

TDMS No. 99017 - 05

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

Date Report Requested: 12/30/2008

Test Type: CHRONIC

Diethylamine

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

F1_R2

C Number: C99017

Lock Date: 07/24/2006

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Study Gender: Both

TDMSE Version: 2.1.0

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Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Disposition Summary				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	19	24	20	13
Natural Death	3	5	5	1
Survivors				
Terminal Sacrifice	28	21	25	36
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Esophagus	(50)	(50)	(50)	(50)
Intestine Large, Cecum	(49)	(47)	(49)	(50)
Necrosis	1 [3.0]		1 [4.0]	
Serosa, Inflammation, Suppurative		1 [3.0]		
Intestine Small, Duodenum	(49)	(49)	(49)	(50)
Intestine Small, Ileum	(48)	(47)	(46)	(49)
Necrosis			1 [4.0]	
Intestine Small, Jejunum	(48)	(47)	(48)	(50)
Inflammation, Suppurative		1 [4.0]		
Ulcer		1 [4.0]		
Artery, Inflammation, Chronic				1 [2.0]
Liver	(50)	(50)	(50)	(50)
Angiectasis			1 [3.0]	
Basophilic Focus	2 [1.5]	2 [2.0]	3 [3.0]	5 [2.2]
Basophilic Focus, Multiple	6 [1.0]	1	1 [1.0]	
Clear Cell Focus	3 [3.7]	8 [2.4]	2 [3.5]	4 [2.3]
Clear Cell Focus, Multiple	9 [1.1]	1 [2.0]	2 [1.0]	6 [1.0]
Degeneration, Cystic	1 [4.0]			
Hepatodiaphragmatic Nodule	4 [4.0]	2 [4.0]	4 [4.0]	
Necrosis	1 [2.0]	2 [3.0]	1 [3.0]	
Vacuolization Cytoplasmic	5 [2.6]	4 [2.8]	5 [3.2]	2 [1.5]
Bile Duct, Cyst		1 [4.0]		
Bile Duct, Dilatation				1 [3.0]
Bile Duct, Hyperplasia			1 [3.0]	1 [3.0]
Kupffer Cell, Pigmentation	1 [1.0]			
Periportal, Inflammation, Chronic	1 [2.0]	1 [2.0]	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)

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Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Periportal, Pigmentation				1 [3.0]
Mesentery	(10)	(13)	(16)	(10)
Inflammation, Chronic			1 [3.0]	
Necrosis	9 [3.0]	12 [3.0]	13 [3.0]	10 [2.7]
Fat, Hemorrhage	1 [3.0]	1 [2.0]	1 [3.0]	
Pancreas	(49)	(50)	(50)	(50)
Acinus, Atrophy	24 [1.6]	22 [2.0]	29 [1.7]	31 [1.8]
Acinus, Hyperplasia				1 [2.0]
Duct, Cyst	1 [4.0]			1 [2.0]
Salivary Glands	(50)	(50)	(50)	(50)
Duct, Cyst	1 [4.0]			
Stomach, Forestomach	(50)	(50)	(50)	(50)
Diverticulum	1 [2.0]			
Hyperplasia, Squamous	2 [2.5]			
Inflammation, Suppurative			1 [2.0]	
Ulcer	1 [4.0]	4 [4.0]	2 [4.0]	2 [3.0]
Muscularis, Degeneration				1 [3.0]
Stomach, Glandular	(50)	(50)	(50)	(50)
Erosion			3 [2.3]	
Inflammation, Chronic Active				1 [3.0]
Tongue	(0)	(0)	(1)	(0)
Epithelium, Hyperplasia			1 [3.0]	
CARDIOVASCULAR SYSTEM				
Blood Vessel	(0)	(0)	(1)	(1)
Adventitia, Inflammation, Chronic				1 [2.0]
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	23 [1.2]	24 [1.4]	21 [1.1]	25 [1.2]
Atrium, Thrombosis	1 [4.0]	4 [3.5]	3 [3.7]	
Atrium, Ventricle, Thrombosis			1 [4.0]	
Myocardium, Mineralization				1 [3.0]
Ventricle, Thrombosis			1 [4.0]	
ENDOCRINE SYSTEM				
Adrenal Cortex	(50)	(50)	(50)	(50)
Atrophy	1 [2.0]	1 [4.0]	1 [4.0]	
Hyperplasia	15 [2.3]	17 [3.2]	10 [3.0]	12 [2.8]

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Lab: BNW

FISCHER 344 RATS MALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Hyperplasia, Focal Necrosis		1 [2.0] 1 [3.0]	1 [2.0]	
Vacuolization Cytoplasmic Adrenal Medulla	9 [2.1] (50)	7 [2.4] (50)	16 [2.2] (50)	6 [1.3] (49)
Hyperplasia Bilateral, Hyperplasia	15 [2.9] 1 [3.0]	18 [2.5]	25 [2.7]	17 [2.9] 1 [3.0]
Islets, Pancreatic Hyperplasia	(50) 1 [4.0]	(50) 1 [3.0]	(50)	(50) 1 [2.0]
Pituitary Gland Atrophy	(50) 1 [4.0]	(48)	(50) 1 [4.0]	(50)
Cyst Hemorrhage	2 [4.0] 1 [4.0]			1 [4.0]
Pars Distalis, Hyperplasia Thyroid Gland	7 [3.4] (50)	9 [3.0] (50)	9 [3.2] (50)	7 [2.6] (50)
Cyst Ultimobranchial Cyst				1 [2.0] 1 [1.0]
C-cell, Hyperplasia Follicular Cell, Hyperplasia	17 [1.9] 1 [3.0]	13 [1.4]	7 [1.6] 1 [2.0]	11 [1.8] 1 [4.0]
GENERAL BODY SYSTEM				
Peritoneum Mesothelium, Tunica Vaginalis, Hyperplasia	(0)	(1)	(1)	(1) 1 [2.0]
GENITAL SYSTEM				
Epididymis Necrosis, Fatty	(50) 1 [3.0]	(50)	(50)	(50)
Preputial Gland Cyst	(50) 2 [3.5]	(50)	(50)	(50) 2 [2.5]
Hyperplasia Inflammation, Suppurative		3 [2.7] 1 [4.0]	1 [4.0]	1 [4.0] 1 [3.0]
Prostate Hyperplasia	(50) 2 [1.5]	(50)	(50) 1 [2.0]	(50) 4 [1.3]
Inflammation, Suppurative Seminal Vesicle	29 [1.4] (50)	28 [1.4] (50)	29 [2.0] (50)	26 [1.5] (50)
Cyst Inflammation, Suppurative			1 [3.0] 1 [4.0]	2 [2.0]

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FISCHER 344 RATS MALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Testes	(50)	(50)	(50)	(50)
Mineralization		2 [3.0]	1 [3.0]	
Artery, Inflammation, Chronic Active	1 [3.0]			1 [2.0]
Germinal Epithelium, Atrophy	9 [3.6]	11 [3.5]	7 [3.4]	15 [3.6]
Germinal Epithelium, Mineralization	1 [3.0]			
Interstitial Cell, Hyperplasia	2 [2.5]		1 [3.0]	2 [3.0]
Tunic, Hyperplasia				1 [2.0]
HEMATOPOIETIC SYSTEM				
Bone Marrow	(50)	(50)	(50)	(50)
Hyperplasia, Reticulum Cell	2 [4.0]		1 [3.0]	
Lymph Node	(10)	(5)	(10)	(10)
Ectasia		1 [4.0]		
Deep Cervical, Hemorrhage				1 [2.0]
Deep Cervical, Pigmentation				1 [2.0]
Pancreatic, Infiltration Cellular, Histiocyte	1 [4.0]			
Pancreatic, Pigmentation	1 [3.0]			
Lymph Node, Bronchial	(4)	(4)	(3)	(5)
Ectasia				1 [3.0]
Hyperplasia, Lymphoid		1 [2.0]		
Pigmentation				1 [2.0]
Lymph Node, Mandibular	(0)	(0)	(1)	(1)
Ectasia				1 [4.0]
Lymph Node, Mediastinal	(30)	(24)	(35)	(29)
Infiltration Cellular, Histiocyte	1 [2.0]			1 [3.0]
Lymph Node, Mesenteric	(49)	(50)	(50)	(49)
Ectasia		1 [2.0]		
Hyperplasia, Lymphoid				1 [2.0]
Spleen	(50)	(50)	(50)	(50)
Hematopoietic Cell Proliferation	1 [4.0]	1 [4.0]	3 [4.0]	1 [3.0]
Hemorrhage	2 [4.0]	2 [4.0]	2 [4.0]	
Hyperplasia, Lymphoid	1 [4.0]			
Necrosis	1 [4.0]	3 [3.7]	2 [4.0]	3 [3.7]
Thrombosis	1 [4.0]			
Capsule, Fibrosis	1 [4.0]			
Thymus	(44)	(43)	(47)	(45)
Hyperplasia, Tubular	1 [4.0]			

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FISCHER 344 RATS MALE	CONTROL	31 PPM	62.5 PPM	125 PPM
INTEGUMENTARY SYSTEM				
Mammary Gland	(50)	(50)	(50)	(49)
Galactocele	1 [4.0]	1 [2.0]	3 [3.0]	2 [4.0]
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion		5 [4.0]	3 [4.0]	1 [4.0]
Hyperkeratosis			1 [4.0]	
Inflammation, Suppurative		1 [3.0]		
Ulcer		2 [4.0]	1 [3.0]	1 [3.0]
Sebaceous Gland, Hyperplasia	1 [1.0]			
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Cranium, Fracture				1 [4.0]
Skeletal Muscle	(0)	(1)	(1)	(1)
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Compression	9 [3.1]	11 [3.1]	6 [2.8]	4 [2.5]
Gliosis	2 [1.0]			
Hemorrhage	2 [4.0]	8 [2.8]	5 [2.4]	
Hydrocephalus	1 [4.0]	1 [3.0]	1 [1.0]	
Inflammation, Suppurative				1 [4.0]
Necrosis				1 [4.0]
RESPIRATORY SYSTEM				
Larynx	(50)	(50)	(50)	(50)
Foreign Body	2	3	3	2
Inflammation, Suppurative	1 [1.0]	1 [2.0]	1 [1.0]	4 [2.5]
Inflammation, Chronic	1 [1.0]			
Epiglottis, Hyperplasia			1 [3.0]	
Epiglottis, Metaplasia, Squamous		1 [1.0]		
Respiratory Epithelium, Metaplasia, Squamous				1 [1.0]
Lung	(50)	(50)	(50)	(50)

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FISCHER 344 RATS MALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Edema	1 [4.0]			
Hemorrhage	5 [2.2]	3 [2.3]	4 [2.0]	5 [1.2]
Inflammation, Suppurative		4 [2.0]		2 [2.0]
Inflammation, Chronic	8 [1.4]	8 [1.5]	8 [1.6]	10 [1.7]
Metaplasia, Osseous		1 [1.0]		2 [1.0]
Alveolar Epithelium, Hyperplasia	6 [1.7]	7 [2.6]	6 [1.8]	5 [3.0]
Alveolar Epithelium, Metaplasia, Squamous				1 [1.0]
Alveolus, Infiltration Cellular, Histiocyte	15 [1.5]	12 [1.8]	19 [1.5]	20 [1.6]
Alveolus, Metaplasia, Osseous				1 [2.0]
Alveolus, Mineralization				1 [1.0]
Alveolus, Proteinosis	1 [1.0]		2 [2.5]	1 [1.0]
Artery, Thrombosis		2 [3.5]		
Bronchiole, Hyperplasia				2 [1.0]
Interstitial, Fibrosis	1 [2.0]			3 [2.0]
Nose	(49)	(50)	(50)	(50)
Foreign Body	6	3	4	2
Hemorrhage		1 [3.0]		
Inflammation, Suppurative	5 [1.6]	5 [1.6]	10 [1.7]	29 [2.6]
Inflammation, Chronic	1 [1.0]			
Thrombosis				1 [1.0]
Glands, Olfactory Epithelium, Accumulation, Hyaline Droplet				1 [1.0]
Glands, Respiratory Epithelium, Accumulation, Hyaline Droplet	6 [1.0]	45 [1.2]	42 [1.6]	45 [1.5]
Glands, Respiratory Epithelium, Hyperplasia	44 [1.0]	46 [1.2]	46 [1.7]	48 [1.7]
Goblet Cell, Hyperplasia			2 [1.5]	13 [2.2]
Nasolacrimal Duct, Inflammation, Suppurative			1 [2.0]	
Olfactory Epithelium, Accumulation, Hyaline Droplet	8 [1.0]	49 [2.4]	49 [2.1]	42 [1.7]
Olfactory Epithelium, Atrophy	2 [1.5]	49 [1.5]	50 [1.8]	50 [2.3]
Olfactory Epithelium, Degeneration, Hyaline		1 [2.0]		1 [2.0]
Olfactory Epithelium, Hyperplasia, Basal Cell			22 [1.8]	50 [2.4]
Olfactory Epithelium, Metaplasia, Squamous		2 [1.5]		1 [1.0]
Olfactory Epithelium, Necrosis		1 [2.0]		2 [2.0]

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Lab: BNW

FISCHER 344 RATS MALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Olfactory Epithelium, Respiratory Metaplasia	2 [1.5]	2 [1.0]	2 [1.5]	37 [1.6]
Olfactory Epithelium, Vacuolization Cytoplasmic		2 [4.0]	8 [3.8]	1 [4.0]
Respiratory Epithelium, Accumulation, Hyaline Droplet		29 [1.2]	42 [1.4]	11 [1.5]
Respiratory Epithelium, Hyperplasia	5 [1.6]	34 [1.2]	35 [1.3]	47 [1.9]
Respiratory Epithelium, Inflammation, Chronic				1 [2.0]
Respiratory Epithelium, Metaplasia, Squamous		2 [1.0]	6 [1.8]	26 [2.1]
Respiratory Epithelium, Necrosis			1 [1.0]	4 [1.3]
Respiratory Epithelium, Ulcer			2 [2.5]	22 [3.3]
Respiratory Epithelium, Vacuolization Cytoplasmic		5 [4.0]	8 [3.9]	3 [4.0]
Turbinate, Hyperostosis				3 [2.3]
Turbinate, Necrosis			1 [2.0]	19 [2.9]
Pleura	(50)	(50)	(50)	(50)
Fibrosis	1 [3.0]			
Hyperplasia		1 [3.0]		
Inflammation, Chronic	3 [1.3]	4 [1.3]	3 [1.3]	9 [1.6]
Trachea	(50)	(50)	(50)	(50)

SPECIAL SENSES SYSTEM

Eye	(49)	(50)	(50)	(50)
Anterior Chamber, Inflammation, Suppurative			1 [4.0]	2 [3.0]
Cornea, Fibrosis	1 [1.0]			
Cornea, Hyperplasia				1 [1.0]
Cornea, Inflammation, Suppurative			1 [2.0]	5 [2.4]
Cornea, Inflammation, Chronic				2 [2.0]
Cornea, Inflammation, Chronic Active				1 [1.0]
Cornea, Mineralization			1 [1.0]	1 [1.0]
Cornea, Vacuolization Cytoplasmic				3 [1.3]
Lens, Cataract	1 [2.0]	3 [4.0]	1 [3.0]	5 [2.6]
Retina, Atrophy	1 [2.0]	3 [4.0]	1 [3.0]	3 [3.3]
Retina, Dysplasia				1 [2.0]
Sclera, Metaplasia, Osseous	11 [1.5]	9 [2.1]	13 [1.8]	6 [1.3]

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Sclera, Mineralization	1 [2.0]	1 [1.0]	1 [1.0]	
Harderian Gland	(50)	(50)	(50)	(50)
Hyperplasia				1 [1.0]
Inflammation, Chronic	1 [1.0]	1 [1.0]		2 [1.5]
Zymbal's Gland	(1)	(3)	(0)	(2)
URINARY SYSTEM				
Kidney	(50)	(50)	(50)	(50)
Nephropathy, Chronic	44 [2.0]	39 [2.3]	40 [2.2]	39 [1.9]
Cortex, Cyst	1 [3.0]			
Cortex, Infarct		2 [3.5]	2 [2.5]	2 [3.5]
Cortex, Renal Tubule, Accumulation, Hyaline Droplet	1 [4.0]			
Cortex, Renal Tubule, Casts Granular, Focal	1 [4.0]			
Cortex, Renal Tubule, Hyperplasia, Atypical				1 [3.0]
Cortex, Renal Tubule, Mineralization		1 [2.0]		
Cortex, Renal Tubule, Necrosis		1 [2.0]		
Papilla, Mineralization	2 [1.0]	3 [1.3]		
Pelvis, Dilatation		1 [3.0]		
Pelvis, Inflammation, Suppurative				1 [2.0]
Pelvis, Transitional Epithelium, Hyperplasia			2 [3.0]	4 [2.8]
Pelvis, Transitional Epithelium, Mineralization		1 [2.0]	1 [4.0]	
Urinary Bladder	(50)	(50)	(49)	(50)
Hemorrhage	1 [4.0]	1 [4.0]		
Infiltration Cellular, Histiocyte	1 [4.0]			
Muscularis, Pigmentation	1 [4.0]			
Transitional Epithelium, Hemorrhage			1 [3.0]	
Transitional Epithelium, Hyperplasia	1 [4.0]			2 [2.5]

*** END OF MALE ***

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FISCHER 344 RATS FEMALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Disposition Summary				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	17	15	18	15
Natural Death	2	4	2	
Survivors				
Moribund Sacrifice			1	1
Terminal Sacrifice	31	31	29	34
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Intestine Large, Colon	(49)	(47)	(50)	(50)
Epithelium, Hyperplasia, Focal	1 [3.0]			
Liver	(50)	(50)	(50)	(50)
Angiectasis	3 [1.3]	1 [3.0]	3 [2.3]	3 [2.7]
Basophilic Focus	3 [2.3]	1 [3.0]	4 [2.5]	7 [1.4]
Basophilic Focus, Multiple	17 [1.0]	13 [1.1]	19 [1.3]	15 [1.1]
Clear Cell Focus	8 [2.6]	8 [1.9]	6 [3.0]	4 [2.8]
Clear Cell Focus, Multiple	8 [2.1]	1 [3.0]	2 [3.0]	3 [2.3]
Degeneration, Cystic		1 [3.0]		
Hemorrhage	1 [3.0]		2 [3.5]	
Hepatodiaphragmatic Nodule	9 [4.0]	6 [4.0]	2 [4.0]	9 [4.0]
Necrosis		1 [4.0]	1 [3.0]	
Thrombosis	1 [4.0]			
Vacuolization Cytoplasmic	3 [3.3]	8 [2.6]	6 [2.2]	2 [1.5]
Artery, Inflammation			1 [3.0]	
Bile Duct, Hyperplasia			1 [4.0]	
Hepatocyte, Regeneration			1 [4.0]	
Periportal, Inflammation, Chronic		1 [2.0]		
Periportal, Pigmentation			1 [3.0]	
Mesentery	(16)	(15)	(18)	(10)
Necrosis	15 [2.9]	14 [2.9]	17 [3.0]	10 [3.0]
Artery, Inflammation			1 [4.0]	
Pancreas	(50)	(50)	(50)	(50)
Inflammation, Chronic				1 [1.0]
Acinus, Atrophy	1 [2.0]	1 [3.0]	1 [3.0]	4 [2.3]

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Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Artery, Inflammation		1 [2.0]	1 [3.0]	
Stomach, Forestomach	(50)	(50)	(50)	(50)
Erosion		1 [2.0]		
Hyperplasia, Squamous	1 [3.0]			
Inflammation, Suppurative	2 [2.5]			
Ulcer	1 [4.0]	3 [3.7]	1 [4.0]	1 [4.0]
Stomach, Glandular	(50)	(50)	(50)	(50)
Ulcer	1 [3.0]	1 [3.0]		
Tongue	(0)	(2)	(0)	(1)
Epithelium, Hyperplasia		1 [3.0]		1 [2.0]
CARDIOVASCULAR SYSTEM				
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	16 [1.3]	17 [1.3]	23 [1.4]	16 [1.2]
Atrium, Ventricle, Thrombosis	1 [4.0]			
ENDOCRINE SYSTEM				
Adrenal Cortex	(50)	(50)	(50)	(50)
Atrophy	1 [3.0]			
Hemorrhage	1 [2.0]			1 [3.0]
Hyperplasia	12 [3.2]	6 [3.3]	15 [2.9]	18 [2.8]
Hyperplasia, Focal	1 [2.0]	1 [2.0]	3 [2.0]	
Necrosis	1 [3.0]	1 [2.0]		
Vacuolization Cytoplasmic	14 [1.4]	13 [2.7]	13 [2.5]	11 [1.6]
Adrenal Medulla	(50)	(50)	(50)	(50)
Hyperplasia	6 [2.5]	1 [2.0]	2 [2.5]	
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia		1 [3.0]		
Parathyroid Gland	(43)	(42)	(48)	(48)
Pituitary Gland	(50)	(50)	(50)	(50)
Cyst		1 [3.0]	1 [3.0]	1 [4.0]
Hemorrhage	2 [4.0]	2 [3.0]		2 [2.5]
Pars Distalis, Hyperplasia	9 [3.4]	10 [3.0]	7 [3.6]	18 [3.3]
Thyroid Gland	(50)	(50)	(50)	(50)
Ultimobranchial Cyst	1 [1.0]			
C-cell, Hyperplasia	25 [1.4]	18 [1.7]	25 [1.4]	21 [1.2]
Follicular Cell, Hyperplasia	1 [1.0]			

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Test Type: CHRONIC

Diethylamine

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	31 PPM	62.5 PPM	125 PPM
GENERAL BODY SYSTEM				
Tissue NOS	(1)	(0)	(0)	(0)
GENITAL SYSTEM				
Clitoral Gland	(50)	(50)	(50)	(50)
Cyst	1 [4.0]	1 [2.0]	2 [3.0]	4 [2.0]
Hyperplasia	2 [4.0]	5 [3.2]	4 [3.5]	6 [3.3]
Inflammation, Chronic	1 [4.0]			
Ovary	(50)	(50)	(50)	(50)
Cyst	7 [2.6]	5 [2.8]	4 [4.0]	4 [3.5]
Uterus	(50)	(50)	(50)	(50)
Hemorrhage			2 [4.0]	1 [4.0]
Thrombosis			1 [4.0]	2 [4.0]
Endometrium, Hyperplasia	1 [2.0]	1 [1.0]	1 [1.0]	2 [2.5]
Vagina	(1)	(0)	(0)	(0)
Cyst	1 [4.0]			
HEMATOPOIETIC SYSTEM				
Bone Marrow	(50)	(50)	(50)	(50)
Hyperplasia, Reticulum Cell	2 [3.5]	1 [4.0]	1 [3.0]	3 [3.7]
Myelofibrosis	1 [3.0]			
Lymph Node	(3)	(0)	(1)	(1)
Lymph Node, Bronchial	(4)	(1)	(5)	(7)
Hemorrhage		1 [2.0]		
Hyperplasia, Histiocytic	1 [2.0]			
Infiltration Cellular, Histiocyte				1 [3.0]
Lymph Node, Mandibular	(2)	(0)	(1)	(2)
Lymph Node, Mediastinal	(33)	(27)	(25)	(29)
Hyperplasia, Lymphoid				1 [4.0]
Infiltration Cellular, Histiocyte				1 [4.0]
Pigmentation				2 [3.0]
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Spleen	(50)	(50)	(50)	(50)
Atrophy	1 [2.0]			

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FISCHER 344 RATS FEMALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Fibrosis		1 [4.0]	1 [2.0]	
Hematopoietic Cell Proliferation	7 [3.9]	3 [3.7]	4 [3.8]	3 [3.7]
Hemorrhage	1 [4.0]			
Hyperplasia, Histiocytic		1 [4.0]		1 [4.0]
Necrosis	1 [4.0]		1 [3.0]	
Pigmentation	1 [2.0]	1 [4.0]		
Stromal Hyperplasia	1 [4.0]			
Thymus	(48)	(44)	(40)	(47)
INTEGUMENTARY SYSTEM				
Mammary Gland	(50)	(50)	(50)	(50)
Galactocele	4 [2.5]	3 [2.0]	5 [1.0]	3 [2.3]
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion	1 [4.0]	1 [4.0]	1 [2.0]	2 [3.0]
Ulcer	6 [3.2]	2 [3.5]	1 [4.0]	3 [4.0]
Subcutaneous Tissue, Cyst		1 [3.0]		
Subcutaneous Tissue, Fibrosis			1 [3.0]	
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Cranium, Inflammation, Suppurative				1 [4.0]
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Compression	12 [3.3]	11 [3.5]	14 [3.3]	9 [3.7]
Hemorrhage	4 [2.5]	1 [4.0]	2 [2.5]	5 [1.8]
Meninges, Hemorrhage	1 [3.0]			
Meninges, Inflammation, Chronic			1 [1.0]	
Ventricle, Hemorrhage	1 [2.0]			
Spinal Cord	(0)	(0)	(1)	(0)
RESPIRATORY SYSTEM				
Larynx	(50)	(50)	(50)	(50)
Foreign Body	4	6	4	1

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Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Inflammation, Suppurative Epiglottis, Metaplasia, Squamous Respiratory Epithelium, Metaplasia, Squamous	2 [1.0]	1 [1.0]	2 [2.0] 2 [1.0]	2 [1.0]
Lung	(50)	(50)	(50)	(50)
Hemorrhage	6 [1.3]	2 [1.5]	1 [2.0]	2 [2.0]
Inflammation, Chronic	4 [1.5]	11 [1.3]	7 [1.4]	24 [1.3]
Metaplasia, Osseous			1 [2.0]	
Alveolar Epithelium, Hyperplasia	3 [1.3]	6 [1.7]	4 [2.0]	3 [1.7]
Alveolar Epithelium, Metaplasia, Squamous				1 [3.0]
Alveolus, Infiltration Cellular, Histiocyte	13 [1.2]	24 [1.3]	27 [1.3]	35 [1.4]
Alveolus, Proteinosis			1 [2.0]	2 [2.0]
Bronchiole, Hyperplasia	1 [1.0]	1 [1.0]		
Interstitialium, Fibrosis	1 [1.0]	2 [1.0]		2 [1.0]
Perivascular, Infiltration Cellular, Lymphocyte			1 [4.0]	
Nose	(50)	(49)	(50)	(50)
Foreign Body	6	1	1	2
Inflammation, Suppurative	6 [2.0]	4 [1.5]	15 [1.5]	34 [2.9]
Glands, Respiratory Epithelium, Accumulation, Hyaline Droplet	9 [1.0]	46 [1.6]	45 [1.7]	44 [1.6]
Glands, Respiratory Epithelium, Hyperplasia	45 [1.0]	49 [1.7]	48 [1.9]	49 [2.1]
Goblet Cell, Hyperplasia	1 [2.0]		4 [1.8]	20 [2.5]
Nasolacrimal Duct, Inflammation, Suppurative	2 [2.0]	2 [1.5]		
Olfactory Epithelium, Accumulation, Hyaline Droplet	11 [1.3]	49 [2.6]	50 [2.6]	48 [2.4]
Olfactory Epithelium, Atrophy	1 [1.0]	47 [1.9]	48 [2.3]	50 [2.7]
Olfactory Epithelium, Hyperplasia				1 [2.0]
Olfactory Epithelium, Hyperplasia, Basal Cell		3 [1.0]	29 [1.7]	48 [2.9]
Olfactory Epithelium, Metaplasia, Squamous			1 [1.0]	
Olfactory Epithelium, Mineralization				1 [1.0]
Olfactory Epithelium, Necrosis		2 [1.0]	3 [1.0]	
Olfactory Epithelium, Respiratory Metaplasia	3 [1.7]	1 [2.0]	2 [1.0]	19 [1.7]
Olfactory Epithelium, Vacuolization		1 [4.0]	4 [3.8]	3 [3.3]

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FISCHER 344 RATS FEMALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Cytoplasmic Respiratory Epithelium, Accumulation, Hyaline Droplet	4 [1.0]	48 [1.9]	46 [1.2]	39 [1.4]
Respiratory Epithelium, Hyperplasia	7 [1.4]	31 [1.2]	41 [1.4]	50 [2.4]
Respiratory Epithelium, Inflammation, Chronic		1 [1.0]		
Respiratory Epithelium, Metaplasia, Squamous	1 [1.0]	1 [1.0]	5 [1.4]	39 [2.3]
Respiratory Epithelium, Necrosis			1 [1.0]	4 [1.8]
Respiratory Epithelium, Ulcer				34 [3.1]
Respiratory Epithelium, Vacuolization		1 [4.0]	4 [4.0]	3 [3.7]
Cytoplasmic Turbinate, Hyperostosis				2 [3.0]
Turbinate, Necrosis				32 [3.0]
Pleura	(50)	(50)	(50)	(50)
Inflammation, Chronic	6 [1.2]	14 [1.2]	12 [1.3]	21 [1.3]
SPECIAL SENSES SYSTEM				
Eye	(50)	(50)	(50)	(50)
Anterior Chamber, Inflammation, Suppurative				1 [4.0]
Bilateral, Lens, Cataract			1 [4.0]	
Cornea, Inflammation, Suppurative		2 [2.5]	2 [2.5]	1 [3.0]
Cornea, Mineralization			1 [1.0]	
Cornea, Vacuolization Cytoplasmic			1 [3.0]	
Lens, Cataract	3 [2.0]	2 [4.0]	5 [3.6]	4 [3.5]
Retina, Atrophy	4 [2.5]	2 [4.0]	8 [3.3]	6 [3.0]
Sclera, Metaplasia, Osseous	4 [1.8]	2 [2.0]	2 [1.5]	2 [2.0]
Harderian Gland	(50)	(50)	(50)	(50)
Inflammation, Chronic			1 [1.0]	
Zymbal's Gland	(0)	(2)	(0)	(0)
URINARY SYSTEM				
Kidney	(50)	(50)	(50)	(50)
Nephropathy, Chronic	26 [1.7]	31 [1.6]	30 [1.9]	24 [1.3]
Cortex, Infarct			1 [3.0]	1 [4.0]
Cortex, Renal Tubule, Accumulation,				1 [4.0]

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FISCHER 344 RATS FEMALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Hyaline Droplet				
Cortex, Renal Tubule, Necrosis			1 [1.0]	
Papilla, Mineralization	12 [1.2]	13 [1.2]	9 [1.2]	4 [1.0]
Pelvis, Transitional Epithelium, Hyperplasia		2 [3.0]	2 [2.0]	
Pelvis, Transitional Epithelium, Mineralization	2 [1.0]			1 [1.0]
Renal Tubule, Vacuolization Cytoplasmic		1 [4.0]		
Urinary Bladder	(50)	(50)	(50)	(50)
Hemorrhage			1 [3.0]	
Transitional Epithelium, Hyperplasia			1 [3.0]	1 [2.0]

*** END OF REPORT ***