

**TDMS No.** 93025 - 07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

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

**P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)**

Tetralin

**CAS Number:** 119-64-2

F2\_R2

**Date Report Requested:** 11/17/2008

**Time Report Requested:** 08:56:08

**First Dose M/F:** 06/16/03 / 06/16/03

**Lab:** BNW

**C Number:** C93025  
**Lock Date:** 03/22/2006  
**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

FISCHER 344 RATS MALE	CONTROL	30 PPM	60 PPM	120 PPM
<b>Disposition Summary</b>				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	24	14	20	19
Natural Death	6	7	5	3
Survivors				
Natural Death		1		
Terminal Sacrifice	20	28	25	28
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Intestine Small, Duodenum	(49)	(47)	(48)	(50)
Intestine Small, Ileum	(44)	(46)	(45)	(48)
Mucularis, Hyperplasia		1 (2%)		
Liver	(50)	(50)	(50)	(50)
Angiectasis		1 (2%)		1 (2%)
Basophilic Focus	2 (4%)		5 (10%)	
Basophilic Focus, Multiple	4 (8%)	1 (2%)	1 (2%)	3 (6%)
Clear Cell Focus	5 (10%)	3 (6%)	3 (6%)	6 (12%)
Clear Cell Focus, Multiple	7 (14%)	11 (22%)	8 (16%)	7 (14%)
Degeneration, Cystic	1 (2%)	2 (4%)	1 (2%)	2 (4%)
Hematopoietic Cell Proliferation			1 (2%)	
Hemorrhage				1 (2%)
Hepatodiaphragmatic Nodule	4 (8%)	4 (8%)	4 (8%)	4 (8%)
Infarct		1 (2%)		
Mixed Cell Focus				1 (2%)
Necrosis	3 (6%)	3 (6%)	1 (2%)	
Vacuolization Cytoplasmic	4 (8%)	5 (10%)	4 (8%)	8 (16%)
Bile Duct, Hyperplasia	15 (30%)	3 (6%)	4 (8%)	9 (18%)
Centrilobular, Degeneration				2 (4%)
Hepatocyte, Regeneration	2 (4%)			
Periportal, Inflammation, Chronic	3 (6%)	3 (6%)	2 (4%)	5 (10%)
Serosa, Fibrosis			1 (2%)	
Mesentery	(15)	(13)	(12)	(11)
Hemorrhage	1 (7%)			1 (9%)
Necrosis	12 (80%)	13 (100%)	12 (100%)	11 (100%)
Fat, Hemorrhage	2 (13%)			1 (9%)
Oral Mucosa	(1)	(0)	(3)	(0)
Hyperplasia, Squamous	1 (100%)			
Pharyngeal, Fibrosis			1 (33%)	
Pharyngeal, Hyperplasia, Squamous			2 (67%)	

Test Type: CHRONIC

Tetralin

Time Report Requested: 08:56:08

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 119-64-2

First Dose M/F: 06/16/03 / 06/16/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	30 PPM	60 PPM	120 PPM
Pancreas	(50)	(50)	(50)	(50)
Cyst	1 (2%)	1 (2%)		
Inflammation, Chronic			1 (2%)	
Acinus, Atrophy	9 (18%)	5 (10%)	3 (6%)	5 (10%)
Artery, Inflammation				1 (2%)
Stomach, Forestomach	(50)	(50)	(50)	(50)
Diverticulum		1 (2%)		
Erosion		1 (2%)		
Hyperplasia, Squamous	2 (4%)		1 (2%)	
Inflammation, Suppurative	2 (4%)	1 (2%)	1 (2%)	
Ulcer	5 (10%)	1 (2%)	3 (6%)	2 (4%)
Stomach, Glandular	(50)	(50)	(50)	(50)
Erosion		2 (4%)		1 (2%)
Ulcer	1 (2%)			1 (2%)
Tongue	(1)	(3)	(3)	(1)
Epithelium, Hyperplasia	1 (100%)	2 (67%)	3 (100%)	1 (100%)
Tooth	(3)	(2)	(1)	(0)
Inflammation, Suppurative		2 (100%)	1 (100%)	
Malformation	2 (67%)			
Epithelium Alveolus, Hyperplasia	1 (33%)			
Peridental Tissue, Inflammation	1 (33%)			
<b>CARDIOVASCULAR SYSTEM</b>				
Blood Vessel	(0)	(0)	(0)	(1)
Inflammation, Chronic Active				1 (100%)
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	35 (70%)	35 (70%)	38 (76%)	32 (64%)
Atrium, Thrombosis	1 (2%)	2 (4%)	1 (2%)	3 (6%)
Ventricle, Inflammation, Suppurative		1 (2%)		
<b>ENDOCRINE SYSTEM</b>				
Adrenal Cortex	(50)	(50)	(49)	(50)
Atrophy			1 (2%)	
Hemorrhage	1 (2%)			
Hyperplasia	13 (26%)	17 (34%)	18 (37%)	14 (28%)
Vacuolization Cytoplasmic	17 (34%)	11 (22%)	19 (39%)	15 (30%)
Adrenal Medulla	(50)	(50)	(49)	(50)
Hyperplasia	16 (32%)	15 (30%)	15 (31%)	13 (26%)
Infiltration Cellular, Lymphocyte			1 (2%)	
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia		2 (4%)	1 (2%)	
Pituitary Gland	(50)	(49)	(49)	(49)

Test Type: CHRONIC

Tetralin

Time Report Requested: 08:56:08

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 119-64-2

First Dose M/F: 06/16/03 / 06/16/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	30 PPM	60 PPM	120 PPM
Cyst	2 (4%)	3 (6%)		
Hemorrhage		2 (4%)	4 (8%)	4 (8%)
Hyperplasia	7 (14%)	8 (16%)	4 (8%)	6 (12%)
Pars Intermedia, Cyst				1 (2%)
Thyroid Gland	(50)	(50)	(50)	(50)
C-cell, Hyperplasia	23 (46%)	17 (34%)	16 (32%)	10 (20%)
Follicle, Cyst	1 (2%)			
Follicular Cell, Hyperplasia		1 (2%)	1 (2%)	1 (2%)
<b>GENERAL BODY SYSTEM</b>				
Peritoneum	(0)	(2)	(0)	(3)
<b>GENITAL SYSTEM</b>				
Epididymis	(50)	(50)	(50)	(50)
Necrosis, Fatty				1 (2%)
Preputial Gland	(50)	(50)	(50)	(49)
Cyst	1 (2%)	1 (2%)	3 (6%)	
Hyperplasia	2 (4%)	2 (4%)	3 (6%)	3 (6%)
Inflammation, Suppurative	1 (2%)			1 (2%)
Prostate	(50)	(50)	(50)	(50)
Hyperplasia	2 (4%)	1 (2%)	5 (10%)	5 (10%)
Inflammation, Suppurative	40 (80%)	36 (72%)	38 (76%)	34 (68%)
Inflammation, Chronic				1 (2%)
Seminal Vesicle	(50)	(50)	(50)	(50)
Dilatation			1 (2%)	
Inflammation, Suppurative			1 (2%)	
Inflammation, Chronic				1 (2%)
Testes	(50)	(50)	(50)	(50)
Mineralization		2 (4%)		1 (2%)
Artery, Inflammation, Chronic Active	1 (2%)	1 (2%)	6 (12%)	2 (4%)
Germinal Epithelium, Atrophy	32 (64%)	42 (84%)	34 (68%)	45 (90%)
Interstitial Cell, Hyperplasia	4 (8%)	4 (8%)	4 (8%)	3 (6%)
<b>HEMATOPOIETIC SYSTEM</b>				
Bone Marrow	(50)	(50)	(50)	(50)
Hyperplasia, Reticulum Cell	2 (4%)		1 (2%)	
Lymph Node	(8)	(2)	(7)	(1)
Deep Cervical, Ectasia			1 (14%)	
Pancreatic, Ectasia			1 (14%)	
Pancreatic, Hyperplasia, Lymphoid				1 (100%)

FISCHER 344 RATS MALE	CONTROL	30 PPM	60 PPM	120 PPM
Pancreatic, Pigmentation, Hemosiderin		1 (50%)		
Lymph Node, Bronchial	(7)	(5)	(4)	(4)
Angiectasis	1 (14%)		2 (50%)	
Ectasia	1 (14%)	1 (20%)		
Hemorrhage		1 (20%)		1 (25%)
Hyperplasia, Lymphoid				1 (25%)
Infiltration Cellular, Histiocyte				1 (25%)
Inflammation, Chronic	1 (14%)			
Inflammation, Chronic Active	1 (14%)			
Pigmentation, Hemosiderin		1 (20%)		
Lymph Node, Mandibular	(0)	(1)	(3)	(0)
Inflammation, Chronic Active			1 (33%)	
Lymph Node, Mediastinal	(33)	(36)	(36)	(31)
Angiectasis		1 (3%)		
Ectasia	1 (3%)		1 (3%)	1 (3%)
Hemorrhage	1 (3%)			2 (6%)
Hyperplasia, Lymphoid		1 (3%)	1 (3%)	1 (3%)
Inflammation, Suppurative			1 (3%)	
Inflammation, Chronic	1 (3%)			
Inflammation, Chronic Active	1 (3%)			
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Ectasia	1 (2%)			
Fibrosis			1 (2%)	
Necrosis		1 (2%)		
Spleen	(50)	(50)	(50)	(50)
Accessory Spleen	2 (4%)	1 (2%)		
Fibrosis		3 (6%)		
Hematopoietic Cell Proliferation	1 (2%)	1 (2%)	4 (8%)	1 (2%)
Hemorrhage	2 (4%)	2 (4%)		1 (2%)
Hyperplasia, Lymphoid	1 (2%)		1 (2%)	
Necrosis	2 (4%)	2 (4%)	1 (2%)	
Pigmentation, Hemosiderin		1 (2%)		
Thymus	(47)	(43)	(44)	(43)
Ectopic Thyroid				1 (2%)
<b>INTEGUMENTARY SYSTEM</b>				
Mammary Gland	(50)	(50)	(50)	(50)
Galactoceles	2 (4%)	3 (6%)	2 (4%)	2 (4%)
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion	4 (8%)	3 (6%)		3 (6%)
Hyperkeratosis		1 (2%)	2 (4%)	
Hyperplasia, Squamous			2 (4%)	
Inflammation, Chronic	1 (2%)	1 (2%)		
Ulcer	5 (10%)	1 (2%)		

FISCHER 344 RATS MALE	CONTROL	30 PPM	60 PPM	120 PPM
Subcutaneous Tissue, Fibrosis		1 (2%)		
Subcutaneous Tissue, Hemorrhage			1 (2%)	
Subcutaneous Tissue, Metaplasia, Osseous		1 (2%)		
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone	(50)	(50)	(50)	(50)
<b>NERVOUS SYSTEM</b>				
Brain	(50)	(50)	(50)	(50)
Compression	13 (26%)	13 (26%)	17 (34%)	4 (8%)
Hemorrhage	6 (12%)	5 (10%)	4 (8%)	2 (4%)
Cerebrum, Mineralization	1 (2%)			
<b>RESPIRATORY SYSTEM</b>				
Larynx	(50)	(50)	(50)	(50)
Foreign Body	6 (12%)	2 (4%)	4 (8%)	3 (6%)
Inflammation, Suppurative	5 (10%)	2 (4%)	7 (14%)	7 (14%)
Inflammation, Chronic	1 (2%)			
Epiglottis, Metaplasia, Squamous				1 (2%)
Respiratory Epithelium, Hyperplasia	1 (2%)			
Respiratory Epithelium, Metaplasia, Squamous		1 (2%)		
Lung	(50)	(50)	(50)	(50)
Congestion	1 (2%)		1 (2%)	
Hemorrhage	5 (10%)	3 (6%)	5 (10%)	3 (6%)
Inflammation, Suppurative			2 (4%)	
Inflammation, Chronic	8 (16%)	10 (20%)	7 (14%)	9 (18%)
Alveolar Epithelium, Hyperplasia	12 (24%)	7 (14%)	11 (22%)	15 (30%)
Alveolar Epithelium, Metaplasia, Squamous	1 (2%)		1 (2%)	1 (2%)
Alveolar Epithelium, Metaplasia, Mucous	1 (2%)		2 (4%)	2 (4%)
Alveolus, Emphysema				1 (2%)
Alveolus, Foreign Body				2 (4%)
Alveolus, Infiltration Cellular, Histiocyte	13 (26%)	16 (32%)	14 (28%)	15 (30%)
Alveolus, Proteinosis	3 (6%)	1 (2%)	3 (6%)	4 (8%)
Artery, Mineralization			1 (2%)	1 (2%)
Bronchiole, Hyperplasia		1 (2%)		1 (2%)
Bronchiole, Inflammation, Suppurative				1 (2%)
Bronchiole, Glands, Degeneration, Mucoid	5 (10%)		1 (2%)	4 (8%)
Bronchiole, Goblet Cell, Hyperplasia	1 (2%)			
Interstitialium, Fibrosis	1 (2%)	1 (2%)	1 (2%)	

FISCHER 344 RATS MALE	CONTROL	30 PPM	60 PPM	120 PPM
Mediastinum, Fibrosis			2 (4%)	
Mediastinum, Hyperplasia, Lymphoid, Focal			1 (2%)	
Nose	(50)	(50)	(49)	(50)
Foreign Body	11 (22%)	5 (10%)	5 (10%)	3 (6%)
Inflammation, Suppurative	6 (12%)	6 (12%)	5 (10%)	4 (8%)
Inflammation, Chronic	1 (2%)			
Inflammation, Chronic Active	1 (2%)			
Glands, Dilatation		3 (6%)	3 (6%)	16 (32%)
Goblet Cell, Hyperplasia		1 (2%)		
Nasolacrimal Duct, Inflammation, Suppurative	1 (2%)	3 (6%)		
Olfactory Epithelium, Atrophy				1 (2%)
Olfactory Epithelium, Degeneration	1 (2%)	40 (80%)	43 (88%)	42 (84%)
Olfactory Epithelium, Degeneration, Hyaline	1 (2%)			
Olfactory Epithelium, Hyperplasia, Basal Cell		38 (76%)	48 (98%)	48 (96%)
Olfactory Epithelium, Inflammation, Suppurative		12 (24%)	8 (16%)	10 (20%)
Olfactory Epithelium, Metaplasia		17 (34%)	31 (63%)	37 (74%)
Olfactory Epithelium, Mineralization		5 (10%)	12 (24%)	17 (34%)
Respiratory Epithelium, Degeneration, Hyaline	1 (2%)			
Respiratory Epithelium, Hyperplasia	1 (2%)	2 (4%)	3 (6%)	3 (6%)
Respiratory Epithelium, Inflammation, Chronic	4 (8%)	4 (8%)	18 (37%)	16 (32%)
Respiratory Epithelium, Metaplasia, Squamous		1 (2%)		
Pleura	(2)	(1)	(3)	(10)
Fibrosis	2 (100%)		1 (33%)	2 (20%)
Inflammation, Chronic				1 (10%)
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(50)	(49)	(48)	(50)
Atrophy	1 (2%)			
Inflammation, Chronic	1 (2%)			
Anterior Chamber, Edema			1 (2%)	
Anterior Chamber, Inflammation, Suppurative	1 (2%)			
Cornea, Degeneration		1 (2%)		
Cornea, Inflammation, Suppurative		1 (2%)		1 (2%)
Cornea, Mineralization	1 (2%)	1 (2%)		1 (2%)
Lens, Cataract	9 (18%)	10 (20%)	10 (21%)	10 (20%)
Retina, Atrophy	2 (4%)	3 (6%)	5 (10%)	4 (8%)
Sclera, Metaplasia, Osseous	4 (8%)	11 (22%)	3 (6%)	7 (14%)
Harderian Gland	(50)	(50)	(50)	(50)
Infiltration Cellular, Lymphocyte			1 (2%)	
Inflammation, Chronic		1 (2%)	2 (4%)	3 (6%)
Zymbal's Gland	(0)	(0)	(1)	(1)

FISCHER 344 RATS MALE	CONTROL	30 PPM	60 PPM	120 PPM
<b>URINARY SYSTEM</b>				
Kidney	(50)	(50)	(50)	(50)
Infiltration Cellular, Lymphocyte Inflammation, Suppurative		1 (2%)	1 (2%)	
Nephropathy, Chronic	48 (96%)	50 (100%)	48 (96%)	50 (100%)
Artery, Necrosis			1 (2%)	
Cortex, Renal Tubule, Accumulation, Hyaline Droplet	1 (2%)	2 (4%)	1 (2%)	
Cortex, Renal Tubule, Dilatation				1 (2%)
Cortex, Renal Tubule, Hyperplasia	1 (2%)	2 (4%)		3 (6%)
Cortex, Renal Tubule, Hyperplasia, Oncocytic		1 (2%)		
Cortex, Renal Tubule, Pigmentation	1 (2%)			
Medulla, Casts			1 (2%)	
Papilla, Mineralization	13 (26%)	11 (22%)	10 (20%)	18 (36%)
Pelvis, Transitional Epithelium, Dilatation				1 (2%)
Pelvis, Transitional Epithelium, Hyperplasia	1 (2%)	1 (2%)		7 (14%)
Urinary Bladder	(50)	(50)	(50)	(50)
Calculus Micro Observation Only	1 (2%)		1 (2%)	
Inflammation, Chronic	1 (2%)			1 (2%)
Transitional Epithelium, Hyperplasia			2 (4%)	1 (2%)

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



FISCHER 344 RATS FEMALE	CONTROL	30 PPM	60 PPM	120 PPM
<b>Disposition Summary</b>				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	16	11	15	11
Natural Death	3	3	4	1
Survivors				
Terminal Sacrifice	31	36	31	38
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(50)	(50)	(50)	(50)
Intestine Large, Cecum	(49)	(50)	(48)	(49)
Intestine Large, Colon	(50)	(50)	(50)	(49)
Inflammation, Suppurative				1 (2%)
Ulcer				1 (2%)
Intestine Large, Rectum	(50)	(50)	(50)	(49)
Intestine Small, Ileum	(49)	(50)	(48)	(49)
Inflammation, Chronic			1 (2%)	
Liver	(50)	(50)	(50)	(50)
Angiectasis	1 (2%)	4 (8%)	1 (2%)	4 (8%)
Basophilic Focus	7 (14%)	7 (14%)	7 (14%)	2 (4%)
Basophilic Focus, Multiple	18 (36%)	13 (26%)	16 (32%)	20 (40%)
Clear Cell Focus	6 (12%)	6 (12%)	7 (14%)	9 (18%)
Clear Cell Focus, Multiple	9 (18%)	2 (4%)	5 (10%)	10 (20%)
Degeneration, Cystic			1 (2%)	
Hematopoietic Cell Proliferation			2 (4%)	
Hepatodiaphragmatic Nodule	5 (10%)	6 (12%)	9 (18%)	6 (12%)
Mixed Cell Focus				1 (2%)
Mixed Cell Focus, Multiple		1 (2%)		
Necrosis	2 (4%)		2 (4%)	
Vacuolization Cytoplasmic	6 (12%)	2 (4%)	2 (4%)	3 (6%)
Bile Duct, Hyperplasia	2 (4%)			1 (2%)
Periportal, Inflammation, Chronic		2 (4%)	3 (6%)	3 (6%)
Serosa, Fibrosis			1 (2%)	
Mesentery	(10)	(18)	(18)	(14)
Necrosis	10 (100%)	18 (100%)	18 (100%)	14 (100%)
Fat, Hemorrhage				1 (7%)
Oral Mucosa	(1)	(0)	(1)	(1)
Pharyngeal, Hyperplasia, Squamous	1 (100%)		1 (100%)	1 (100%)
Pancreas	(50)	(50)	(50)	(50)
Cyst		1 (2%)		

FISCHER 344 RATS FEMALE	CONTROL	30 PPM	60 PPM	120 PPM
Inflammation, Chronic Acinus, Atrophy Salivary Glands	2 (4%) (50)	1 (2%) 1 (2%) (50)	(50)	(50)
Inflammation, Chronic Stomach, Forestomach	(50)	(50)	(50)	1 (2%) (50)
Hyperplasia, Squamous Inflammation, Suppurative Ulcer	1 (2%) 2 (4%)		1 (2%) 1 (2%)	
Stomach, Glandular Ulcer	(50) 1 (2%)	(50)	(50)	1 (2%) (50)
Epithelium, Hyperplasia Tongue	(1)	1 (2%) (1)	(0)	(3)
Epithelium, Hyperplasia		1 (100%)		3 (100%)
<b>CARDIOVASCULAR SYSTEM</b>				
Blood Vessel Media, Inflammation, Chronic	(0)	(0)	(0)	(1) 1 (100%)
Heart Cardiomyopathy	(50) 22 (44%)	(50) 24 (48%)	(50) 32 (64%)	(50) 34 (68%)
Atrium, Thrombosis Pericardium, Fibrosis Pericardium, Infiltration Cellular, Mixed Cell Ventricle, Thrombosis	1 (2%) 1 (2%) 1 (2%)			
		1 (2%)		
<b>ENDOCRINE SYSTEM</b>				
Adrenal Cortex Hematopoietic Cell Proliferation Hemorrhage Hyperplasia	(50) 3 (6%) 14 (28%)	(50) 1 (2%) 17 (34%)	(50) 2 (4%) 1 (2%) 14 (28%)	(50) 18 (36%)
Metaplasia, Osseous Necrosis Vacuolization Cytoplasmic Capsule, Hyperplasia		1 (2%) 7 (14%)	1 (2%) 8 (16%)	4 (8%) 1 (2%)
Adrenal Medulla Hyperplasia	(50) 1 (2%)	(50) 2 (4%)	(50) 3 (6%)	(50)
Islets, Pancreatic Hyperplasia	(50) 1 (2%)	(50)	(50)	(50)
Parathyroid Gland Hyperplasia	(49) 1 (2%)	(50)	(48) 1 (2%)	(47) 1 (2%)
Pituitary Gland Cyst Hyperplasia	(49) 3 (6%) 5 (10%)	(50) 2 (4%) 11 (22%)	(50) 4 (8%) 10 (20%)	(50) 4 (8%) 5 (10%)

FISCHER 344 RATS FEMALE	CONTROL	30 PPM	60 PPM	120 PPM
Thyroid Gland	(50)	(50)	(50)	(49)
C-cell, Hyperplasia	27 (54%)	23 (46%)	17 (34%)	19 (39%)
Follicle, Cyst				1 (2%)
Follicular Cell, Hyperplasia	1 (2%)		1 (2%)	

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Clitoral Gland	(50)	(50)	(50)	(50)
Cyst	2 (4%)			3 (6%)
Hyperplasia	4 (8%)	4 (8%)	4 (8%)	2 (4%)
Inflammation, Suppurative				1 (2%)
Inflammation, Chronic			1 (2%)	
Ovary	(50)	(50)	(50)	(50)
Cyst	6 (12%)	4 (8%)	7 (14%)	9 (18%)
Hyperplasia, Adenomatous				1 (2%)
Oviduct	(0)	(1)	(0)	(0)
Cyst		1 (100%)		
Inflammation, Suppurative		1 (100%)		
Uterus	(50)	(50)	(50)	(50)
Decidual Reaction	1 (2%)	1 (2%)		
Hemorrhage	1 (2%)	1 (2%)	2 (4%)	3 (6%)
Hydrometra		1 (2%)		
Necrosis		3 (6%)		2 (4%)
Thrombosis			1 (2%)	
Cervix, Myometrium, Hypertrophy		1 (2%)		
Endometrium, Hyperplasia	2 (4%)	5 (10%)	7 (14%)	11 (22%)
Endometrium, Inflammation, Suppurative			3 (6%)	

HEMATOPOIETIC SYSTEM

Bone Marrow	(50)	(50)	(50)	(50)
Hyperplasia			1 (2%)	1 (2%)
Hyperplasia, Reticulum Cell		2 (4%)	3 (6%)	
Erythroid Cell, Hyperplasia			1 (2%)	
Lymph Node	(4)	(3)	(3)	(3)
Pancreatic, Ectasia			1 (33%)	
Pancreatic, Erythrophagocytosis		1 (33%)		
Pancreatic, Hemorrhage		1 (33%)		1 (33%)
Pancreatic, Infiltration Cellular, Histiocyte	1 (25%)	1 (33%)		

FISCHER 344 RATS FEMALE	CONTROL	30 PPM	60 PPM	120 PPM
Pancreatic, Inflammation, Chronic				1 (33%)
Pancreatic, Pigmentation		1 (33%)	1 (33%)	1 (33%)
Lymph Node, Bronchial	(3)	(5)	(3)	(2)
Ectasia			1 (33%)	
Hyperplasia, Lymphoid		1 (20%)		
Infiltration Cellular, Histiocyte		2 (40%)		
Pigmentation		1 (20%)		
Lymph Node, Mediastinal	(33)	(36)	(40)	(34)
Angiectasis	1 (3%)		1 (3%)	
Ectasia				1 (3%)
Hyperplasia, Lymphoid	2 (6%)			
Inflammation, Chronic	1 (3%)			
Pigmentation	2 (6%)		1 (3%)	
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Ectasia				1 (2%)
Pigmentation				1 (2%)
Spleen	(50)	(50)	(50)	(50)
Fibrosis	1 (2%)	1 (2%)		
Hematopoietic Cell Proliferation	2 (4%)	4 (8%)	5 (10%)	1 (2%)
Hemorrhage		1 (2%)		
Necrosis	2 (4%)			
Thymus	(44)	(45)	(48)	(46)
Cyst		1 (2%)		
Ectopic Parathyroid Gland				1 (2%)
<b>INTEGUMENTARY SYSTEM</b>				
Mammary Gland	(50)	(50)	(50)	(50)
Galactoceles	1 (2%)	2 (4%)	4 (8%)	2 (4%)
Hyperplasia				1 (2%)
Epithelium, Hyperplasia		1 (2%)	1 (2%)	
Skin	(50)	(50)	(50)	(50)
Hyperkeratosis				1 (2%)
Hyperplasia, Squamous				1 (2%)
Inflammation, Chronic			1 (2%)	1 (2%)
Ulcer	1 (2%)	1 (2%)	1 (2%)	3 (6%)
Subcutaneous Tissue, Hemorrhage		1 (2%)		
Subcutaneous Tissue, Inflammation, Chronic	1 (2%)			
Subcutaneous Tissue, Ulcer			1 (2%)	
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone	(50)	(50)	(50)	(50)
Skeletal Muscle	(1)	(1)	(0)	(0)

FISCHER 344 RATS FEMALE	CONTROL	30 PPM	60 PPM	120 PPM
<b>NERVOUS SYSTEM</b>				
Brain	(50)	(50)	(50)	(50)
Compression	11 (22%)	6 (12%)	13 (26%)	12 (24%)
Hemorrhage	2 (4%)	3 (6%)	4 (8%)	5 (10%)
Hydrocephalus				1 (2%)
Necrosis				1 (2%)
Thrombosis	1 (2%)			
Choroid Plexus, Hyperplasia				1 (2%)
Medulla, Gliosis			1 (2%)	
Spinal Cord	(0)	(1)	(0)	(0)
<b>RESPIRATORY SYSTEM</b>				
Larynx	(50)	(50)	(50)	(50)
Foreign Body	3 (6%)	4 (8%)	4 (8%)	3 (6%)
Inflammation, Suppurative	6 (12%)	2 (4%)	6 (12%)	9 (18%)
Inflammation, Chronic		1 (2%)	1 (2%)	1 (2%)
Epiglottis, Metaplasia, Squamous				1 (2%)
Respiratory Epithelium, Hyperplasia	3 (6%)	1 (2%)		1 (2%)
Lung	(50)	(50)	(50)	(50)
Hemorrhage	2 (4%)	1 (2%)		
Inflammation, Suppurative		1 (2%)		
Inflammation, Chronic	12 (24%)	16 (32%)	14 (28%)	21 (42%)
Alveolar Epithelium, Hyperplasia	6 (12%)	5 (10%)	4 (8%)	3 (6%)
Alveolar Epithelium, Metaplasia, Squamous	1 (2%)			
Alveolus, Infiltration Cellular, Histiocyte	21 (42%)	30 (60%)	24 (48%)	34 (68%)
Alveolus, Pigmentation	1 (2%)			
Alveolus, Proteinosis		5 (10%)	3 (6%)	2 (4%)
Bronchiole, Hyperplasia	1 (2%)	3 (6%)	2 (4%)	3 (6%)
Bronchiole, Glands, Degeneration, Mucoid	2 (4%)	2 (4%)	2 (4%)	
Interstitial, Fibrosis				1 (2%)
Mediastinum, Infiltration Cellular, Histiocyte		1 (2%)		
Nose	(50)	(50)	(50)	(50)
Foreign Body	1 (2%)	1 (2%)	2 (4%)	5 (10%)
Inflammation, Suppurative	7 (14%)	1 (2%)	4 (8%)	4 (8%)
Glands, Dilatation		6 (12%)	10 (20%)	16 (32%)
Nasolacrimal Duct, Inflammation, Suppurative	3 (6%)	2 (4%)	1 (2%)	1 (2%)
Olfactory Epithelium, Degeneration		47 (94%)	50 (100%)	46 (92%)
Olfactory Epithelium, Degeneration, Hyaline	3 (6%)			
Olfactory Epithelium, Hyperplasia, Basal Cell		48 (96%)	50 (100%)	49 (98%)
Olfactory Epithelium, Inflammation, Suppurative		16 (32%)	15 (30%)	19 (38%)

Test Type: CHRONIC

Tetralin

Time Report Requested: 08:56:08

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 119-64-2

First Dose M/F: 06/16/03 / 06/16/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	30 PPM	60 PPM	120 PPM
Olfactory Epithelium, Metaplasia		41 (82%)	43 (86%)	49 (98%)
Olfactory Epithelium, Mineralization		2 (4%)	8 (16%)	13 (26%)
Respiratory Epithelium, Degeneration, Hyaline	1 (2%)			
Respiratory Epithelium, Hyperplasia	7 (14%)	1 (2%)	2 (4%)	5 (10%)
Respiratory Epithelium, Inflammation, Chronic	1 (2%)	7 (14%)	11 (22%)	12 (24%)
Pleura	(9)	(16)	(15)	(17)
Fibrosis			2 (13%)	
Infiltration Cellular, Histiocyte	1 (11%)			
Mesothelium, Hyperplasia			1 (7%)	
Trachea	(50)	(50)	(50)	(50)
Inflammation, Chronic			1 (2%)	
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(49)	(50)	(49)	(50)
Cornea, Inflammation	1 (2%)			
Cornea, Inflammation, Suppurative		1 (2%)		
Cornea, Mineralization				1 (2%)
Lens, Cataract	2 (4%)	6 (12%)	7 (14%)	11 (22%)
Retina, Atrophy	4 (8%)	7 (14%)	7 (14%)	7 (14%)
Sclera, Metaplasia, Osseous		1 (2%)	1 (2%)	
Harderian Gland	(50)	(50)	(50)	(50)
Inflammation, Chronic	2 (4%)	1 (2%)	2 (4%)	
Zymbal's Gland	(1)	(0)	(0)	(0)
<b>URINARY SYSTEM</b>				
Kidney	(50)	(50)	(50)	(50)
Nephropathy, Chronic	40 (80%)	41 (82%)	44 (88%)	49 (98%)
Cortex, Infarct, Multiple	1 (2%)			
Cortex, Renal Tubule, Accumulation, Hyaline Droplet	1 (2%)		2 (4%)	
Papilla, Mineralization	28 (56%)	16 (32%)	23 (46%)	20 (40%)
Pelvis, Inflammation, Suppurative				1 (2%)
Pelvis, Inflammation, Chronic			1 (2%)	
Pelvis, Mineralization	1 (2%)			
Pelvis, Transitional Epithelium, Hyperplasia		4 (8%)	1 (2%)	2 (4%)
Pelvis, Transitional Epithelium, Mineralization	2 (4%)	1 (2%)	2 (4%)	2 (4%)
Renal Tubule, Dilatation		1 (2%)		
Urinary Bladder	(50)	(50)	(50)	(50)
Transitional Epithelium, Hyperplasia		2 (4%)		1 (2%)

TDMS No. 93025 - 07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

**P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)**

Tetralin

CAS Number: 119-64-2

Date Report Requested: 11/17/2008

Time Report Requested: 08:56:08

First Dose M/F: 06/16/03 / 06/16/03

Lab: BNW

---

FISCHER 344 RATS FEMALE	CONTROL	30 PPM	60 PPM	120 PPM
-------------------------	---------	--------	--------	---------

---

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