophilic Focus, Multiple	5	5	10	8
Clear Cell Focus	6	6	6	2
Clear Cell Focus, Multiple	3		1	
Eosinophilic Focus	1		2	1
Hematopoietic Cell Proliferation				1 [3.0]
Hepatodiaphragmatic Nodule	2 [4.0]	6 [4.0]	6 [4.0]	7 [4.0]
Inflammation, Suppurative			1 [4.0]	
Necrosis	2 [3.0]	1 [4.0]	3 [3.0]	1 [2.0]
Thrombosis	1 [2.0]		1 [3.0]	
Vacuolization Cytoplasmic	8 [2.4]	5 [2.6]	1 [3.0]	
Bile Duct, Bile Stasis	1 [4.0]			
Bile Duct, Hyperplasia			2 [3.5]	
Hepatocyte, Regeneration			1 [3.0]	
Serosa, Fibrosis			1 [2.0]	
Mesentery	(14)	(17)	(12)	(10)
Necrosis	14 [3.0]	17 [3.0]	12 [3.0]	10 [3.0]
Oral Mucosa	(1)	(0)	(1)	(0)

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FISCHER 344 RATS FEMALE	CONTROL	100 PPM	300 PPM	1000 PPM
Inflammation, Suppurative Pancreas	1 [3.0] (50)	(50)	(50)	(50)
Acinus, Atrophy Duct, Cyst	1 [3.0]	1 [4.0]		
Stomach, Forestomach	(50)	(50)	(50)	(50)
Diverticulum		1 [4.0]		
Hyperplasia, Squamous Inflammation, Suppurative		4 [3.3]	2 [3.0]	2 [2.0] 1 [2.0]
Ulcer	5 [3.8]	5 [3.8]	3 [4.0]	2 [4.0]
Epithelium, Muscularis, Inflammation, Suppurative		1 [4.0]		
Stomach, Glandular	(49)	(50)	(50)	(50)
Erosion	2 [3.0]			2 [2.0]
Hyperplasia				1 [2.0]
Ulcer		1 [4.0]	1 [4.0]	
Tongue	(0)	(1)	(2)	(0)
Epithelium, Hyperplasia		1 [1.0]	1 [2.0]	
<b>CARDIOVASCULAR SYSTEM</b>				
Blood Vessel	(0)	(1)	(0)	(1)
Infiltration Cellular, Polymorphonuclear Inflammation		1 [4.0]		1 [4.0]
Thrombosis				1 [4.0]
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy			1 [2.0]	
Atrium, Thrombosis	1 [4.0]	1 [4.0]		
<b>ENDOCRINE SYSTEM</b>				
Adrenal Cortex	(50)	(50)	(50)	(50)
Angiectasis	3 [3.7]			
Hyperplasia	7 [2.3]	5 [2.4]	10 [2.4]	8 [3.1]
Hypertrophy		1 [2.0]		2 [2.5]
Necrosis	1 [3.0]	1 [4.0]	1 [2.0]	
Thrombosis				1 [3.0]
Vacuolization Cytoplasmic	18 [1.8]	18 [1.9]	18 [1.8]	12 [2.3]
Adrenal Medulla	(49)	(50)	(50)	(50)
Hemorrhage		1 [4.0]		

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Test Type: CHRONIC

ALPHA-METHYLSTYRENE

Time Report Requested: 13:44:41

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-83-9

First Dose M/F: 08/06/01 / 08/06/01

Species/Strain: RATS/F 344

Pathologist: RENNE, R.

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	100 PPM	300 PPM	1000 PPM
Hyperplasia			2 [2.0]	3 [3.0]
Islets, Pancreatic	(50)	(50)	(50)	(50)
Pituitary Gland	(50)	(49)	(50)	(50)
Cyst	4 [3.3]	5 [3.2]	3 [3.7]	2 [2.0]
Hemorrhage	2 [4.0]		1 [4.0]	1 [4.0]
Hyperplasia	7 [3.0]	8 [3.1]	8 [3.3]	14 [3.6]
Thyroid Gland	(50)	(50)	(50)	(50)
C-cell, Hyperplasia	8 [1.6]	5 [2.2]	9 [2.0]	6 [1.5]
Follicle, Cyst				1 [3.0]
Follicular Cell, Hyperplasia				2 [2.5]
<b>GENERAL BODY SYSTEM</b>				
None				
<b>GENITAL SYSTEM</b>				
Clitoral Gland	(50)	(50)	(50)	(50)
Cyst	2 [2.5]			
Hyperplasia	7 [3.9]	6 [3.7]	3 [4.0]	4 [3.8]
Inflammation, Chronic	2 [4.0]		1 [3.0]	
Ovary	(50)	(50)	(50)	(50)
Atrophy	1 [4.0]			
Cyst	9 [3.6]	2 [3.5]	9 [3.3]	8 [3.6]
Uterus	(50)	(50)	(50)	(50)
Cyst			1	
Hemorrhage	1 [4.0]	1 [4.0]	1 [4.0]	2 [4.0]
Hydrometra			1 [3.0]	
Necrosis	1 [4.0]			
Thrombosis			1 [4.0]	1 [4.0]
Cervix, Myometrium, Hyperplasia	2 [3.0]			
Endometrium, Hyperplasia	6 [2.5]	3 [3.0]	4 [3.0]	5 [2.0]
Endometrium, Inflammation, Suppurative			1 [4.0]	
Myometrium, Hyperplasia		1 [4.0]		
Vagina	(0)	(1)	(0)	(1)
Infiltration Cellular, Mixed Cell				1 [3.0]
<b>HEMATOPOIETIC SYSTEM</b>				

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ALPHA-METHYLSTYRENE

Time Report Requested: 13:44:41

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CAS Number: 98-83-9

First Dose M/F: 08/06/01 / 08/06/01

Species/Strain: RATS/F 344

Pathologist: RENNE, R.

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	100 PPM	300 PPM	1000 PPM
Lymph Node	(2)	(3)	(2)	(5)
Inflammation, Chronic Active				1 [4.0]
Pancreatic, Hemorrhage			1 [3.0]	
Lymph Node, Bronchial	(4)	(7)	(8)	(3)
Angiectasis	1 [4.0]			
Congestion	1 [4.0]			
Hemorrhage				1 [3.0]
Hyperplasia, Lymphoid	1 [4.0]	1 [4.0]	1 [4.0]	
Lymph Node, Mandibular	(3)	(0)	(1)	(1)
Lymph Node, Mediastinal	(26)	(25)	(21)	(28)
Hyperplasia, Lymphoid			1 [3.0]	
Pigmentation				1 [3.0]
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Congestion	1 [4.0]			
Spleen	(50)	(50)	(50)	(50)
Accessory Spleen		1 [4.0]		
Fibrosis	1 [4.0]		2 [3.5]	1 [4.0]
Hematopoietic Cell Proliferation	2 [3.5]	2 [4.0]	2 [3.5]	3 [4.0]
Pigmentation				1 [4.0]
Thymus	(50)	(48)	(48)	(48)
Cyst		1 [4.0]		
<b>INTEGUMENTARY SYSTEM</b>				
Mammary Gland	(50)	(50)	(50)	(50)
Galactocele	2 [2.0]	3 [3.0]	4 [3.5]	1 [4.0]
Inflammation, Suppurative		1 [4.0]	1 [4.0]	
Necrosis				1 [4.0]
Duct, Cyst				1 [4.0]
Epithelium, Hyperplasia	1 [1.0]			
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion		1 [4.0]		
Hyperkeratosis	1 [3.0]	1 [3.0]		
Inflammation, Chronic				1 [3.0]
Ulcer		1 [4.0]	3 [3.7]	1 [3.0]
Subcutaneous Tissue, Hemorrhage				1 [4.0]
Subcutaneous Tissue, Inflammation, Granulomatous		1 [3.0]		

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Species/Strain: RATS/F 344

Pathologist: RENNE, R.

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	100 PPM	300 PPM	1000 PPM
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone	(50)	(50)	(50)	(50)
Maxilla, Fracture	1			
Skeletal Muscle	(2)	(1)	(0)	(0)
Infiltration Cellular, Lipocyte	1 [4.0]			
<b>NERVOUS SYSTEM</b>				
Brain	(50)	(50)	(50)	(50)
Compression	7 [3.4]	7 [3.7]	11 [3.3]	8 [3.5]
Hemorrhage	6 [3.5]	4 [3.8]	5 [3.2]	1 [4.0]
Cerebellum, Hydrocephalus		1 [4.0]		
Cerebrum, Infiltration Cellular, Mononuclear Cell, Focal	1 [2.0]			
<b>RESPIRATORY SYSTEM</b>				
Larynx	(50)	(50)	(50)	(50)
Foreign Body	1 [4.0]	1 [4.0]	2 [4.0]	3 [4.0]
Inflammation, Suppurative	2 [3.5]		1 [2.0]	
Inflammation, Chronic	1 [1.0]	1 [1.0]		4 [1.5]
Epiglottis, Metaplasia, Squamous	1 [1.0]			1 [1.0]
Respiratory Epithelium, Hyperplasia	1 [4.0]	1 [2.0]	2 [2.5]	2 [2.5]
Respiratory Epithelium, Metaplasia, Squamous			1 [2.0]	
Lung	(50)	(50)	(50)	(50)
Hemorrhage	1 [4.0]		1 [2.0]	1 [4.0]
Infiltration Cellular, Polymorphonuclear		1 [4.0]		
Inflammation, Suppurative			1 [3.0]	
Inflammation, Granulomatous		1 [3.0]		
Inflammation, Chronic	5 [1.8]	1 [2.0]	6 [1.5]	5 [1.8]
Alveolar Epithelium, Hyperplasia	3 [4.0]	6 [3.5]	2 [2.5]	5 [3.2]
Alveolar Epithelium, Metaplasia, Squamous	1 [3.0]			
Alveolus, Infiltration Cellular, Histiocyte	20 [1.1]	19 [1.1]	22 [1.0]	30 [1.0]
Bronchiole, Foreign Body		1		
Bronchiole, Hyperplasia	1 [2.0]			1 [2.0]
Bronchiole, Inflammation, Chronic		1 [3.0]		

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Pathologist: RENNE, R.

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	100 PPM	300 PPM	1000 PPM
Interstitialium, Fibrosis				1 [2.0]
Nose	(49)	(49)	(50)	(50)
Foreign Body	1	2	3	2
Inflammation, Suppurative	2 [2.5]	5 [2.6]	6 [2.0]	6 [2.0]
Inflammation, Chronic				1 [1.0]
Glands, Dilatation			2 [1.5]	
Goblet Cell, Hyperplasia	1 [2.0]	1 [2.0]	3 [2.0]	3 [1.7]
Nasolacrimal Duct, Inflammation, Suppurative	1 [2.0]	1 [2.0]	4 [2.3]	2 [2.5]
Olfactory Epithelium, Degeneration	1 [1.0]	1 [1.0]	7 [1.3]	24 [1.1]
Olfactory Epithelium, Degeneration, Hyaline	4 [1.3]	8 [1.4]	6 [1.8]	4 [1.8]
Olfactory Epithelium, Hyperplasia, Basal Cell		14 [1.0]	30 [1.0]	49 [1.6]
Olfactory Epithelium, Metaplasia	1 [2.0]			1 [3.0]
Respiratory Epithelium, Degeneration, Hyaline	1 [1.0]	3 [1.7]	2 [1.0]	
Respiratory Epithelium, Hyperplasia		1 [2.0]	1 [2.0]	1 [2.0]
Respiratory Epithelium, Metaplasia, Squamous	1 [1.0]		2 [2.0]	2 [1.5]
Pleura	(16)	(13)	(15)	(30)
Inflammation, Chronic	16 [1.1]	13 [1.0]	15 [1.0]	27 [1.0]
Mesothelium, Hyperplasia				1 [4.0]
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(48)	(49)	(50)	(50)
Atrophy				2 [4.0]
Inflammation, Suppurative	1 [4.0]			
Anterior Chamber, Hemorrhage				1 [4.0]
Lens, Cataract	5 [3.0]	1 [4.0]	4 [3.8]	5 [3.4]
Lens, Mineralization			3 [4.0]	
Retina, Atrophy	2 [3.0]			2 [3.5]
Sclera, Metaplasia, Osseous		1 [2.0]		
<b>URINARY SYSTEM</b>				
Kidney	(49)	(50)	(50)	(50)
Cyst			1	

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Species/Strain: RATS/F 344

Pathologist: RENNE, R.

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	100 PPM	300 PPM	1000 PPM
Infiltration Cellular, Lipocyte Nephropathy	34 [1.6]	27 [1.3]	1 [1.0] 35 [1.5]	31 [1.8]
Capsule, Hemorrhage		1 [4.0]		
Cortex, Infarct		1		1
Cortex, Infarct, Multiple			1	
Papilla, Mineralization	1 [1.0]	6 [1.0]	8 [1.0]	7 [1.0]
Pelvis, Transitional Epithelium, Hyperplasia	5 [2.2]	3 [1.7]		
Pelvis, Transitional Epithelium, Mineralization	31 [1.5]	26 [1.0]	31 [1.1]	16 [1.0]
Pelvis, Dilatation		1 [2.0]		
Renal Tubule, Degeneration	1 [4.0]			
Renal Tubule, Pigmentation				2 [4.0]
Ureter	(1)	(0)	(0)	(0)
Transitional Epithelium, Hyperplasia	1 [3.0]			
Urinary Bladder	(50)	(50)	(50)	(50)
Serosa, Edema		1 [4.0]		
Transitional Epithelium, Hyperplasia		1 [1.0]		2 [2.5]

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