

TDMS No. 93025 - 07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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

F2_R2

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

DAY ON TEST	0 0																								
	6 7 6 7 6 6 7 6 5 7 7 5 6 6 7 5 7 6 7 6 6 7 7 7 5																								
FISCHER 344 RATS MALE CONTROL	2 3 4 2 8 6 3 4 9 1 2 8 7 0 2 8 2 4 3 0 0 0 2 2 5																								
	8 0 2 9 4 8 0 7 1 2 9 6 0 0 9 6 9 9 0 0 5 1 9 9 7																								
ANIMAL ID	0 0																								
	0 0																								
CONTROL	0 0																								
	0 0																								
	1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 2 2 2 2																								
	males (cont...)																								

ALIMENTARY SYSTEM

Esophagus	+ +																								
Intestine Large, Cecum	+ A + + +																								
Intestine Large, Colon	+ +																								
Intestine Large, Rectum	+ +																								
Intestine Small, Duodenum	+ +																								
Intestine Small, Ileum	+ + + + + + + + + + + + A + + + + + + + + + + A + + +																								
Intestine Small, Jejunum	+ + + + + + + + + + + + A + + + + + + + + + + A + + +																								
Liver	+ +																								
Basophilic Focus																									
Basophilic Focus, Multiple																									
Clear Cell Focus	2 1																								
Clear Cell Focus, Multiple	2 1																								
Degeneration, Cystic	4 4																								
Hepatodiaphragmatic Nodule	4 4																								
Necrosis	4 3																								
Vacuolization Cytoplasmic	3 2																								
Bile Duct, Hyperplasia	1 1 3 1 1 2 2																								
Hepatocyte, Regeneration	1 1 3 1 1 2 2																								

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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 M .. Missing tissue
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 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

DAY ON TEST	0 0																								
	6 7 6 7 6 6 7 6 5 7 7 5 6 6 7 5 7 6 7 6 6 7 7 7 5																								
FISCHER 344 RATS MALE CONTROL	2 3 4 2 8 6 3 4 9 1 2 8 7 0 2 8 2 4 3 0 0 0 2 2 5																								
	8 0 2 9 4 8 0 7 1 2 9 6 0 0 9 6 9 9 0 0 5 1 9 9 7																								
ANIMAL ID	0 0																								
	0 0																								
CONTROL	0 0																								
	0 0																								
	1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 2 2 3 4 5																								
	males (cont...)																								
Periportal, Inflammation, Chronic	1												2												
Mesentery	+						+			+			+			+									
Hemorrhage																									
Necrosis	2		1	2						2		2		3		2		3		2					
Fat, Hemorrhage																									
Oral Mucosa																									
Hyperplasia, Squamous	4																								
Pancreas	+																								
Cyst	1																								
Acinus, Atrophy						3		2		1	4				2		3								
Salivary Glands	+																								
Stomach, Forestomach	+																								
Hyperplasia, Squamous	4																								
Inflammation, Suppurative	4																								
Ulcer	4																								
Stomach, Glandular	+																								
Ulcer	+																								
Tongue																									
Epithelium, Hyperplasia													2												
Tooth													+												

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DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		6	7	6	7	6	6	7	6	5	7	7	5	6	6	7	5	7	6	7	6	6	7	7	7	5
		2	3	4	2	8	6	3	4	9	1	2	8	7	0	2	8	2	4	3	0	0	0	2	2	5
		8	0	2	9	4	8	0	7	1	2	9	6	0	0	9	6	9	9	0	0	5	1	9	9	7
FISCHER 344 RATS MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	CONTROL	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

Germinal Epithelium, Atrophy				2	3	2	2	1	4	2	2			2			2	2	2	2	2	2	2	4
Interstitial Cell, Hyperplasia	4												3											

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia, Reticulum Cell																									
Lymph Node							+	+	+		+							+					+		+
Lymph Node, Bronchial	M	M	M	M	M	M	M	+	M	M	M	M	M	M	M	M	M	M	M	+	M	M	M	M	M
Angiectasis																									
Ectasia																									
Inflammation, Chronic																									
Inflammation, Chronic Active																									3
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Lymph Node, Mediastinal	+	+	+	M	+	M	+	M	M	M	+	M	+	+	+	M	M	M	M	+	M	+	M	+	+
Ectasia																									
Hemorrhage							2																		
Inflammation, Chronic																									
Inflammation, Chronic Active																									3
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ectasia																									
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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DAY ON TEST	0 0																								
	6 7 6 7 6 6 7 6 5 7 7 5 6 6 7 5 7 6 7 6 6 7 7 7 5																								
FISCHER 344 RATS MALE CONTROL	2 3 4 2 8 6 3 4 9 1 2 8 7 0 2 8 2 4 3 0 0 0 2 2 5																								
	8 0 2 9 4 8 0 7 1 2 9 6 0 0 9 6 9 9 0 0 5 1 9 9 7																								
ANIMAL ID	0 0																								
	0 0																								
	0 0																								
	0 0																								
	1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 2 3 4 5																								

males (cont...)

Hemorrhage Cerebrum, Mineralization 2 1 2

RESPIRATORY SYSTEM

Larynx	+ +																								
Foreign Body	4 4 4																								
Inflammation, Suppurative	1 2 1																								
Inflammation, Chronic	1																								
Respiratory Epithelium, Hyperplasia	1																								
Lung	+ +																								
Congestion	3																								
Hemorrhage	2 1 1 1																								
Inflammation, Chronic	1 3 2																								
Alveolar Epithelium, Hyperplasia	1 4 1 1 1 3 2																								
Alveolar Epithelium, Metaplasia, Squamous	4																								
Alveolar Epithelium, Metaplasia, Mucous	3																								
Alveolus, Infiltration Cellular, Histiocyte	1 2 3 2 1 2 1																								
Alveolus, Proteinosis	3																								
Bronchiole, Glands, Degeneration, Mucoïd	1																								
Bronchiole, Goblet Cell, Hyperplasia	3																								
Interstitialium, Fibrosis																									
Nose	+ +																								
Foreign Body	1 3 3 3																								
Inflammation, Suppurative	1 1 2 2																								
Inflammation, Chronic																									

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	6	7	6	7	6	6	7	6	5	7	7	5	6	6	7	5	7	6	7	6	6	7	7	7	5	
	2	3	4	2	8	6	3	4	9	1	2	8	7	0	2	8	2	4	3	0	0	0	2	2	5	
	8	0	2	9	4	8	0	7	1	2	9	6	0	0	9	6	9	9	0	0	5	1	9	9	7	
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	males (cont...)

Inflammation, Chronic Active																										
Nasolacrimal Duct, Inflammation, Suppurative																										
Olfactory Epithelium, Degeneration																										
Olfactory Epithelium, Degeneration, Hyaline																										
Respiratory Epithelium, Degeneration, Hyaline																										1
Respiratory Epithelium, Hyperplasia																										2
Respiratory Epithelium, Inflammation, Chronic																										1
Pleura Fibrosis																										2
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy																										4
Inflammation, Chronic																										3
Anterior Chamber, Inflammation, Suppurative																										
Cornea, Mineralization																										
Lens, Cataract																										3
Retina, Atrophy																										1
Sclera, Metaplasia, Osseous																										2

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6	7	6	7	6	6	7	6	5	7	7	5	6	6	7	5	7	6	7	6	6	7	7	5	
FISCHER 344 RATS MALE CONTROL	2	3	4	2	8	6	3	4	9	1	2	8	7	0	2	8	2	4	3	0	0	0	2	2	5
	8	0	2	9	4	8	0	7	1	2	9	6	0	0	9	6	9	9	0	0	5	1	9	9	7
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

Harderian Gland +

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Nephropathy, Chronic	3	3	3	3	4	3	4	1	4	3	4		2	1	1	1	4	2	4	1	1	4	3	3	1
Cortex, Renal Tubule, Accumulation, Hyaline Droplet																									
Cortex, Renal Tubule, Hyperplasia							2																		
Cortex, Renal Tubule, Pigmentation										4															
Papilla, Mineralization	1	1	1				1										1					1	2		
Pelvis, Transitional Epithelium, Hyperplasia																							1		
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Calculus Micro Observation Only																									
Inflammation, Chronic											X														

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 Page 10

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	6	7	7	6	7	7	7	6	7	6	7	5	3	7	7	6	6	5	7	5	6	7	5
	1	2	4	2	2	7	2	2	3	4	2	8	2	6	7	2	2	4	4	6	2	3	6	2	9
	8	6	2	9	9	8	9	9	0	7	9	2	9	3	2	9	9	8	7	3	9	0	2	9	3
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
	* TOTALS																								

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Intestine Large, Cecum	+	+	+	+	+	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	A	46		
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	49	
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	49	
Intestine Small, Ileum	+	+	+	+	+	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	A	+	A	44	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	A	+	A	45	
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Basophilic Focus																											2	1.0
Basophilic Focus, Multiple																											4	1.0
Clear Cell Focus																											5	1.2
Clear Cell Focus, Multiple																											7	1.6
Degeneration, Cystic																											1	1.0
Hepatodiaphragmatic Nodule																											4	4.0
Necrosis																											3	3.3
Vacuolization Cytoplasmic																											4	2.8
Bile Duct, Hyperplasia																											15	1.6
Hepatocyte, Regeneration																											2	4.0

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	6	7	7	6	7	7	7	6	7	6	7	5	3	7	7	6	6	5	7	5	6	7	5
	1	2	4	2	2	7	2	2	3	4	2	8	2	6	7	2	2	4	4	6	2	3	6	2	9
	8	6	2	9	9	8	9	9	0	7	9	2	9	3	2	9	9	8	7	3	9	0	2	9	3
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
																								* TOTALS	

Periportal, Inflammation, Chronic																								1	3	1.3
Mesentery	+	+															+	15								
Hemorrhage																								2	1	2.0
Necrosis	1															2	3	12	2.1							
Fat, Hemorrhage	1												3			2	2.0									
Oral Mucosa																								1	1	4.0
Hyperplasia, Squamous																										
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cyst																									1	1.0
Acinus, Atrophy						2	2						3			9	2.4									
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia, Squamous											3			2	3.5											
Inflammation, Suppurative											3			2	3.5											
Ulcer	3											4	4	4			5	3.8								
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Ulcer											4			1	4.0											
Tongue																								1	1	2.0
Epithelium, Hyperplasia																										
Tooth											+			3												

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	6	7	7	6	7	7	7	6	7	6	7	5	3	7	7	6	6	5	7	5	6	7	5
	1	2	4	2	2	7	2	2	3	4	2	8	2	6	7	2	2	4	4	6	2	3	6	2	9
	8	6	2	9	9	8	9	9	0	7	9	2	9	3	2	9	9	8	7	3	9	0	2	9	3
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
																								* TOTALS	

Malformation	3	2	3.5
Epithelium Alveolus, Hyperplasia		1	4.0
Peridontal Tissue, Inflammation	2	1	2.0

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cardiomyopathy	2		1	2		1	1	1	1		1	2		1		1	2		2	1		2	2	2	35	1.4
Atrium, Thrombosis																									1	4.0

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Hemorrhage											2														1	2.0	
Hyperplasia	2					4		1	1			1	1		1	4				1					13	1.7	
Vacuolization Cytoplasmic	1		1						1			1		1	2		1						1		17	1.4	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Hyperplasia		1		1					2	2					2							1			4	16	1.9
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Parathyroid Gland	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48		
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Cyst							4																		2	4.0	
Hyperplasia		4	3		4							2							3						7	3.1	

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 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
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 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	6	7	7	6	7	7	7	6	7	6	7	5	3	7	7	6	6	5	7	5	6	7	5
	1	2	4	2	2	7	2	2	3	4	2	8	2	6	7	2	2	4	4	6	2	3	6	2	9
	8	6	2	9	9	8	9	9	0	7	9	2	9	3	2	9	9	8	7	3	9	0	2	9	3
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
																								* TOTALS	

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
C-cell, Hyperplasia	1		1	1	1		2	1					1	1		4			1		4				23 1.7
Follicle, Cyst																									1 2.0

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Penis																									1
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cyst																							2		1 2.0
Hyperplasia																							3		2 3.0
Inflammation, Suppurative				2																					1 2.0
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia			1																				1		2 1.0
Inflammation, Suppurative	2	1		2	1	1	1	1	2		1	1		1	1	2	2	2	2	2	2	1	1		40 1.4
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Artery, Inflammation, Chronic Active	2																								1 2.0

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 A .. Autolysis precludes evaluation
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 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 93025 - 07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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

DAY ON TEST	0																								* TOTALS
	7 5 1 8 6 2 9 9 8 9 9 0 7 9 2 9 3 2 9 9 8 7 3 9 0 2 9 3																								
FISCHER 344 RATS MALE CONTROL	ANIMAL ID																								
	0 0																								
	2 2 2 2 2 3																								
	6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0																								
Germinal Epithelium, Atrophy		2 4		2 2		2		1 2		2 2		2 2		3		2 1		3		2 2		32		2.2	
Interstitial Cell, Hyperplasia						1						2										4		2.5	

HEMATOPOIETIC SYSTEM

Bone Marrow	+ +																								50		
Hyperplasia, Reticulum Cell	3												3										2		3.0		
Lymph Node	+																								8		
Lymph Node, Bronchial	M M M + M M M M + + M M M M M M M + M M M M M M +																								7		
Angiectasis																									1	3.0	
Ectasia																									1	4.0	
Inflammation, Chronic	4																								1	4.0	
Inflammation, Chronic Active																									1	3.0	
Lymph Node, Mandibular	M M																								0		
Lymph Node, Mediastinal	+ + + + + + + + M + M + M + + + + + + M + + + M +																								33		
Ectasia																									1	4.0	
Hemorrhage																									1	2.0	
Inflammation, Chronic	4																								1	4.0	
Inflammation, Chronic Active																									1	3.0	
Lymph Node, Mesenteric	+ +																								50		
Ectasia																									1	2.0	
Spleen	+ +																								50		

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2) Mild 4) Marked

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FISCHER 344 RATS MALE CONTROL	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5		
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0												* TOTALS

Accessory Spleen																																					X	2	2.0
Hematopoietic Cell Proliferation																																						1	4.0
Hemorrhage		4																																			4	2	4.0
Hyperplasia, Lymphoid																																						1	4.0
Necrosis																																						2	4.0
Thymus		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		47	

INTEGUMENTARY SYSTEM

Mammary Gland																																						50	
Galactoceles											4																											2	4.0
Skin																																						50	
Cyst Epithelial Inclusion																	4	4																				4	4.0
Inflammation, Chronic																																						1	3.0
Ulcer																	4																				4	5	3.8

MUSCULOSKELETAL SYSTEM

Bone																																						50	
------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----	--

NERVOUS SYSTEM

Brain																																						50	
Compression																																						13	2.8

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 1-4 .. Lesion qualified as:
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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	6	7	7	6	7	7	7	6	7	6	7	5	3	7	7	6	6	5	7	5	6	7	5
	1	2	4	2	2	7	2	2	3	4	2	8	2	6	7	2	2	4	4	6	2	3	6	2	9
	8	6	2	9	9	8	9	9	0	7	9	2	9	3	2	9	9	8	7	3	9	0	2	9	3
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
* TOTALS																									

Hemorrhage	1										4										3		3		6		2.5	
Cerebrum, Mineralization																									1		1.0	

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																
Foreign Body																									4		4		4		6		4.0									
Inflammation, Suppurative																									1		1		5		1.2											
Inflammation, Chronic																													1		1.0											
Respiratory Epithelium, Hyperplasia																													1		1.0											
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																
Congestion																													1		3.0											
Hemorrhage																									2				5		1.4											
Inflammation, Chronic																									2		1		1		8		1.6									
Alveolar Epithelium, Hyperplasia																									3		3		1		12		2.0									
Alveolar Epithelium, Metaplasia, Squamous																													2		2		4.0									
Alveolar Epithelium, Metaplasia, Mucous																															1		3.0									
Alveolus, Infiltration Cellular, Histiocyte																											1		2		1		13		1.5							
Alveolus, Proteinosis																									1		2				3		2.0									
Bronchiole, Glands, Degeneration, Muroid																									1		2				1		1		5		1.2					
Bronchiole, Goblet Cell, Hyperplasia																															1		1		1		3.0					
Interstitialium, Fibrosis																									1						1		1		1		1.0					
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																
Foreign Body																									3		1		3		X		3				3		11		2.6	
Inflammation, Suppurative																													1				1				6		1.3			
Inflammation, Chronic																													1								1		1.0			

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DAY ON TEST	0																								* TOTALS	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	7	7	6	7	7	6	7	7	7	6	7	6	7	5	3	7	7	6	6	5	7	5	6	7	5	
	1	2	4	2	2	7	2	2	3	4	2	8	2	6	7	2	2	4	4	6	2	3	6	2	9	
	8	6	2	9	9	8	9	9	0	7	9	2	9	3	2	9	9	8	7	3	9	0	2	9	3	
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	

Inflammation, Chronic Active							1																			1	1.0								
Nasolacrimal Duct, Inflammation, Suppurative																												1	1.0						
Olfactory Epithelium, Degeneration																													1	1.0					
Olfactory Epithelium, Degeneration, Hyaline														2																1	2.0				
Respiratory Epithelium, Degeneration, Hyaline																															1	1.0			
Respiratory Epithelium, Hyperplasia																																1	2.0		
Respiratory Epithelium, Inflammation, Chronic																													1		1		4	1.0	
Pleura Fibrosis																																		2	1.5
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+									50

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+									50		
Atrophy																																				1	4.0
Inflammation, Chronic																																				1	3.0
Anterior Chamber, Inflammation, Suppurative																												1									1.0
Cornea, Mineralization																																				1	1.0
Lens, Cataract																												1		4						4	2.6
Retina, Atrophy																															4					4	4.0
Sclera, Metaplasia, Osseous																														1						2	2.3

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 Page 18

	DAY ON TEST																								* TOTALS	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7	7	6	7	7	6	7	7	7	6	7	6	7	5	3	7	7	6	6	5	7	5	6	7	5	
	1	2	4	2	2	7	2	2	3	4	2	8	2	6	7	2	2	4	4	6	2	3	6	2	9	
	8	6	2	9	9	8	9	9	0	7	9	2	9	3	2	9	9	8	7	3	9	0	2	9	3	
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Nephropathy, Chronic	4	1	1	3	3	3	3	4	2	4	4		2	2	2	2	2	2	3	2	3	1	4	3	1	48 2.6
Cortex, Renal Tubule, Accumulation, Hyaline Droplet																		4								1 4.0
Cortex, Renal Tubule, Hyperplasia																										1 2.0
Cortex, Renal Tubule, Pigmentation																										1 4.0
Papilla, Mineralization		1	1	1				1														2		1		13 1.2
Pelvis, Transitional Epithelium, Hyperplasia																										1 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Calculus Micro Observation Only																										1
Inflammation, Chronic																						2				1 2.0

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+ .. Tissue examined microscopically

x .. Lesion present

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DAY ON TEST	0																								
	7	7	7	7	7	7	7	7	6	6	7	7	6	7	7	6	5	7	7	5	7	7	5	6	7
1	3	2	2	3	2	2	3	7	3	3	2	9	2	2	4	9	2	2	1	3	3	7	7	3	
5	0	9	9	0	9	9	0	4	3	0	9	6	9	9	2	0	9	9	3	0	0	6	0	0	
FISCHER 344 RATS MALE ANIMAL ID 30 PPM	0																								
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	

males (cont...)

ALIMENTARY SYSTEM

Esophagus	+																								
Intestine Large, Cecum	+																								
Intestine Large, Colon	+																								
Intestine Large, Rectum	+																								
Intestine Small, Duodenum	+																								
Intestine Small, Ileum Muscularis, Hyperplasia	+																								
Intestine Small, Jejunum	+																								
Liver	+																								
Angiectasis	4																								
Basophilic Focus, Multiple	2																								
Clear Cell Focus	4																								
Clear Cell Focus, Multiple	1 1 1 2 2																								
Degeneration, Cystic	3																								
Hepatodiaphragmatic Nodule	4 4 4																								
Infarct	4																								
Necrosis	4																								
Vacuolization Cytoplasmic																									

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	DAY ON TEST																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	6	6	7	7	6	7	7	6	5	7	7	5	7	7	5	6	7	0	
	1	3	2	2	3	2	2	3	7	3	3	2	9	2	2	4	9	2	2	1	3	3	7	7	3	
	5	0	9	9	0	9	9	0	4	3	0	9	6	9	9	2	0	9	9	3	0	0	6	0	0	
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30 PPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	males
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	(cont...)
Bile Duct, Hyperplasia						1																				
Periportal, Inflammation, Chronic						1	2										1									
Mesentery Necrosis	+							+				+					+	+								
	2							2				3					1	3						2		
Pancreas Cyst	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Acinus, Atrophy												3							1							
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Stomach, Forestomach Diverticulum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Erosion	4																									
Inflammation, Suppurative Ulcer																										
Stomach, Glandular Erosion	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Tongue Epithelium, Hyperplasia																									+	
																									1	
Tooth Inflammation, Suppurative																									+	
																									4	

CARDIOVASCULAR SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
DAY ON TEST		7	7	7	7	7	7	7	6	6	7	7	6	7	7	6	5	7	7	5	7	7	5	6	7		
DAY ON TEST		1	3	2	2	3	2	2	3	7	3	3	2	9	2	2	4	9	2	2	1	3	3	7	7	3	
DAY ON TEST		5	0	9	9	0	9	9	0	4	3	0	9	6	9	9	2	0	9	9	3	0	0	6	0	0	
FISCHER 344 RATS MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	ANIMAL ID	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	ANIMAL ID	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
30 PPM																											males (cont...)

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cardiomyopathy	2		2	2	1	3	1	2	1		2	1	2	1			1	1	1	2	1	1					
Atrium, Thrombosis																											
Ventricle, Inflammation, Suppurative																											

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia				3	3		2	2			2	1						1	4							1
Vacuolization Cytoplasmic	3						2		1						1	1						1				
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia				1	4						4								4							
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia							4																			
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst									4																	
Hemorrhage																										
Hyperplasia		3																					2		4	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
C-cell, Hyperplasia		1	4	4			2						1		4	1						1	1		2	
Follicular Cell, Hyperplasia																										

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 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 22

TDMS No. 93025 - 07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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

DAY ON TEST	0 7 1 5	0 7 3 0	0 7 2 9	0 7 2 9	0 7 3 0	0 7 2 9	0 7 2 9	0 6 3 0	0 6 7 4	0 6 3 3	0 7 3 0	0 7 2 9	0 7 2 6	0 7 2 9	0 5 4 0	0 7 2 9	0 7 2 9	0 5 1 3	0 7 3 0	0 5 3 0	0 7 7 6	0 5 3 0	0 6 7 0	0 7 7 0	0 5 3 0	
FISCHER 344 RATS MALE ANIMAL ID	0 0 2 0 1	0 0 2 0 2	0 0 2 0 3	0 0 2 0 4	0 0 2 0 5	0 0 2 0 6	0 0 2 0 7	0 0 2 0 8	0 0 2 1 9	0 0 2 1 0	0 0 2 1 1	0 0 2 1 2	0 0 2 2 3	0 0 2 2 4	0 0 2 2 5	0 0 2 2 6	0 0 2 2 7	0 0 2 2 8	0 0 2 2 9	0 0 2 2 0	0 0 2 2 1	0 0 2 2 2	0 0 2 2 3	0 0 2 2 4	0 0 2 2 5	
30 PPM																										
																										males (cont...)

GENERAL BODY SYSTEM

Peritoneum

GENITAL SYSTEM

Epididymis

Preputial Gland
Cyst
Hyperplasia

Prostate
Hyperplasia
Inflammation, Suppurative

Seminal Vesicle

Testes
Mineralization
Artery, Inflammation, Chronic Active
Germinal Epithelium, Atrophy
Interstitial Cell, Hyperplasia

HEMATOPOIETIC SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 23

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
DAY ON TEST		7	7	7	7	7	7	7	6	6	7	7	6	7	7	6	5	7	7	5	7	7	5	6	7	
DAY ON TEST		1	3	2	2	3	2	2	3	7	3	3	2	9	2	2	4	9	2	2	1	3	3	7	7	3
DAY ON TEST		5	0	9	9	0	9	9	0	4	3	0	9	6	9	9	2	0	9	9	3	0	0	6	0	0
FISCHER 344 RATS MALE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30 PPM		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

Bone Marrow		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node Pancreatic, Pigmentation, Hemosiderin																									
Lymph Node, Bronchial Ectasia Hemorrhage Pigmentation, Hemosiderin		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Lymph Node, Mandibular		+	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Lymph Node, Mediastinal Angiectasis Hemorrhage Hyperplasia, Lymphoid		+	+	+	+	+	+	+	+	+	+	M	+	+	+	M	+	+	M	+	+	+	M	+	+
Lymph Node, Mesenteric Necrosis		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen Accessory Spleen Fibrosis Hematopoietic Cell Proliferation Hemorrhage Necrosis Pigmentation, Hemosiderin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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I .. Insufficient tissue

M .. Missing tissue
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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Page 24

DAY ON TEST	ANIMAL ID																									males (cont...)
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	7	7	7	7	7	7	7	6	6	7	7	6	7	7	6	5	7	7	5	7	7	5	6	7	0	
1	3	2	2	3	2	2	3	7	3	3	2	9	2	2	4	9	2	2	1	3	3	7	7	3	0	
5	0	9	9	0	9	9	0	4	3	0	9	6	9	9	2	0	9	9	3	0	0	6	0	0	0	
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30 PPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	2

Thymus + + + + + M +

INTEGUMENTARY SYSTEM

Mammary Gland +
 Galactocele 3 2 4

Skin +
 Cyst Epithelial Inclusion
 Hyperkeratosis 3
 Inflammation, Chronic
 Ulcer 4
 Subcutaneous Tissue, Fibrosis 2
 Subcutaneous Tissue, Metaplasia, Osseous 3

MUSCULOSKELETAL SYSTEM

Bone +

NERVOUS SYSTEM

Brain +
 Compression 2 2 4 4 2 3 4
 Hemorrhage 4 4 4

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	6	6	7	7	6	7	7	6	5	7	7	5	7	7	5	6	7	
	1	3	2	2	3	2	2	3	7	3	3	2	9	2	2	4	9	2	2	1	3	3	7	7	3
	5	0	9	9	0	9	9	0	4	3	0	9	6	9	9	2	0	9	9	3	0	0	6	0	0
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 PPM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foreign Body													4											4	
Inflammation, Suppurative																								2	
Respiratory Epithelium, Metaplasia, Squamous																									
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hemorrhage												3													
Inflammation, Chronic						3					1							2						2	
Alveolar Epithelium, Hyperplasia																		2							
Alveolus, Infiltration Cellular, Histiocyte	1		1	2		3				1	2					2				1				3	
Alveolus, Proteinosis																			1						
Bronchiole, Hyperplasia										1															
Interstitialium, Fibrosis																									
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foreign Body	3	3																							3
Inflammation, Suppurative	1	1								1								2	2						
Glands, Dilatation																									2
Goblet Cell, Hyperplasia																2									
Nasolacrimal Duct, Inflammation, Suppurative										1															
Olfactory Epithelium, Degeneration	2	2	2	2	2	2	2	2			1	3	1	3	2		3	2	1	2	2	2		2	2
Olfactory Epithelium, Hyperplasia, Basal Cell	2	2	1	1	2				2		1	2	2	1		2	1		2	2	2	2		2	
Olfactory Epithelium, Inflammation, Suppurative		2	1		1	1			1			1						1			1				

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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
DAY ON TEST		7	7	7	7	7	7	7	6	6	7	7	6	7	7	6	5	7	7	5	7	7	5	6	7	
		1	3	2	2	3	2	2	3	7	3	3	2	9	2	2	4	9	2	2	1	3	3	7	7	3
		5	0	9	9	0	9	9	0	4	3	0	9	6	9	9	2	0	9	9	3	0	0	6	0	0
FISCHER 344 RATS MALE 30 PPM	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
Olfactory Epithelium, Metaplasia		2	2	2										2			1			2	2		1	2		
Olfactory Epithelium, Mineralization		1									1							2								
Respiratory Epithelium, Hyperplasia										2										3						
Respiratory Epithelium, Inflammation, Chronic							1					1													1	
Respiratory Epithelium, Metaplasia, Squamous																										
Pleura																										
Trachea		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

males
(cont...)

SPECIAL SENSES SYSTEM

Eye		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cornea, Degeneration																									
Cornea, Inflammation, Suppurative					1																				
Cornea, Mineralization																									
Lens, Cataract		2	1							1										2					2
Retina, Atrophy																									
Sclera, Metaplasia, Osseous		1				2						1	1			1					1	2			2
Harderian Gland																									
Inflammation, Chronic		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

URINARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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BLANK .. Not examined microscopically
Page 27
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 93025 - 07

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 11/17/2008

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

	DAY ON TEST																									males (cont...)
	0 7 1 5	0 7 3 0	0 7 2 9	0 7 2 9	0 7 3 0	0 7 2 9	0 7 2 9	0 7 3 0	0 6 7 4	0 6 3 3	0 7 3 0	0 7 2 9	0 6 6 9	0 7 2 9	0 6 4 2	0 7 9 0	0 7 2 9	0 5 2 9	0 7 2 3	0 7 3 0	0 5 1 0	0 7 3 0	0 5 7 6	0 7 3 0		
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30 PPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Inflammation, Suppurative																										
Nephropathy, Chronic	4	3	3	3	3	3	2	4	3	3	3	2	3	4	3	3	3	4	4	2	3	3	3	2	3	
Cortex, Renal Tubule, Accumulation, Hyaline Droplet																										
Cortex, Renal Tubule, Hyperplasia	4													2												
Cortex, Renal Tubule, Hyperplasia, Oncocytic																			4							
Papilla, Mineralization										1		1													1	
Pelvis, Transitional Epithelium, Hyperplasia																										
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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DAY ON TEST	ANIMAL ID																								* TOTALS	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
5	7	7	7	5	7	7	7	7	7	7	7	7	7	5	5	7	5	7	6	6	7	7	7	5	7	
6	2	1	2	8	2	2	2	3	2	3	2	2	0	6	3	6	2	7	6	2	2	1	4	3		
3	9	6	9	2	9	9	9	0	9	0	2	9	0	3	0	0	2	6	3	9	9	5	7	0		
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30 PPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5		
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cardiomyopathy	1	1	2	1		1			2	1	1	1		1		1	1	1		2		1	1	1	35 1.3
Atrium, Thrombosis							4															4			2 4.0
Ventricle, Inflammation, Suppurative							4																		1 4.0

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia		3		4			3		2	4							2	2					3	17 2.5	
Vacuolization Cytoplasmic			1													1		2			2	1		11 1.5	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia		4	4		4			3			3	1			1		1		2		1	4		15 2.7	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia																			4					2 4.0	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Pituitary Gland	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Cyst														4	4									3 4.0	
Hemorrhage										4						4								2 4.0	
Hyperplasia			4				3	4							3						3			8 3.3	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
C-cell, Hyperplasia		1				1							4			1			3		1	1		17 1.9	
Follicular Cell, Hyperplasia																				4				1 4.0	

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 31

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	7	7	7	5	7	7	7	7	7	7	7	7	5	5	7	5	7	6	6	7	7	7	5	7	0	0
	6	2	1	2	8	2	2	2	3	2	3	2	2	0	6	3	6	2	7	6	2	2	1	4	3	0	0
	3	9	6	9	2	9	9	9	0	9	0	2	9	0	3	0	0	2	6	3	9	9	5	7	0	0	0
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 PPM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	0	0
																											* TOTALS

GENERAL BODY SYSTEM

Peritoneum

+ + 2

GENITAL SYSTEM

Epididymis

+ 50

Preputial Gland
Cyst
Hyperplasia

+ 50
1 3.0
2 3.0

Prostate
Hyperplasia
Inflammation, Suppurative

+ 50
1 1.0
1 2 2 1 1 3 2 36 1.6

Seminal Vesicle

+ 50

Testes
Mineralization
Artery, Inflammation, Chronic Active
Germinal Epithelium, Atrophy
Interstitial Cell, Hyperplasia

+ 50
2 2.5
1 1.0
2 2 2 4 2 2 2 3 2 4 4 4 2 4 2 2 2 2 2 2 2 2 2 42 2.4
2 4 2.8

HEMATOPOIETIC SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|-----------|
| | 5 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 7 | 5 | 7 | 6 | 6 | 7 | 7 | 7 | 5 | 7 | | |
| | 6 | 2 | 1 | 2 | 8 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 0 | 6 | 3 | 6 | 2 | 7 | 6 | 2 | 2 | 1 | 4 | 3 | |
| | 3 | 9 | 6 | 9 | 2 | 9 | 9 | 9 | 0 | 9 | 0 | 2 | 9 | 0 | 3 | 0 | 0 | 2 | 6 | 3 | 9 | 9 | 5 | 7 | 0 | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 30 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| ANIMAL ID | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node | | | | + | | | | | | | | | | | | | | | | | | | | | 2 | |
| Pancreatic, Pigmentation, Hemosiderin | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Lymph Node, Bronchial | M | M | + | + | M | + | M | M | M | M | M | + | M | M | M | M | + | M | M | M | M | M | M | M | 5 | |
| Ectasia | | | | | | 4 | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Pigmentation, Hemosiderin | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 1 | |
| Lymph Node, Mediastinal | + | + | + | M | M | M | + | M | + | + | + | M | M | + | + | M | + | + | + | + | M | M | + | + | M | 36 |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Necrosis | | | | | | | 4 | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Accessory Spleen | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Fibrosis | | | | | | | | | | 2 | | | | | | | | | | | | | | | 3 2.7 | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | 4 | | 2 3.0 | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 2 4.0 | |
| Pigmentation, Hemosiderin | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 7 | 5 | 7 | 6 | 6 | 7 | 7 | 7 | 5 | 7 | |
| | 6 | 2 | 1 | 2 | 8 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 0 | 6 | 3 | 6 | 2 | 7 | 6 | 2 | 2 | 1 | 4 | 3 |
| | 3 | 9 | 6 | 9 | 2 | 9 | 9 | 9 | 0 | 9 | 0 | 2 | 9 | 0 | 3 | 0 | 0 | 2 | 6 | 3 | 9 | 9 | 5 | 7 | 0 |

FISCHER 344 RATS MALE

30 PPM

ANIMAL ID

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

* TOTALS

Thymus + + + M + + + M + + M + M + + + + + + + + M M + + + 43

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Galactoceles | | | | | | | | | | | | | | | | | | | | | | | | | 3 3.0 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cyst Epithelial Inclusion | | | | 4 | | 4 | | 4 | | | | | | | | | | | | | | | | | 3 4.0 |
| Hyperkeratosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Inflammation, Chronic | | | | | 2 | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Subcutaneous Tissue, Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Subcutaneous Tissue, Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |

MUSCULOSKELETAL SYSTEM

Bone + 50

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Compression | 1 | 2 | | | | | | | | | | 2 | | | | | | | | | | | | | 13 2.7 |
| Hemorrhage | | 2 | | | | | | | | | | | | | 2 | | 3 | | | | | | | | 5 3.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

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

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 5 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 7 | 5 | 7 | 6 | 6 | 7 | 7 | 7 | 5 | 7 |
| | 6 | 2 | 1 | 2 | 8 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 0 | 6 | 3 | 6 | 2 | 7 | 6 | 2 | 2 | 1 | 4 | 3 |
| | 3 | 9 | 6 | 9 | 2 | 9 | 9 | 9 | 0 | 9 | 0 | 2 | 9 | 0 | 3 | 0 | 0 | 2 | 6 | 3 | 9 | 9 | 5 | 7 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Inflammation, Suppurative | | | | | | | 1 | | | | | | | | | | | | | | | | | | | 4.0 |
| Respiratory Epithelium, Metaplasia, Squamous | | | | | | | | | | | | | | | | 1 | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1.0 |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hemorrhage | | | | | | | | | | | | | | | | | 1 | | | | | | 3 | | | 3 |
| Inflammation, Chronic | | | | | | | | 1 | 1 | | | | | 1 | | | | | | 2 | 1 | 1 | | | | 10 |
| Alveolar Epithelium, Hyperplasia | | | | | 1 | 1 | | | | | | | | 1 | 2 | 4 | 2 | | | | | | | | | 7 |
| Alveolus, Infiltration Cellular, Histiocyte | | | | 2 | 1 | 1 | | 1 | | | | 1 | | | | | | 1 | | | | 1 | | | | 16 |
| Alveolus, Proteinosis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Bronchiole, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Interstitialium, Fibrosis | | | | | | | | | | | | | | 2 | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Foreign Body | | | | | | | | 3 | | | | | | | | | 3 | | | | | | | | | 5 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | 1 | | | 6 |
| Glands, Dilatation | | | | | | | | | 1 | | | | | | | 1 | | | | | | | | | | 3 |
| Goblet Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nasolacrimal Duct, Inflammation, Suppurative | | | | | | | | | | | | | 2 | | | | | | | | | | | | 1 | 3 |
| Olfactory Epithelium, Degeneration | 1 | 2 | | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | | 2 | 1 | | 1 | | 1 | 2 | | | 1 | 2 | 40 |
| Olfactory Epithelium, Hyperplasia, Basal Cell | 1 | 2 | | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | | 2 | 1 | 1 | 2 | 2 | 2 | 1 | | | 2 | 38 | |
| Olfactory Epithelium, Inflammation, Suppurative | | 1 | | | 1 | | | | | | | | 1 | 1 | | | | | | | | | | | | 12 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 93025 - 07

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 11/17/2008

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

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|---|
| | 5 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 7 | 5 | 7 | 6 | 6 | 7 | 7 | 7 | 5 | 7 |
| | 6 | 2 | 1 | 2 | 8 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 0 | 6 | 3 | 6 | 2 | 7 | 6 | 2 | 2 | 1 | 4 | 3 |
| | 3 | 9 | 6 | 9 | 2 | 9 | 9 | 9 | 0 | 9 | 0 | 2 | 9 | 0 | 3 | 0 | 0 | 2 | 6 | 3 | 9 | 9 | 5 | 7 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Olfactory Epithelium, Metaplasia | | | | 1 | | 1 | | | | | 1 | 2 | | | 1 | 2 | | | | | | 2 | | | 17 1.6 |
| Olfactory Epithelium, Mineralization | 1 | | | | | | | | | | | | | | 1 | | | | | | | | | | 5 1.2 |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 |
| Respiratory Epithelium, Inflammation, Chronic | | | | | | | | | 2 | | | | | | | | | | | | | | | | 4 1.3 |
| Respiratory Epithelium, Metaplasia, Squamous | | | | | | | | | | | | | | | 1 | | | | | | | | | | 1 1.0 |
| Pleura | | | | | | | | | + | | | | | | | | | | | | | | | | 1 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | 49 |
| Cornea, Degeneration | 1 | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Cornea, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Cornea, Mineralization | 1 | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Lens, Cataract | 3 | | 3 | | | | 3 | 4 | | | | | | | | | | 3 | | | | | | | 10 2.4 |
| Retina, Atrophy | 3 | | 3 | | | | | 4 | | | | | | | | | | | | | | | | | 3 3.3 |
| Sclera, Metaplasia, Osseous | | | | | | | | | | | 1 | | | | | 2 | | | | | 2 | | | | 11 1.5 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | 1 | | | | | | | | 1 1.0 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Page 36

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 5 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 7 | 5 | 7 | 6 | 6 | 7 | 7 | 7 | 5 | 7 | |
| 6 | 2 | 1 | 2 | 8 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 0 | 6 | 3 | 6 | 2 | 7 | 6 | 2 | 2 | 1 | 4 | 3 | | |
| 3 | 9 | 6 | 9 | 2 | 9 | 9 | 9 | 0 | 9 | 0 | 2 | 9 | 0 | 3 | 0 | 0 | 2 | 6 | 3 | 9 | 9 | 5 | 7 | 0 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 30 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Nephropathy, Chronic | 4 | 3 | 1 | 1 | 3 | 3 | 4 | 3 | 4 | 4 | 2 | 4 | 3 | 1 | 3 | 3 | 2 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 2 | 50 3.0 |
| Cortex, Renal Tubule, Accumulation, Hyaline Droplet | | | | | 4 | | | | | | | | | | | | | 4 | | | | | | | | 2 4.0 |
| Cortex, Renal Tubule, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 2 3.0 |
| Cortex, Renal Tubule, Hyperplasia, Oncocytic | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Papilla, Mineralization | | | | 1 | 1 | | | | | 1 | | | 1 | 1 | | | 1 | | | | | 1 | | 1 | | 11 1.0 |
| Pelvis, Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | 2 | | | 1 2.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked
Page 37

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | males
(cont...) | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|
| | 7 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 4 | 6 | 7 | 7 | 6 | | 7 |
| | 3 | 3 | 4 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 1 | 6 | 2 | 2 | 3 | 2 | 3 | 1 | 4 | 2 | 2 |
| | 0 | 7 | 7 | 0 | 9 | 0 | 4 | 9 | 3 | 9 | 9 | 9 | 0 | 9 | 4 | 1 | 9 | 9 | 8 | 5 | 0 | 9 | 0 | 9 | 9 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | + | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | |
| Intestine Large, Colon | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | |
| Intestine Small, Ileum | + | + | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | 1 | | | | | 1 | 1 |
| Basophilic Focus, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clear Cell Focus | | | | | | | | | | | | | | | | | | | 1 | | X | | | | |
| Clear Cell Focus, Multiple | | | | | | | 1 | | | | 1 | | | | | | | | | | | | | | |
| Degeneration, Cystic | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | 4 | | | 4 | | | | | | | | | | | 4 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vacuolization Cytoplasmic | | | | 2 | | | | | | | | | | 1 | | | | | 2 | | | | | | |
| Bile Duct, Hyperplasia | | | | | | | | | | 1 | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 5 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 4 | 6 | 7 | 7 | 6 | 7 | 7 |
| | 3 | 3 | 4 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 1 | 6 | 2 | 2 | 3 | 2 | 3 | 1 | 4 | 2 | 2 |
| | 0 | 7 | 7 | 0 | 9 | 0 | 4 | 9 | 3 | 9 | 9 | 9 | 9 | 0 | 9 | 4 | 1 | 9 | 9 | 8 | 5 | 0 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 |

males (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|---|---|---|
| Periportal, Inflammation, Chronic Serosa, Fibrosis | | | | | | | | | | | 2 | | | | | | | | | | | 3 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery Necrosis | | | | | + | | | | | + | | | | | | | | | | + | | | | | + |
| | | | | | 1 | | | | | 2 | | | | | | | | | | 2 | | | | | 2 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oral Mucosa Pharyngeal, Fibrosis Pharyngeal, Hyperplasia, Squamous | | | | | | | | | | | + | | | | | | | | | | | | | | |
| | | | | | | | | | | | 4 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas Inflammation, Chronic Acinus, Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | 2 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach Hyperplasia, Squamous Inflammation, Suppurative Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | 4 | | | | | | | | | | | 3
2 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tongue Epithelium, Hyperplasia | | | | | | | | | | | + | | | | | | | | | | | + | | | |
| | | | | | | | | | | | 3 | | | | | | | | | | | 3 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tooth Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 93025 - 07
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 11/17/2008
 Time Report Requested: 08:56:08
 First Dose M/F: 06/16/03 / 06/16/03
 Lab: BNW

Tetralin
 CAS Number: 119-64-2

| DAY ON TEST | FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | | males (cont...) | | |
|---|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|-----------------|--|
| | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 7 5 5 7 7 7 7 6 7 7 6 7 7 6 5 7 7 4 6 7 7 6 7 7 | 7 | 5 | 5 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 4 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | |
| 3 3 4 3 2 3 2 2 2 2 2 1 3 2 1 6 2 2 3 2 3 1 4 2 2 | 3 | 3 | 4 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 1 | 6 | 2 | 2 | 3 | 2 | 3 | 1 | 4 | 2 | 2 | 2 | 2 | |
| 0 7 7 0 9 0 4 9 3 9 9 9 0 9 4 1 9 9 8 5 0 9 0 9 9 | 0 | 7 | 7 | 0 | 9 | 0 | 4 | 9 | 3 | 9 | 9 | 9 | 0 | 9 | 4 | 1 | 9 | 9 | 8 | 5 | 0 | 9 | 0 | 9 | 9 | 0 | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 1 2 3 4 5 6 7 8 9 0 1 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | males (cont...) | |

CARDIOVASCULAR SYSTEM

| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cardiomyopathy | 1 | 1 | 2 | 3 | 1 | 1 | 3 | | 1 | 2 | 2 | 1 | 2 | 1 | | 1 | 1 | 2 | | 2 | | 1 | 1 | 2 | | |
| Atrium, Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| Adrenal Cortex | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | 4 | | 2 | 1 | | 1 | 2 | | 2 | 2 | | | | | 1 | | 2 | 4 | 2 | | | |
| Vacuolization Cytoplasmic | 1 | | 1 | | | | | 1 | | 1 | 1 | 1 | | 1 | 2 | | | | | | | 1 | 2 | 1 | |
| Adrenal Medulla | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | 1 | | | 1 | | 4 | | | 2 | 3 | | 2 | 2 | | 3 | | | | | | | | | | |
| Infiltration Cellular, Lymphocyte | | | | | | | | | | | | | | | | | | | | | | | 3 | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | 4 | | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pituitary Gland | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hemorrhage | | | | | | | | 4 | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | | 2 | | | | | | | | | | | | | 4 | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 Page 40
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
|-----------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS MALE | | 7 | 5 | 5 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 4 | 6 | 7 | 7 | 6 | 7 | 7 | | |
| 60 PPM | | 3 | 3 | 4 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 1 | 6 | 2 | 2 | 3 | 2 | 3 | 1 | 4 | 2 | 2 | | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

males (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| C-cell, Hyperplasia | | 1 | | | 1 | 1 | | 1 | | | | | | | | | | 1 | 1 | | | 1 | | | 1 | |
| Follicular Cell, Hyperplasia | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hyperplasia | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | 2 | 1 | | 2 | | | 3 | 2 | 3 | 2 | 1 | 4 | 2 | | 1 | 3 | 1 | | | 1 | 3 | 3 | 1 | 1 | | |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | 1 | | | | | | | | | | | | | | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | 2 | | | | | | | | 4 | | 1 | |
| Germinal Epithelium, Atrophy | 4 | | 2 | 2 | 2 | 2 | | | | | | | | 3 | 4 | | | 2 | 2 | | 2 | 2 | 4 | 1 | 3 | 2 |
| Interstitial Cell, Hyperplasia | | | | | | | | | 1 | | | | | | | | 2 | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 93025 - 07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|--------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 7 | 7 | 6 | 6 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 4 | 4 | 5 | 7 | 7 | 6 | 6 | | |
| 2 | 2 | 6 | 4 | 3 | 8 | 2 | 0 | 6 | 2 | 1 | 2 | 3 | 2 | 3 | 9 | 9 | 3 | 8 | 8 | 2 | 2 | 2 | 8 | 4 | | |
| 9 | 9 | 2 | 2 | 0 | 9 | 9 | 0 | 2 | 9 | 8 | 9 | 0 | 1 | 0 | 1 | 8 | 0 | 0 | 3 | 3 | 9 | 9 | 9 | 7 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 60 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Infiltration Cellular, Lymphocyte | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Nephropathy, Chronic | 4 | 1 | 3 | 4 | 2 | 3 | 4 | 2 | 3 | | 3 | 4 | 4 | 3 | 2 | 3 | 2 | 3 | 3 | 2 | 1 | 4 | 3 | 2 | 4 | 48 3.0 |
| Artery, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Cortex, Renal Tubule, Accumulation, Hyaline Droplet | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Medulla, Casts | | | | | | | | | | | | | | | 4 | | | | | | | | | | | 1 4.0 |
| Papilla, Mineralization | 1 | | | | 1 | | 1 | | | | 1 | | | | | | | 1 | | | | | | | | 10 1.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Calculus Micro Observation Only | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Transitional Epithelium, Hyperplasia | | | | | | 2 | | | | | | | | | | | | | | | | | | | | 2 2.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 5 | 4 | 6 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 3 | 7 | 6 | 7 | 7 | |
| | 3 | 0 | 3 | 8 | 8 | 8 | 3 | 9 | 7 | 3 | 6 | 3 | 2 | 3 | 2 | 2 | 8 | 2 | 8 | 3 | 8 | 0 | 4 | 2 | 2 |
| | 0 | 1 | 0 | 6 | 4 | 7 | 0 | 5 | 4 | 0 | 3 | 0 | 9 | 0 | 9 | 9 | 3 | 9 | 9 | 0 | 1 | 8 | 1 | 9 | 9 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 120 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Centrilobular, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 2 | 3.0 | | | | | | | | | | | | | | | | | | | | | |
| Periportal, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 1.8 | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | + | 11 | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 2.4 | | | | | | | | | | | | | | | | | | | | | |
| Fat, Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | 1.0 | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | | | | | | | | | | | | | | | | | | | | | | | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Acinus, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3 | 2.6 | | | | | | | | | | | | | | | | | | | | | |
| Artery, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | 4.0 | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | | | | | | | | | | | | | | | | | | | | | | | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | | | | | | | | | | | | | | | | | | | | | | | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 4 | 4.0 | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | | | | | | | | | | | | | | | | | | | | | | | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Erosion | | | | | | | | | | | | | | | | | | | | | | | | | | | 1.0 | | | | | | | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | | | | | | | | | | | | | | | | | | | | | |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | + | 1 | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3.0 | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----|
| Blood Vessel | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 4.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 5 | 4 | 6 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 3 | 7 | 6 | 7 | 7 | 7 |
| | 3 | 0 | 3 | 8 | 8 | 8 | 3 | 9 | 7 | 3 | 6 | 3 | 2 | 3 | 2 | 2 | 8 | 2 | 8 | 3 | 8 | 0 | 4 | 2 | 2 |
| | 0 | 1 | 0 | 6 | 4 | 7 | 0 | 5 | 4 | 0 | 3 | 0 | 9 | 0 | 9 | 9 | 3 | 9 | 9 | 0 | 1 | 8 | 1 | 9 | 9 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 120 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |

GENERAL BODY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|
| Peritoneum | + | | | | | | | | | | | | | | | | | | | | | | | 3 |
|------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|---------------|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Necrosis, Fatty | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 3 3.3 | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 5 1.2 | |
| Inflammation, Suppurative | 1 | 2 | | 1 | 1 | 2 | | 2 | 1 | 2 | 1 | | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | 1 | 2 | | 34 1.5 | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 | |
| Germinal Epithelium, Atrophy | 2 | 4 | 2 | 2 | | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | | 3 | 2 | 2 | | 2 | 2 | 2 | 44 2.3 |
| Interstitial Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 3 2.0 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 93025 - 07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|--|
| | 7 | 7 | 7 | 5 | 4 | 6 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 3 | 7 | 6 | 7 | 7 | | |
| | 3 | 0 | 3 | 8 | 8 | 8 | 3 | 9 | 7 | 3 | 6 | 3 | 2 | 3 | 2 | 2 | 8 | 2 | 8 | 3 | 8 | 0 | 4 | 2 | 2 | |
| | 0 | 1 | 0 | 6 | 4 | 7 | 0 | 5 | 4 | 0 | 3 | 0 | 9 | 0 | 9 | 9 | 3 | 9 | 9 | 0 | 1 | 8 | 1 | 9 | 9 | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 120 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|----|---|--|
| Bone Marrow | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Pancreatic, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | | | |
| Lymph Node, Bronchial | M | M | M | M | M | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | + | 4 | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | | | |
| Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | 3 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | | | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 0 | |
| Lymph Node, Mediastinal | + | + | M | + | + | + | M | M | M | M | + | M | M | + | M | M | + | + | M | M | + | + | + | M | M | 31 | | |
| Ectasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | | | |
| Lymph Node, Mesenteric | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | | |
| Spleen | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | 3 | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | | | |
| Thymus | + | | | | | | | | | | | | | | | | | | | | | | | | 43 | | | |
| Ectopic Thyroid | | | | | | | | | | | | | | | | | | | | | | | | | M | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|---|
| | | 7 | 7 | 7 | 5 | 4 | 6 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 3 | 7 | 6 | 7 | 7 | |
| | | 3 | 0 | 3 | 8 | 8 | 8 | 3 | 9 | 7 | 3 | 6 | 3 | 2 | 3 | 2 | 2 | 8 | 2 | 8 | 3 | 8 | 0 | 4 | 2 | 2 |
| | | 0 | 1 | 0 | 6 | 4 | 7 | 0 | 5 | 4 | 0 | 3 | 0 | 9 | 0 | 9 | 9 | 3 | 9 | 9 | 0 | 1 | 8 | 1 | 9 | 9 |
| FISCHER 344 RATS MALE | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 120 PPM | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|-----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Galactocele | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | 2 | 1.0 | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Cyst Epithelial Inclusion | | | | | | 4 | | | | | 4 | | | | | | | | | | | | | | | | | 3 | 4.0 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Compression | | | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | 4 | 2.3 |
| Hemorrhage | | | | | | 3 | | | | | | | | | | | 3 | | | | | | | | | | | | 2 | 3.0 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|---|-----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 4.0 |
| Inflammation, Suppurative | | | | | | 1 | | | 1 | | | | | | | | | | | | | | | | | | | | | 7 | 1.1 |
| Epiglottis, Metaplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| | 7 | 7 | 7 | 5 | 4 | 6 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 3 | 7 | 6 | 7 | 7 | |
| | 3 | 0 | 3 | 8 | 8 | 8 | 3 | 9 | 7 | 3 | 6 | 3 | 2 | 3 | 2 | 2 | 8 | 2 | 8 | 3 | 8 | 0 | 4 | 2 | 2 |
| | 0 | 1 | 0 | 6 | 4 | 7 | 0 | 5 | 4 | 0 | 3 | 0 | 9 | 0 | 9 | 9 | 3 | 9 | 9 | 0 | 1 | 8 | 1 | 9 | 9 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 120 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|-----|-----|-----|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 1.7 | | | | |
| Inflammation, Chronic | | | | 2 | 1 | | | | | | | 1 | | | | 2 | | | | | | | | 2 | | 9 | 1.7 | | | |
| Alveolar Epithelium, Hyperplasia | | | 4 | 3 | 1 | | | | | | | 2 | | 3 | | 3 | | | | | | | | | | | 15 | 2.7 | | |
| Alveolar Epithelium, Metaplasia, Squamous | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | | |
| Alveolar Epithelium, Metaplasia, Mucous | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | 2 | 3.0 | | |
| Alveolus, Emphysema | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | 1 | 2.0 | | |
| Alveolus, Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.0 | | |
| Alveolus, Infiltration Cellular, Histiocyte | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 15 | 1.3 | |
| Alveolus, Proteinosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 3.3 | |
| Artery, Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Bronchiole, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | |
| Bronchiole, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |
| Bronchiole, Glands, Degeneration, Mucoïd | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 1.5 | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | | |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3.0 | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 1.8 | |
| Glands, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 16 | 1.8 |
| Olfactory Epithelium, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Olfactory Epithelium, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 42 | 2.0 |
| Olfactory Epithelium, Hyperplasia, Basal Cell | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 48 | 2.0 |
| Olfactory Epithelium, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 10 | 1.9 |
| Olfactory Epithelium, Metaplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 37 | 1.8 |
| Olfactory Epithelium, Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 17 | 1.3 |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 1.3 |
| Respiratory Epithelium, Inflammation, | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 16 | 1.1 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 5 | 4 | 6 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 3 | 7 | 6 | 7 | 7 | |
| | 3 | 0 | 3 | 8 | 8 | 8 | 3 | 9 | 7 | 3 | 6 | 3 | 2 | 3 | 2 | 2 | 8 | 2 | 8 | 3 | 8 | 0 | 4 | 2 | 2 |
| | 0 | 1 | 0 | 6 | 4 | 7 | 0 | 5 | 4 | 0 | 3 | 0 | 9 | 0 | 9 | 9 | 3 | 9 | 9 | 0 | 1 | 8 | 1 | 9 | 9 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 120 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Chronic | | | | | | | | | | | | | | | | | | | | | | | |
| Pleura | | | | | | | | | | | | | | | | | | | | | | | |
| Fibrosis | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | | | | | | | | | | | | | | | | | | | | | | | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Eye | | | | | | | | | | | | | | | | | | | | | | | |
| Cornea, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | |
| Cornea, Mineralization | | | | | | | | | | | | | | | | | | | | | | | |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | |
| Retina, Atrophy | | | | | | | | | | | | | | | | | | | | | | | |
| Sclera, Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | |
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Kidney | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy, Chronic | | | | | | | | | | | | | | | | | | | | | | | |
| Cortex, Renal Tubule, Dilatation | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked
Page 72

TDMS No. 93025 - 07

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 11/17/2008

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

| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----------------|
| DAY ON TEST | 7 | 7 | 7 | 5 | 4 | 6 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 3 | 7 | 6 | 7 | 7 | 7 | |
| | 3 | 0 | 3 | 8 | 8 | 8 | 3 | 9 | 7 | 3 | 6 | 3 | 2 | 3 | 2 | 2 | 8 | 2 | 8 | 3 | 8 | 0 | 4 | 2 | 2 | |
| | 0 | 1 | 0 | 6 | 4 | 7 | 0 | 5 | 4 | 0 | 3 | 0 | 9 | 0 | 9 | 9 | 3 | 9 | 9 | 0 | 1 | 8 | 1 | 9 | 9 | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 120 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS |
| Cortex, Renal Tubule, Hyperplasia | | | | 4 | | | | | | | | | | | | | | | | | | | | | | 3 3.7 |
| Papilla, Mineralization | 1 | 1 | 1 | | | 1 | | | | | | | 1 | 1 | 2 | | | | 1 | | | | | 1 | | 18 1.2 |
| Pelvis, Transitional Epithelium, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Pelvis, Transitional Epithelium, Hyperplasia | | | | | | | | | | | 2 | | | | 3 | | | 1 | | | | | 1 | | | 7 1.7 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |

*** END OF MALE DATA ***

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 73

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------------|
| | 6 | 7 | 6 | 7 | 5 | 4 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 6 | 7 | 6 | 5 | 0 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 8 | 3 | 9 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 9 | 2 | 3 | 3 | 7 | 3 | 7 | 2 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 |
| | 2 | 2 | 1 | 1 | 3 | 0 | 1 | 2 | 2 | 1 | 1 | 8 | 0 | 1 | 5 | 0 | 7 | 2 | 8 | 7 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 7 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 2 | 2 | 3 | 4 | 5 | females (cont...) |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Basophilic Focus | | | | | | | | | | 2 | | | | | 1 | 1 | | | | | 3 | | | | | | 1 |
| Basophilic Focus, Multiple | | | | | | | 1 | 2 | | | | | X | | | | | | | | 1 | | | | | | |
| Clear Cell Focus | | 1 | | | | | | | | | | 2 | | 1 | | | | | | | | | | 3 | | | |
| Clear Cell Focus, Multiple | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | |
| Hepatodiaphragmatic Nodule | | | | | | | | 4 | | | | | | | | | | 4 | | 4 | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Vacuolization Cytoplasmic | | | 2 | | 2 | | | | | | | | | 2 | | | | | 1 | | | | | | | | |
| Bile Duct, Hyperplasia | 2 | | | | | | | | | 2 | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 7 | 6 | 7 | 5 | 4 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 6 | 7 | 6 | 5 | 0 | 7 | 7 | 7 | 7 | 7 | 7 | |
| 8 | 3 | 9 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 9 | 2 | 3 | 3 | 7 | 3 | 7 | 2 | 3 | 1 | 3 | 3 | 3 | 3 | 1 | |
| 2 | 2 | 1 | 1 | 3 | 0 | 1 | 2 | 2 | 1 | 1 | 8 | 0 | 1 | 5 | 0 | 7 | 2 | 8 | 7 | 1 | 2 | 0 | 0 | 7 | |

| FISCHER 344 RATS FEMALE
CONTROL | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
|------------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Mesentery
Necrosis | + | | | + | | | | | | | | | | | | | | | | | | | | | |
| | 2 | | | 2 | | | | | | | | | | | | | | | | | | | | | |
| Oral Mucosa
Pharyngeal, Hyperplasia, Squamous | | | | + | | | | | | | | | | | | | | | | | | | | | |
| | | | | 4 | | | | | | | | | | | | | | | | | | | | | |
| Pancreas
Acinus, Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | 1 | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach
Hyperplasia, Squamous
Inflammation, Suppurative | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | 2 | | | | | | | | | | | | | |
| | | | | | | | | | | | | 2 | | | | | | | 2 | | | | | | |
| Stomach, Glandular
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart
Cardiomyopathy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrium, Thrombosis | | | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | | | | | | 1 | 3 |
| Pericardium, Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Pericardium, Infiltration Cellular, Mixed Cell | | | | | | | | | | | | | | | | | | | | | | | | 2 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 93025 - 07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 6 7 6 7 5 4 7 7 7 7 5 6 7 7 6 7 6 5 0 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE
CONTROL ANIMAL ID | 8 3 9 3 2 2 3 3 3 3 9 2 3 3 7 3 7 2 3 1 3 3 3 3 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 2 1 1 3 0 1 2 2 1 1 8 0 1 5 0 7 2 8 7 1 2 0 0 7 | | | | | | | | | | | | | | | | | | | | | | | |
| CONTROL ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | |

females (cont...)

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex
Hemorrhage | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | 2 | | | | | | 2 | | | | | | | 4 | 4 | | | | | | 2 | | | 3 | 3 |
| Vacuolization Cytoplasmic | | | | | | 2 | | | | | | | | 2 | | | | | | | | | | | |
| Adrenal Medulla
Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Islets, Pancreatic
Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland
Hyperplasia | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Pituitary Gland
Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | | 1 | | 4 | | | | | | | | | | | | | 4 | | 4 | | |
| Thyroid Gland
C-cell, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Follicular Cell, Hyperplasia | 1 | 1 | | 1 | 1 | | 1 | | 1 | | | | 4 | 1 | 1 | | | | | 1 | | 1 | 2 | 1 | 4 |

GENERAL BODY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
|--------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6 | 7 | 6 | 7 | 5 | 4 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 6 | 7 | 6 | 5 | 0 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| 8 | 3 | 9 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 9 | 2 | 3 | 3 | 7 | 3 | 7 | 2 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 1 | |
| 2 | 2 | 1 | 1 | 3 | 0 | 1 | 2 | 2 | 1 | 1 | 8 | 0 | 1 | 5 | 0 | 7 | 2 | 8 | 7 | 1 | 2 | 0 | 0 | 7 | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | | 4 | | | | | | | | | | | | | | | | | | 2 | | |
| Hyperplasia | | | | 4 | | | | | | | | | | | | | | | | | | 3 | 2 | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | | 4 | | | | | | | | | | | | | | | | | | 4 | | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Decidual Reaction | | | | | | | | | | | | | | | | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | 4 | |
| Endometrium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Infiltration Cellular, Histiocyte | | | | + | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Bronchial | M | M | M | M | + | + | M | M | M | M | M | M | M | M | + | M | M | M | M | M | M | M | M | M | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Lymph Node, Mediastinal | M | + | + | M | + | + | M | M | + | + | + | + | + | M | + | M | + | + | + | M | + | M | M | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 6 | 7 | 5 | 4 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 6 | 7 | 6 | 5 | 0 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 8 | 3 | 9 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 9 | 2 | 3 | 3 | 7 | 3 | 7 | 2 | 3 | 1 | 3 | 3 | 3 | 3 | 1 | |
| | 2 | 2 | 1 | 1 | 3 | 0 | 1 | 2 | 2 | 1 | 1 | 8 | 0 | 1 | 5 | 0 | 7 | 2 | 8 | 7 | 1 | 2 | 0 | 0 | 7 | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

females (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Hyperplasia, Lymphoid
Inflammation, Chronic
Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen
Fibrosis
Hematopoietic Cell Proliferation
Necrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 3 |
| | | | | 4 | | | | | | | | | | | | | | | | | | | | | | 4 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | M | + | + | + |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland
Galactocele | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Skin
Ulcer
Subcutaneous Tissue, Inflammation,
Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 3 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 93025 - 07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS FEMALE
CONTROL | ANIMAL ID | 6 | 7 | 6 | 7 | 5 | 4 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 6 | 7 | 6 | 5 | 0 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 8 | 3 | 9 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 9 | 2 | 3 | 3 | 7 | 3 | 7 | 2 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 1 |
| | | 2 | 2 | 1 | 1 | 3 | 0 | 1 | 2 | 2 | 1 | 1 | 8 | 0 | 1 | 5 | 0 | 7 | 2 | 8 | 7 | 1 | 2 | 0 | 0 | 0 | 0 | 7 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 2 | 3 | 4 | 5 | 5 | |

females (cont...)

Skeletal Muscle

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Compression | 3 | | | 3 | | | | | 3 | | | 3 | | | | 3 | | | 3 | | | | | | | | 4 |
| Hemorrhage | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | |
| Thrombosis | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | 3 | | | | | |
| Inflammation, Chronic | | | | | 2 | | | | | | | | 2 | | | | | | | | | | | | | | 1 |
| Alveolar Epithelium, Hyperplasia | | | | | 3 | | | | | | | | | 1 | | | | | | | | | | | | | |
| Alveolar Epithelium, Metaplasia, Squamous | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | 2 | | | | | 3 | | 2 | 1 | 1 | | | 4 | | | | | | | | | | 1 |
| Alveolus, Pigmentation | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | |
| Bronchiole, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bronchiole, Glands, Degeneration, Mucoïd | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
|--------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6 | 7 | 6 | 7 | 5 | 4 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 6 | 7 | 6 | 5 | 0 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| 8 | 3 | 9 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 9 | 2 | 3 | 3 | 7 | 3 | 7 | 2 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 1 | |
| 2 | 2 | 1 | 1 | 3 | 0 | 1 | 2 | 2 | 1 | 1 | 8 | 0 | 1 | 5 | 0 | 7 | 2 | 8 | 7 | 1 | 2 | 0 | 0 | 7 | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | 2 | | | | | 1 | 1 | | | | | | | | | | 1 | | |
| Nasolacrimal Duct, Inflammation, Suppurative | | | | | | | | | | | | | | | 3 | | | | | | | 3 | | |
| Olfactory Epithelium, Degeneration, Hyaline | | | | | | | 1 | | | | | | | | | 1 | | | | | | | | |
| Respiratory Epithelium, Degeneration, Hyaline | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | 2 | 2 | 1 | | | | | | | 2 | | 1 | | |
| Respiratory Epithelium, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | 2 | | | |
| Pleura | | | | + | | | | | | | | | + | | | | | | | | | | | |
| Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | 4 | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cornea, Inflammation | | | | | | | | | | | | | | | | | | | | | 2 | | | |
| Lens, Cataract | | | | 4 | | | | | | | | | | | | | | | | | | | | 2 |
| Retina, Atrophy | | | | 3 | | | | | | | | 2 | | | | | | | | | | | | 2 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 93025 - 07

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 11/17/2008

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

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 6 | 7 | 6 | 7 | 5 | 4 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 6 | 7 | 6 | 5 | 0 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 8 | 3 | 9 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 9 | 2 | 3 | 3 | 7 | 3 | 7 | 2 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 1 |
| | 2 | 2 | 1 | 1 | 3 | 0 | 1 | 2 | 2 | 1 | 1 | 8 | 0 | 1 | 5 | 0 | 7 | 2 | 8 | 7 | 1 | 2 | 0 | 0 | 7 | |
| FISCHER 344 RATS FEMALE
CONTROL ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

females
(cont...)

Zymbal's Gland +

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Nephropathy, Chronic | 2 | 2 | | 3 | | | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | | 2 | 1 | 1 | 3 | 1 | 2 | |
| Cortex, Infarct, Multiple | | | | | | | | | | | | | | | | | | | | | 3 | | | | |
| Cortex, Renal Tubule, Accumulation,
Hyaline Droplet | | | | | | | | | | | | | | | | | | | | | | | | | |
| Papilla, Mineralization | | | 1 | | | | 1 | 1 | 1 | 1 | 1 | | 1 | | | | | | 1 | 1 | 1 | | 1 | 2 | |
| Pelvis, Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pelvis, Transitional Epithelium,
Mineralization | 1 | | | | | | | | | | | 3 | | | | | | | | | | | | | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 93025 - 07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 7 | 7 |
| | 3 | 3 | 3 | 3 | 8 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 9 | 3 | 4 | 8 | 3 | 3 | 8 | 3 | 3 | |
| | 1 | 2 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 6 | 1 | 7 | 1 | 8 | 0 | 2 | 1 | 1 | 1 | 2 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | 49 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 49 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Basophilic Focus | | | | | | | | | | | | | | | | | 1 | | | | | | 1 | | | 7 1.4 |
| Basophilic Focus, Multiple | 1 | | 1 | 1 | X | 1 | 2 | 1 | | | 1 | 2 | 3 | 2 | | 1 | | | 1 | | | 1 | | 1 | | 18 1.4 |
| Clear Cell Focus | | 2 | | | | | | | | | | | | | | | | | 1 | | | | | | | 6 1.7 |
| Clear Cell Focus, Multiple | | | | | 2 | X | | 1 | | 2 | 1 | | | | | | | | | | 1 | | | 2 | | 9 1.6 |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | 4 | | | | | | | | | | | | 4 | 5 4.0 |
| Necrosis | | | | | | | | | | | | | | | | | | 3 | | | | | | | | 2 3.0 |
| Vacuolization Cytoplasmic | | | | | | | 3 | | | | | | | | 2 | | | | | | | | | | | 6 2.0 |
| Bile Duct, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
l .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 7 | |
| DAY ON TEST | 3 | 3 | 3 | 3 | 8 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 9 | 3 | 4 | 8 | 3 | 3 | 8 | 3 | 3 | |
| DAY ON TEST | 1 | 2 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 6 | 1 | 7 | 1 | 8 | 0 | 2 | 1 | 1 | 1 | 2 |
| FISCHER 344 RATS FEMALE CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| ANIMAL ID | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| ANIMAL ID | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Mesentery | + | | | + | | | | | | | | | | | + | | | | + | | | | | + | | | | | 10 | | |
| Necrosis | 1 | | | 2 | | | | | | | | | | | 3 | | | | 2 | | | | 2 | | | | | 3 | 10 | 2.1 | |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Pharyngeal, Hyperplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Acinus, Atrophy | | | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | | 2 | 2.0 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Hyperplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.0 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Tongue | | | | | | | | | | | | | | | + | | | | | | | | | | | | | | | 1 | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|-----|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Cardiomyopathy | 1 | | | | 1 | | | | 1 | | | 1 | 1 | 1 | | 1 | | | 2 | | | 2 | 2 | | | | | 2 | 22 | 1.3 | |
| Atrium, Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Pericardium, Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Pericardium, Infiltration Cellular, Mixed Cell | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:
 x .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|--|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 7 | | |
| | 3 | 3 | 3 | 3 | 8 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 9 | 3 | 4 | 8 | 3 | 3 | 8 | 3 | 3 | | |
| | 1 | 2 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 6 | 1 | 7 | 1 | 8 | 0 | 2 | 1 | 1 | 1 | 2 | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hemorrhage | | | | | 2 | | | | | | | | | | | | 2 | | | | | | | | | 3 | 2.0 |
| Hyperplasia | | 4 | | | 2 | | | | | | | | | 3 | 4 | | | | 4 | 4 | | | 4 | | 2 | 14 | 3.2 |
| Vacuolization Cytoplasmic | | | | | | 2 | | | | | | | | | 1 | | | | | | | | | | | 4 | 1.8 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Cyst | | | | | | | | | | | | | 4 | | | | | | | | | | | | | 3 | 3.0 |
| Hyperplasia | | | 2 | | | 2 | 3 | | | | | | | | | | | | | | | | | | | 5 | 3.0 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| C-cell, Hyperplasia | 2 | 1 | | 1 | | | 1 | 2 | | | | | | 1 | 2 | | | | 1 | 1 | | 1 | 1 | 1 | | 27 | 1.4 |
| Follicular Cell, Hyperplasia | | | | | | | | | | 2 | | | | | | | | | | | | | | | | 1 | 2.0 |

GENERAL BODY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Page 84

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|---|
| | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 7 | |
| | 3 | 3 | 3 | 3 | 8 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 9 | 3 | 4 | 8 | 3 | 3 | 8 | 3 | 3 | |
| | 1 | 2 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 6 | 1 | 7 | 1 | 8 | 0 | 2 | 1 | 1 | 1 | 2 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 2 3.0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 4 3.3 | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | 4 | 4 | | | | | 2 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 6 3.7 | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Decidual Reaction | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endometrium, Hyperplasia | | | | | | 1 | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Lymph Node | | | | | | + | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 4 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Lymph Node, Bronchial | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M |
| | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M |
| | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| Lymph Node, Mediastinal | M | M | M | + | + | + | M | + | + | M | M | + | + | + | + | + | + | + | + | + | + | + | M | M | + |
| | | | | | | | | | | | | | | | | | | | | | | | | 33 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 93025 - 07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|---|
| | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 7 | |
| | 3 | 3 | 3 | 3 | 8 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 9 | 3 | 4 | 8 | 3 | 3 | 8 | 3 | 3 | |
| | 1 | 2 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 6 | 1 | 7 | 1 | 8 | 0 | 2 | 1 | 1 | 1 | 2 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 | |
| Hyperplasia, Lymphoid Inflammation, Chronic Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | 4 | 3.0 | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Spleen Fibrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | 2 | 3.5 | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | 4 | 4.0 | |
| Thymus | + | + | + | + | + | + | + | + | + | M | M | + | + | + | + | M | + | + | + | + | + | M | + | + | + | + |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Mammary Gland Galactocele | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skin Ulcer | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Subcutaneous Tissue, Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked
Page 86

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 7 |
| | 3 | 3 | 3 | 3 | 8 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 9 | 3 | 4 | 8 | 3 | 3 | 8 | 3 | 3 |
| | 1 | 2 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 6 | 1 | 7 | 1 | 8 | 0 | 2 | 1 | 1 | 2 |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

* TOTALS

Skeletal Muscle

+

1

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Compression | 3 | | | | | | | | | | | | | | | | 3 | 3 | | | | | 3 | 11 3.1 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | 1 | | | | 2 1.5 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Foreign Body | | | | 4 | | 4 | | | | | | | | | | | | | 4 | | | | | 3 4.0 |
| Inflammation, Suppurative | 1 | | | 1 | | | | | 1 | | | | | | | 1 | 1 | | | | | | | 6 1.2 |
| Respiratory Epithelium, Hyperplasia | | | | | | 1 | | | | 2 | | | | | | | 1 | | | | | | | 3 1.3 |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hemorrhage | | | | | | | | | | | | | 3 | | | | | | | | | | | 2 3.0 |
| Inflammation, Chronic | 2 | | | | | 1 | | 1 | 1 | 2 | | | 3 | | 1 | | 2 | | | | | 1 | | 12 1.6 |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | 1 | | | | 1 | | 1 | | | | | | | 4 | | 6 1.8 |
| Alveolar Epithelium, Metaplasia, Squamous | | | | | | | | | | | | | 1 | | 1 | | | | | | | | | 1 3.0 |
| Alveolus, Infiltration Cellular, Histiocyte | 2 | | | | | 1 | | 1 | 1 | 3 | 1 | | 1 | 2 | | 1 | | | | 1 | 1 | 1 | | 21 1.5 |
| Alveolus, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Bronchiole, Hyperplasia | | | | | | | | | | 1 | | | | | | | | | | | | | | 1 1.0 |
| Bronchiole, Glands, Degeneration, Muroid | | | | | | 1 | | | | | | | | | | | 1 | | | | | | | 2 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 l .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 93025 - 07

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 11/17/2008

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

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|-------|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | |
| | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 7 | |
| | 3 | 3 | 3 | 3 | 8 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 9 | 3 | 4 | 8 | 3 | 3 | 8 | 3 | 3 | |
| | 1 | 2 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 6 | 1 | 7 | 1 | 8 | 0 | 2 | 1 | 1 | 1 | 2 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Foreign Body | | | | | | | | | | | | | | | | | | 3 | | | | | | | 1 3.0 | |
| Inflammation, Suppurative | 1 | | | | 1 | | | | | | | | 2 | | | | | | | | | | | | 7 1.3 | |
| Nasolacrimal Duct, Inflammation, Suppurative | | | | | | | | | | | | 2 | | | | | | | | | | | | | 3 2.7 | |
| Olfactory Epithelium, Degeneration, Hyaline | | | | | | | | | | | | | | | | | | | | 1 | | | | | 3 1.0 | |
| Respiratory Epithelium, Degeneration, Hyaline | | | | | | 1 | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Respiratory Epithelium, Hyperplasia | 1 | | | | 2 | | | | | | | | | | | | | | | | | | | | 7 1.6 | |
| Respiratory Epithelium, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Pleura | + | | | | | + | | + | | + | | | | | | | | | | + | | | | + | 9 | |
| Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Cornea, Inflammation | | | | | | | | | | | | | | | | | | | | | 1 | | | | 1 2.0 |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | | | 2 3.0 |
| Retina, Atrophy | | | | | | | | | | | | 1 | | | | | | | | | | | | | 4 2.0 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Chronic | 1 | | | | | | | | | | | 1 | | | | | | | | | | | | | 2 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
|--------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 6 | 7 | 7 | |
| | 3 | 3 | 3 | 3 | 8 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 9 | 3 | 4 | 8 | 3 | 3 | 8 | 3 | 3 | |
| | 1 | 2 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 6 | 1 | 7 | 1 | 8 | 0 | 2 | 1 | 1 | 1 | 2 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | |

Zymbal's Gland

1

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|-----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Nephropathy, Chronic | 1 | 3 | 1 | 1 | | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 3 | 3 | | 3 | 3 | 1 | 3 | | 40 | 1.6 | | |
| Cortex, Infarct, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |
| Cortex, Renal Tubule, Accumulation, Hyaline Droplet | | | | | 3 | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |
| Papilla, Mineralization | 1 | | 1 | 1 | | | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | 2 | 1 | | 1 | | 2 | | 2 | | | 28 | 1.1 | |
| Pelvis, Mineralization | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | 1 | 1.0 |
| Pelvis, Transitional Epithelium, Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.0 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 89

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 2 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 8 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 |
| | | 5 | 6 | 2 | 1 | 1 | 2 | 8 | 2 | 1 | 1 | 1 | 6 | 1 | 0 | 2 | 2 | 0 | 1 | 2 | 1 | 1 | 3 | 2 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FISCHER 344 RATS FEMALE | ANIMAL ID | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 30 PPM | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 |

females (cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis | | | | | | | | | | | | | | 2 | | | | | | 4 | | | | 4 |
| Basophilic Focus | | | | | | | | | | | | | | 1 | 3 | | | | 1 | | | | | |
| Basophilic Focus, Multiple | | | X | | | X | | X | | | | | | | | | 1 | | | | 1 | 1 | | |
| Clear Cell Focus | | 1 | | | | X | | | | | | | | | 2 | | | | | | | | | |
| Clear Cell Focus, Multiple | | | | | | | | | | | | | | | | | | | | | | | | |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | 4 | | | | | | | 4 | | | | |
| Mixed Cell Focus, Multiple | | | | | | | | | | | | | | | | | | | | 1 | | | | |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Periportal, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | 2 | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked
Page 90

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | females (cont...) |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| 2 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 8 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | |
| 5 | 6 | 2 | 1 | 1 | 2 | 8 | 2 | 1 | 1 | 1 | 6 | 1 | 0 | 2 | 2 | 0 | 1 | 2 | 1 | 1 | 3 | 2 | 0 | 1 | | |

FISCHER 344 RATS FEMALE

30 PPM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mesentery Necrosis | + | | | | | + | + | | | + | | | | + | + | + | | | + | + | | | | |
| | 3 | | | | | 3 | 3 | | | 3 | | | | 3 | 3 | 3 | | | 3 | 3 | | | | |
| Pancreas Cyst Inflammation, Chronic Acinus, Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular Epithelium, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | 4 | | | | | | | | | | | | | | | | | | |
| Tongue Epithelium, Hyperplasia | | | | | | | + | | | | | | | | | | | | | | | | | |
| | | | | | | | 3 | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart Cardiomyopathy Ventricle, Thrombosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | 1 | 1 | | 1 | | 1 | 1 | | 2 | 1 | | 1 | 2 | 1 | 1 | 1 | | 1 | | | |
| | | | | | | 4 | | | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 8 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 |
| | 5 | 6 | 2 | 1 | 1 | 2 | 8 | 2 | 1 | 1 | 1 | 6 | 1 | 0 | 2 | 2 | 0 | 1 | 2 | 1 | 1 | 3 | 2 | 0 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | 2 | 1 | | 3 | 2 | | | | 1 | | 2 | 3 | | 2 | | 4 | | | 2 | | | | | |
| Necrosis | | | | | | | 4 | | | | | | | | | | | | | | | | | | |
| Vacuolization Cytoplasmic | | | | | | 2 | | 1 | | 2 | | | | | | | | | 4 | | | | | | 2 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | 4 | | | | | | | | | | | | 4 | | | | | | | | | | | |
| Hyperplasia | | 2 | | 2 | | 4 | | | | | | | | 2 | | 1 | | | | | | | 4 | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| C-cell, Hyperplasia | 1 | 4 | | | 1 | 1 | 1 | 1 | | | 1 | 1 | | 1 | | | | 3 | 4 | | | 1 | | 1 | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | 3 | | | | | | 2 | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 92

| DAY ON TEST | FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| 2 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 8 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | 3 | | |
| 5 | 6 | 2 | 1 | 1 | 2 | 8 | 2 | 1 | 1 | 1 | 6 | 1 | 0 | 2 | 2 | 0 | 1 | 2 | 1 | 1 | 3 | 2 | 0 | 1 | 1 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 5 | |

females (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cyst | | | | | | | | | | | 4 | | | | | | | | | | | | | | 4 | |
| Oviduct | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Decidual Reaction | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydrometra | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cervix, Myometrium, Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endometrium, Hyperplasia | 1 | | | | | 4 | | | | | | | | | | | | | | | | | | | | 1 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hyperplasia, Reticulum Cell | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Erythrophagocytosis | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Bronchial | M | M | M | M | M | M | M | M | M | + | M | M | + | M | + | M | M | M | M | M | M | M | M | M | M | M | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 2 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 8 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | |
| | 5 | 6 | 2 | 1 | 1 | 2 | 8 | 2 | 1 | 1 | 1 | 6 | 1 | 0 | 2 | 2 | 0 | 1 | 2 | 1 | 1 | 3 | 2 | 0 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 30 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |
| Infiltration Cellular, Histiocyte Pigmentation | | | | | | | | | | | 4 | | | | | | | | | | 4 | | | | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Lymph Node, Mediastinal | + | M | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | M | + | + | + | + | M | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Spleen Fibrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | 4 | | | | | | | | | | | | | | |
| Hemorrhage | 4 | | | | | | | | | | | | | | | 4 | | | | | | | | | |
| Thymus Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | 3 | | | | | | | | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Mammary Gland Galactocele | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Epithelium, Hyperplasia | 1 | | | | | | | | | | | | | | | | | | | | 1 | | | | |
| Skin Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Subcutaneous Tissue, Hemorrhage | 4 | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Page 94

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 2 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 8 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | |
| 5 | 6 | 2 | 1 | 1 | 2 | 8 | 2 | 1 | 1 | 1 | 6 | 1 | 0 | 2 | 2 | 0 | 1 | 2 | 1 | 1 | 3 | 2 | 0 | 1 | |

| FISCHER 344 RATS FEMALE
ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

females (cont...)

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Bone | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|---|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|---|--|--|--|
| Brain | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Compression | | | | | | | | | | | 3 | | | | | | | | | | | 4 | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | 4 | | | |
| Peripheral Nerve | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spinal Cord | | | | | | | | | | | | | | | | | | | | | | | | | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|---|--|--|--|
| Larynx | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Foreign Body | | | | | | | | | | | 4 | | | | | | | | | | | 4 | | | |
| Inflammation, Suppurative | | | | | | | | | | | 1 | | | | | | | | | | | 1 | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Lung | + | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | females (cont...) |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------------------|
| | 7 5 7 7 7 7 4 7 7 7 7 5 7 6 7 7 7 7 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE
30 PPM ANIMAL ID | 2 5 3 3 3 3 3 3 3 3 3 3 1 3 8 3 3 3 3 3 3 3 0 1 3 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5 6 2 1 1 2 8 2 1 1 1 6 1 0 2 2 0 1 2 1 1 3 2 0 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 1 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Hemorrhage | 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | 2 1 1 1 1 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alveolar Epithelium, Hyperplasia | 2 2 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alveolus, Infiltration Cellular, Histiocyte | 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alveolus, Proteinosis | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bronchiole, Hyperplasia | 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bronchiole, Glands, Degeneration, Mucoid | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mediastinum, Infiltration Cellular, Histiocyte | 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Foreign Body | 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glands, Dilatation | 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nasolacrimal Duct, Inflammation, Suppurative | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Degeneration | 2 1 1 1 2 2 1 2 2 2 1 2 1 1 2 2 2 2 2 2 1 2 2 2 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Hyperplasia, Basal Cell | 2 1 1 2 2 1 1 2 1 2 1 2 2 1 2 2 2 2 2 2 1 2 2 2 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Inflammation, Suppurative | 1 2 1 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Metaplasia | 2 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 1 1 1 1 2 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Mineralization | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory Epithelium, Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory Epithelium, Inflammation, Chronic | 1 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pleura | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | + | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 8 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 |
| | 5 | 6 | 2 | 1 | 1 | 2 | 8 | 2 | 1 | 1 | 1 | 6 | 1 | 0 | 2 | 2 | 0 | 1 | 2 | 1 | 1 | 3 | 2 | 0 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females (cont...)

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cornea, Inflammation, Suppurative | | | | | | | | | | | | | | | 1 | | | | | | | | | |
| Lens, Cataract | 4 | | | | | | | | | | | | | 1 | 2 | | | | | | | | | 1 |
| Retina, Atrophy | 4 | | | | | | | | | | | | | 2 | 2 | | | | | | | | | 1 |
| Sclera, Metaplasia, Osseous | | | | | | | | | | | | | | | 2 | | | | | | | | | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Nephropathy, Chronic | 1 | | 1 | 2 | 1 | 3 | 4 | 1 | 2 | 1 | 3 | | 2 | 3 | 1 | | 1 | | 1 | 1 | 1 | 2 | 2 | 2 | 1 |
| Papilla, Mineralization | | | | | | 1 | | | 1 | | | | | | 1 | | 1 | | 1 | | | | | 2 | |
| Pelvis, Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | 2 | | | | 2 | | | | | 2 | |
| Pelvis, Transitional Epithelium, Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Transitional Epithelium, Hyperplasia | | | | | | | | 4 | | | | | | | | | | | | | 1 | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 7 | 7 | 4 | 7 | 7 | 7 | 1 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 0 | |
| 3 | 3 | 3 | 7 | 3 | 3 | 3 | 9 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 9 | 0 | |
| 0 | 2 | 1 | 4 | 1 | 1 | 2 | 6 | 1 | 4 | 1 | 0 | 0 | 1 | 1 | 2 | 8 | 0 | 8 | 1 | 1 | 2 | 2 | 2 | 9 | 0 | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 30 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 3 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | 2 | | | | 4 3.0 |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | 7 2.0 |
| Basophilic Focus, Multiple | | | | | | | | | | | | | | | | | | | | | | 1 | 2 | | 13 1.0 |
| Clear Cell Focus | | | | 1 | X | | 1 | 1 | | | | | | 1 | 1 | | | | | | | | | | 6 2.2 |
| Clear Cell Focus, Multiple | | | | | | | | | | | | | | | | | | | | | | 2 | 3 | | 2 1.5 |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | 4 | | | | | | | | | | | 2 | | | 6 4.0 |
| Mixed Cell Focus, Multiple | | | | | | | | | | | | | | | | | | | | | | | | 4 | 1 1.0 |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 3.0 |
| Periportal, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 2.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| DAY ON TEST | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 1 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | | |
| | 3 | 3 | 3 | 7 | 3 | 3 | 3 | 9 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 9 | | |
| | 0 | 2 | 1 | 4 | 1 | 1 | 2 | 6 | 1 | 4 | 1 | 0 | 0 | 1 | 1 | 2 | 8 | 0 | 8 | 1 | 1 | 2 | 2 | 2 | 9 | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS |

Mesentery + 18
 Necrosis 3 3 3 2 3

Pancreas + 50
 Cyst 3 1 3.0
 Inflammation, Chronic 2 1 2.0
 Acinus, Atrophy 1 2.0

Salivary Glands + 50

Stomach, Forestomach + 50

Stomach, Glandular + 50
 Epithelium, Hyperplasia 1 4.0

Tongue 1
 Epithelium, Hyperplasia 1 3.0

CARDIOVASCULAR SYSTEM

Heart + 50
 Cardiomyopathy 1 1 1 1 1 1 2 2 2 1 1 24 1.2
 Ventricle, Thrombosis 1 4.0

ENDOCRINE SYSTEM

Adrenal Cortex + 50

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:
 x .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate
 l .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked
 Page 99

TDMS No. 93025 - 07

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 11/17/2008

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

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 1 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 |
| | 3 | 3 | 3 | 7 | 3 | 3 | 3 | 9 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 9 | 9 |
| | 0 | 2 | 1 | 4 | 1 | 1 | 2 | 6 | 1 | 4 | 1 | 0 | 0 | 1 | 1 | 2 | 8 | 0 | 8 | 1 | 1 | 2 | 2 | 9 | 9 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------------|
| Hemorrhage | | | | | | | | | | | 3 | | | | | | | | | | | | | | 1 3.0 |
| Hyperplasia | | | | | | | 4 | | | | | | | 2 | | | 4 | | 2 | 2 | 2 | 2 | | | 17 2.4 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Vacuolization Cytoplasmic | | 1 | | | | | | | | | | | | 1 | | | | | | | | | | | 7 1.9 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 2 1.0 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | 1 | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 2 4.0 |
| Hyperplasia | | 3 | | | 3 | | 3 | | | | | | | | | | 3 | | | 4 | | | | | 11 2.8 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| C-cell, Hyperplasia | 1 | 1 | | | 1 | | 1 | | | | | | | 1 | 1 | 2 | | | 2 | 1 | | 1 | | | 23 1.4 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------------|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | 4 | | | | | | | | | | | | | | | | | | | | | | 2 | | 4 2.8 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 1 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | |
| | 3 | 3 | 3 | 7 | 3 | 3 | 3 | 9 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 0 | 3 | 3 | 3 | 3 | 9 | |
| | 0 | 2 | 1 | 4 | 1 | 1 | 2 | 6 | 1 | 4 | 1 | 0 | 0 | 1 | 1 | 2 | 8 | 0 | 8 | 1 | 1 | 2 | 2 | 9 | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 30 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|--------------|
| Infiltration Cellular, Histiocyte Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | 2 4.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 0 |
| Lymph Node, Mediastinal | + | + | M | + | M | M | + | + | M | + | M | + | M | M | + | + | + | + | + | + | + | + | M | M | M | 36 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Hematopoietic Cell Proliferation | | | | | | | | | | 3 | | | | 3 | | | | | | | | | | | 4 3.5 | |
| Hemorrhage | | | | | | | | | | 4 | | | | | | | | | | | | | | | 1 4.0 | |
| Thymus | + | + | M | M | + | + | + | + | M | + | + | + | + | M | + | + | + | M | + | + | + | + | + | + | 45 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Galactocele | | | | 1 | | | | | | | | | | | | | | | | | | | | | 2 1.0 |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Subcutaneous Tissue, Hemorrhage | | | | | 3 | | | | | | | | | | | | | | | | | | | | 1 3.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 7 7 7 4 7 7 7 1 6 6 7 7 7 7 7 7 5 7 7 7 7 7 7 6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE
30 PPM
ANIMAL ID | 3 3 3 7 3 3 3 9 5 4 3 3 3 3 3 3 2 3 0 3 3 3 3 9 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 2 1 4 1 1 2 6 1 4 1 0 0 1 1 2 8 0 8 1 1 2 2 2 9 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|
| Bone | + | | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Skeletal Muscle | + | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-----|
| Brain | + | | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Compression | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 3.5 |
| Hemorrhage | 4 4 4 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3.7 |
| Peripheral Nerve | + | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Spinal Cord | + | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-----|
| Larynx | + | | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Foreign Body | 4 4 | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 4.0 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.0 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Lung | + | | | | | | | | | | | | | | | | | | | | | | | | | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|---|-------------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|----------|--------|
| | 0 7 3 0 | 0 7 3 0 | 0 7 3 0 | 0 4 7 3 1 | 0 7 3 3 1 | 0 7 3 3 2 | 0 1 9 6 1 | 0 6 5 4 1 | 0 6 4 3 0 | 0 7 7 3 0 | 0 7 7 3 1 | 0 7 7 3 1 | 0 7 7 3 2 | 0 5 2 8 | 0 7 3 0 | 0 7 3 3 | 0 7 3 3 | 0 7 3 3 | 0 7 3 2 | 0 7 3 2 | 0 7 3 2 | 0 7 3 2 | 0 7 3 2 | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 30 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | | | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 0 | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | | |
| Inflammation, Chronic | 1 | 1 | 1 | | | | 1 | | | | | | 2 | | | | | 2 | | | 2 | | 1 | 16 1.4 | | |
| Alveolar Epithelium, Hyperplasia | | | | | 4 | | | | | | | | | | | | | | 3 | | | | | 5 3.0 | | |
| Alveolus, Infiltration Cellular, Histiocyte | 1 | 1 | 1 | | 2 | | 1 | | 1 | | 1 | 1 | 2 | | 1 | | | | 1 | 2 | | 2 | 1 | 1 | 30 1.3 | |
| Alveolus, Proteinosis | | | | | | | 2 | | | | | | | | | | | | 1 | | | | | 5 1.4 | | |
| Bronchiole, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 3 1.0 | | |
| Bronchiole, Glands, Degeneration, Mucoid | | | | | | | | | | | | | | | | | | | | | 1 | | | 2 1.0 | | |
| Mediastinum, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | | |
| Glands, Dilatation | | | 1 | | | | | | | | | | | | | | | | | | | | | 6 1.0 | | |
| Nasolacrimal Duct, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 | | |
| Olfactory Epithelium, Degeneration | 2 | 2 | 1 | | 2 | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 47 1.6 |
| Olfactory Epithelium, Hyperplasia, Basal Cell | 2 | 2 | 1 | 1 | 2 | 2 | 2 | | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 48 1.6 |
| Olfactory Epithelium, Inflammation, Suppurative | | | | 1 | | | 1 | 2 | | | | | | 1 | | | 1 | | | 1 | 1 | 1 | | 1 | 16 1.2 | |
| Olfactory Epithelium, Metaplasia | 1 | | 1 | | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 41 1.2 |
| Olfactory Epithelium, Mineralization | | | | | | | | | | | | | | 1 | | | | | | | | | | | 2 1.0 | |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Respiratory Epithelium, Inflammation, Chronic | | | | | | | 1 | | | | | 1 | | 1 | | | | | | 1 | | | | | 7 1.0 | |
| Pleura | | | + | | | | + | | | | | | + | | | | | | | + | | + | | | 16 | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|
| | 7 7 7 4 7 7 7 1 6 6 7 7 7 7 7 7 5 7 7 7 7 7 7 7 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 3 3 7 3 3 3 9 5 4 3 3 3 3 3 3 2 3 0 3 3 3 3 3 9 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 2 1 4 1 1 2 6 1 4 1 0 0 1 1 2 8 0 8 1 1 2 2 2 9 | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 PPM | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-----|
| Eye | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Cornea, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 2.7 |
| Retina, Atrophy | 1 | | | | | | | | | | | | | | | | | | | | | | | | 4 | 2.6 |
| Sclera, Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Harderian Gland | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Inflammation, Chronic | 1 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-----|
| Kidney | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Nephropathy, Chronic | 2 1 3 | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.7 |
| Papilla, Mineralization | 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | 16 | 1.1 |
| Pelvis, Transitional Epithelium, Hyperplasia | 1 | | | | | | | | | | | | | | | | | | | | | | | | 4 | 1.8 |
| Pelvis, Transitional Epithelium, Mineralization | 1 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Renal Tubule, Dilatation | 4 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Urinary Bladder | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.5 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 105

TDMS No. 93025 - 07

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 11/17/2008

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

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|-------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS FEMALE | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 60 PPM | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum
Inflammation, Chronic | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis | | | | | 1 | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | | 3 | | 1 | | | | | | | | | | | | | | | 1 | | | | | 3 |
| Basophilic Focus, Multiple | | | 4 | | | | | 1 | 2 | | 1 | | 1 | | | | | 1 | | | | | | |
| Clear Cell Focus | | | 3 | | | | | | | | | | | 1 | | | | | | | | | | |
| Clear Cell Focus, Multiple | | | | | 2 | | | | 1 | | | | | | | | | | | | | | 1 | |
| Degeneration, Cystic | | | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | 4 | | | | | | 4 | | | | 4 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Page 106

TDMS No. 93025 - 07

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 11/17/2008

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

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 4 | 7 |
| | 0 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 2 | 1 | 3 | 3 | 3 | 3 | 2 | 4 | 0 | 3 | 3 | 0 | 3 | 3 | 3 | 2 | 3 |
| | 4 | 1 | 2 | 1 | 1 | 7 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 8 | 1 | 4 | 0 | 1 | 7 | 0 | 1 | 2 | 5 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------|--|--|
| Vacuolization Cytoplasmic Periportal, Inflammation, Chronic Serosa, Fibrosis | | | 2 3 | | | | | | | | | | | | | | | | | | | | | 1 2 | | |
| Mesentery Necrosis | | | + + | | | | | | | | | | | | | | | | | | | | | + + | | |
| | | | 3 2 | | | | | | | | | | | | | | | | | | | | | 1 3 1 | | |
| Oral Mucosa Pharyngeal, Hyperplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach Hyperplasia, Squamous Inflammation, Suppurative | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart Cardiomyopathy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | 1 | | 1 | 1 | 2 | 2 | | | | 1 | 2 | 1 | | 1 | 1 | 1 | 1 | | | | 1 | | | 1 | |

ENDOCRINE SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
l .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked
Page 107

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 4 | 7 | |
| | 0 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 2 | 1 | 3 | 3 | 3 | 3 | 2 | 4 | 0 | 3 | 3 | 0 | 3 | 3 | 3 | 2 | 3 | |
| | 4 | 1 | 2 | 1 | 1 | 7 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 8 | 1 | 4 | 0 | 1 | 7 | 0 | 1 | 2 | 5 | 1 | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 60 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | | | 2 | | | | 3 | 1 | | 2 | | | | 1 | | | | | | | 4 | | | | |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Vacuolization Cytoplasmic | | | 2 | | | | | 1 | | | | 1 | | | | | 1 | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Hyperplasia | | | | | | | | | | | 3 | | | | | | 3 | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | M | + | + |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | |
| Hyperplasia | | | | 4 | | | | 1 | | | | | | | | 4 | | | | | | | | | | 4 | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| C-cell, Hyperplasia | 4 | 1 | 1 | 1 | | 1 | 1 | | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |

GENERAL BODY SYSTEM
NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 108

TDMS No. 93025 - 07

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 11/17/2008

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

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------------|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 4 | 7 |
| | 0 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 2 | 1 | 3 | 3 | 3 | 3 | 2 | 4 | 0 | 3 | 3 | 0 | 3 | 3 | 3 | 2 | 3 |
| | 4 | 1 | 2 | 1 | 1 | 7 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 8 | 1 | 4 | 0 | 1 | 7 | 0 | 1 | 2 | 5 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| ANIMAL ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |
| | | | | | | | | | | | | | | | | | | | | | | | | | females (cont...) |

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland
Hyperplasia
Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Ovary
Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Uterus
Hemorrhage
Thrombosis
Endometrium, Hyperplasia
Endometrium, Inflammation, Suppurative | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow
Hyperplasia
Hyperplasia, Reticulum Cell
Erythroid Cell, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Lymph Node
Pancreatic, Ectasia
Pancreatic, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymph Node, Bronchial | M | M | + | M | M | M | M | M | M | M | M | M | M | M | + | M | M | M | M | M | M | M | M | M | M | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
|--------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 4 | 7 | | |
| | | 0 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 2 | 1 | 3 | 3 | 3 | 2 | 4 | 0 | 3 | 3 | 0 | 3 | 3 | 3 | 2 | 3 | | |
| | | 4 | 1 | 2 | 1 | 1 | 7 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 8 | 1 | 4 | 0 | 1 | 7 | 0 | 1 | 2 | 5 | 1 | |
| FISCHER 344 RATS FEMALE | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 60 PPM | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| ANIMAL ID | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ectasia | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | + | M | M | M | M | M | M | |
| Lymph Node, Mediastinal | + | M | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | |
| Angiectasis | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pigmentation | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | 4 | | | 2 | | | | | | | | 4 |
| Thymus | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Galactocele | 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subcutaneous Tissue, Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | 4 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS FEMALE | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 4 | 7 | 0 |
| 60 PPM | | 0 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 2 | 1 | 3 | 3 | 3 | 2 | 4 | 0 | 3 | 3 | 0 | 3 | 3 | 3 | 2 | 3 | 0 |
| ANIMAL ID | | 4 | 1 | 2 | 1 | 1 | 7 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 8 | 1 | 4 | 0 | 1 | 7 | 0 | 1 | 2 | 5 | 1 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females (cont...)

MUSCULOSKELETAL SYSTEM

Bone +

NERVOUS SYSTEM

Brain +
 Compression 4 4 3 4 3 2 3 4 4 + + +
 Hemorrhage 1
 Medulla, Gliosis

RESPIRATORY SYSTEM

Larynx +
 Foreign Body 4
 Inflammation, Suppurative 1
 Inflammation, Chronic 1
 Lung +
 Inflammation, Chronic 2 2 1 1 2 3 2 2 1 3
 Alveolar Epithelium, Hyperplasia 4 1
 Alveolus, Infiltration Cellular, Histiocyte 1 1 1 2 1 1 2 1 1 2 1
 Alveolus, Proteinosis 1 1
 Bronchiole, Hyperplasia 1
 Bronchiole, Glands, Degeneration, Mucoid 2

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------------|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 4 | 7 | |
| | 0 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 2 | 1 | 3 | 3 | 3 | 3 | 2 | 4 | 0 | 3 | 3 | 0 | 3 | 3 | 3 | 2 | 3 | |
| | 4 | 1 | 2 | 1 | 1 | 7 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 2 | 8 | 1 | 4 | 0 | 1 | 7 | 0 | 1 | 2 | 5 | 1 | |
| FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 5 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | females (cont...) |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | 3 | | | | | | | | | | | | | | | | | | | | | | |
| Glands, Dilatation | | | | 2 | | | | | | 1 | | | | | | | 2 | | | | | | | | | 1 |
| Nasolacrimal Duct, Inflammation, Suppurative | | | | | | | | | | 2 | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Degeneration | 1 | 2 | 2 | 3 | 1 | 2 | 1 | 1 | 2 | 3 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 3 | 1 | 1 | 1 | 2 | 2 | |
| Olfactory Epithelium, Hyperplasia, Basal Cell | 1 | 2 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 1 | 1 | 2 | 3 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 3 | 2 | |
| Olfactory Epithelium, Inflammation, Suppurative | | | | 1 | | 1 | | | | | | | | 1 | | 1 | | | 1 | 1 | | 2 | | | | |
| Olfactory Epithelium, Metaplasia | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | | 1 | 1 | 1 | 1 |
| Olfactory Epithelium, Mineralization | | | | | | | | | | | | | | | 1 | | | | | | | | | 1 | 1 | |
| Respiratory Epithelium, Hyperplasia | | | | 2 | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory Epithelium, Inflammation, Chronic | | | | | | | | | | | | | | | 1 | 1 | | | | | | | 1 | 1 | | |
| Pleura | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesothelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Retina, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|--------------------------------|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| | | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 5 | 7 | 6 | 7 | 5 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | |
| | | 3 | 3 | 3 | 3 | 9 | 2 | 3 | 3 | 3 | 2 | 3 | 0 | 1 | 3 | 6 | 3 | 0 | 3 | 3 | 3 | 8 | 3 | 3 | 1 | |
| | | 1 | 1 | 2 | 1 | 1 | 7 | 2 | 2 | 2 | 2 | 7 | 2 | 8 | 5 | 2 | 3 | 2 | 9 | 2 | 2 | 1 | 5 | 2 | 1 | 5 |
| FISCHER 344 RATS FEMALE | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 60 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|------------|------------|
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.5 | |
| Periportal, Inflammation, Chronic | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | 3 | 1.3 |
| Serosa, Fibrosis | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Mesentery | + | + | + | + | + | | + | + | + | | + | | | | | | | | + | | | | | | | | | 18 | |
| Necrosis | 3 | 3 | 3 | 1 | 3 | | 3 | 2 | 3 | | 2 | | | | | | | | 3 | | | | | | | | | 18 | 2.4 |
| Oral Mucosa | | | | | | | | | | | + | | | | | | | | | | | | | | | | | 1 | |
| Pharyngeal, Hyperplasia, Squamous | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |
| Hyperplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|-----------|------------|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |
| Cardiomyopathy | 1 | 1 | 1 | | | | 1 | 1 | | 1 | | 1 | 1 | 1 | | 1 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | | 32 | 1.2 |

ENDOCRINE SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|
| | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 5 | 7 | 6 | 7 | 5 | 7 | 7 | 7 | 6 | 7 | 7 | | 7 |
| | 3 | 3 | 3 | 3 | 9 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 0 | 1 | 3 | 6 | 3 | 0 | 3 | 3 | 3 | 8 | 3 | 3 | 1 | |
| | 1 | 1 | 2 | 1 | 1 | 7 | 2 | 2 | 2 | 2 | 7 | 2 | 8 | 5 | 2 | 3 | 2 | 9 | 2 | 2 | 1 | 5 | 2 | 1 | 5 | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 60 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | 2 | | | | | | | | | 2 | | | | | | | | | | | 4 | 2.3 |
| Inflammation, Chronic | | | | | | | | | | | | | | | 1 | | | | | | | | | | | 1 | 1.0 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst | | | | | | | | | | 1 | | | | | | | 4 | | | | | | | 4 | | 7 | 3.6 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hemorrhage | | | | | | | | | | | 4 | | | 4 | | | | | | | | | | | | 2 | 4.0 |
| Thrombosis | | | | | | | | | | | | | | 4 | | | | | | | | | | | | 1 | 4.0 |
| Endometrium, Hyperplasia | | | | | | | | | | | | 1 | 2 | | 2 | | | | | | | | | 2 | | 7 | 1.4 |
| Endometrium, Inflammation, Suppurative | | | | | | | | | | 2 | | | 2 | | | | | | | | | | | | | 3 | 1.7 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Hyperplasia, Reticulum Cell | | | | | | | | | | | 4 | | | | | | | | | | | | | | | 3 | 3.7 |
| Erythroid Cell, Hyperplasia | | | | | | | | | | | | | | | 4 | | | | | | | | | | | 1 | 4.0 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Pancreatic, Ectasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Pancreatic, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Lymph Node, Bronchial | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 3 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 5 | 7 | 6 | 7 | 5 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 |
| | 3 | 3 | 3 | 3 | 9 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 0 | 1 | 3 | 6 | 3 | 0 | 3 | 3 | 3 | 8 | 3 | 3 | 1 | |
| | 1 | 1 | 2 | 1 | 1 | 7 | 2 | 2 | 2 | 2 | 7 | 2 | 8 | 5 | 2 | 3 | 2 | 9 | 2 | 2 | 1 | 5 | 2 | 1 | 5 | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

Sclera, Metaplasia, Osseous 1 2.0

Harderian Gland 50
 Inflammation, Chronic 1 2.0

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|--|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Nephropathy, Chronic | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | | 2 | 1 | 2 | | 2 | 3 | 2 | 44 | 1.8 | |
| Cortex, Renal Tubule, Accumulation, Hyaline Droplet | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 3.5 | |
| Papilla, Mineralization | | 1 | 1 | | | 1 | | 1 | | 1 | | 1 | 1 | | | | | | 1 | 1 | | 1 | | 1 | 1 | 23 | 1.0 | |
| Pelvis, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Pelvis, Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Pelvis, Transitional Epithelium, Mineralization | | | | | | | | | | | | | | | | 1 | | | | | | | | | | 1 | 2.0 | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
|-------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS FEMALE | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 120 PPM | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| ANIMAL ID | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |
| | | 7 | 4 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | | |
| | | 3 | 4 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | | |
| | | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 7 | 2 | 5 | 1 | 2 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

females (cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon
Inflammation, Suppurative
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | 4 | | | | | | | | | | | | | | | | |
| | | | | | | | | | 4 | | | | | | | | | | | | | | | | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis | | | | | | | | | | | | | | 1 | | | | | | | | | 1 | 3 | |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus, Multiple | | | | | | | | 1 | | 2 | | 1 | 1 | | 1 | 1 | | | 1 | | | X | | 1 | |
| Clear Cell Focus | 1 | | | | | 4 | | | | | | | | | | | | | 2 | | | | | 3 | |
| Clear Cell Focus, Multiple | | | | | 1 | | 1 | | 3 | 1 | 1 | | | | | 2 | | | | | | | | | |
| Hepatodiaphragmatic Nodule | | 4 | | | | | | | | | | | | | | 4 | | 4 | | | | | | 4 | |
| Mixed Cell Focus | | | | | | | | | | | | | | | | | | | | | 2 | | | | |
| Vacuolization Cytoplasmic | | | 4 | | | 1 | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | females (cont...) | |
|--------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------------------|--------------------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| 7 | 4 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 0 | |
| 3 | 4 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 0 | |
| 2 | 2 | 3 | 2 | 2 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 7 | 2 | 5 | 1 | 2 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 120 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | females (cont...) |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bile Duct, Hyperplasia
Periportal, Inflammation, Chronic | | | | | | | | 1 | | | | | | 1 | | | | | | | | | | | 1 | 2 |
| Mesentery
Necrosis
Fat, Hemorrhage | | | + | + | + | | | + | + | | | | + | + | | | | | | + | | | | | + | + |
| | | | 2 | 3 | 3 | | | 3 | 3 | | | | 1 | 2 | | | | | | 1 | | | | | | 3 |
| | | | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| Oral Mucosa
Pharyngeal, Hyperplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Salivary Glands
Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | 4 | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Tongue
Epithelium, Hyperplasia | | | + | | + | | | | | | | | | | | | | | | | | | | | | |
| | | | 4 | | 4 | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

Blood Vessel
Media, Inflammation, Chronic

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 4 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 |
| | 3 | 4 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 |
| | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 7 | 2 | 5 | 1 | 2 |
| FISCHER 344 RATS FEMALE
120 PPM | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| | females (cont...) | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy | | | | 1 | 1 | 1 | 1 | 1 | 2 | 1 | | | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | 2 | 1 | 2 | 2 | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | 2 | | | 1 | | | | 3 | 2 | | | | 3 | 2 | | | 2 | | 4 | 3 | 3 | | | | | |
| Vacuolization Cytoplasmic Capsule, Hyperplasia | | | | | 4 | | | | | | | 1 | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | M | + | + |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | | | | | | | | | 3 | | | 4 | | | 3 | | | | | | | | 2 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| C-cell, Hyperplasia | 1 | | 2 | | 1 | 1 | | | | 4 | | | | | | | | 1 | | | | | | | 1 | |
| Follicle, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|--------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 7 | 4 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | |
| | | 3 | 4 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | |
| | | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 7 | 2 | 5 | 1 | 2 |
| FISCHER 344 RATS FEMALE | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 120 PPM | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

females (cont...)

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | | | | | 4 | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | 2 | | | | | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cyst | | | | 4 | | | | 4 | 4 | | | 1 | 4 | | | | | | 4 | 1 | | | | | | |
| Hyperplasia, Adenomatous | | | | | | | | 3 | | | | | | | | | | | | | | | | | | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endometrium, Hyperplasia | | | | 2 | | | | | | 2 | | | | | | | | | | 2 | 3 | | | | | |
| Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | + |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Page 125

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 4 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | |
| 3 | 4 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | |
| 2 | 2 | 3 | 2 | 2 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 7 | 2 | 5 | 1 | 2 |
| FISCHER 344 RATS FEMALE
120 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymph Node | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Hemorrhage | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Inflammation, Chronic | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Bronchial | M | + | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Lymph Node, Mediastinal Ectasia | + | + | + | + | M | M | + | + | M | + | M | + | M | + | + | + | + | M | M | M | + | M | + | + | M |
| Lymph Node, Mesenteric Ectasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pigmentation | 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen Hematopoietic Cell Proliferation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Thymus Ectopic Parathyroid Gland | + | M | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | M | + | + | + | + | + | + | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland Galactocele Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | 4 | | | | | | | | | | | | 4 | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
l .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|--|
| | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE
120 PPM
ANIMAL ID | 3 | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | | |
| | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hyperkeratosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ulcer | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Compression | | | | | 4 | | | | | | 3 | 3 | | 3 | 4 | | | | | | | 3 | 4 | | | | | |
| Hemorrhage | | | 4 | | | 1 | | | | | | | | | | | | | | | | 2 | | | | | | |
| Hydrocephalus | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Choroid Plexus, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Foreign Body | | | | | 4 | | | | | | | | 4 | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | 1 | | 1 | | | | | | | 1 | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epiglottis, Metaplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 4 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| FISCHER 344 RATS FEMALE
120 PPM | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | |
| | females (cont...) | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Inflammation, Chronic | 2 | | 2 | | | | 1 | 2 | | 1 | 1 | 1 | 1 | | 2 | | | | 1 | 1 | | 2 | 2 | | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | 1 | | 1 | | | | 1 | | | | | | |
| Alveolus, Infiltration Cellular, Histiocyte | 1 | | | 1 | | | 1 | 2 | | 2 | 1 | 2 | 1 | 1 | 2 | | | 1 | 1 | 1 | 2 | 1 | | 1 | |
| Alveolus, Proteinosis | 1 | | | | | | | | | | | | | | | | | | | | 1 | | | | |
| Bronchiole, Hyperplasia | | | | | | | 1 | | | | | | | | 1 | | | | | | | | | | |
| Interstitialium, Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Foreign Body | | | | | | | | | | | | | | | | 3 | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | 1 | | | | | | 2 | | | | | | | | | | |
| Glands, Dilatation | | | | | | | 1 | | | | | | | | | 2 | | 1 | | | | | | 2 | |
| Nasolacrimal Duct, Inflammation, Suppurative | | | | | | | | | | | | 3 | | | | | | | | | | | | | |
| Olfactory Epithelium, Degeneration | 2 | 2 | 2 | 1 | 1 | 2 | 1 | | 2 | 1 | 1 | | 1 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | | 2 | 1 | 2 | 2 |
| Olfactory Epithelium, Hyperplasia, Basal Cell | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | 1 | 2 | 2 | 2 | 3 | 2 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| Olfactory Epithelium, Inflammation, Suppurative | 1 | | | 1 | 2 | 1 | | | 2 | 3 | | | | 1 | | 1 | | | 1 | 1 | | | | | |
| Olfactory Epithelium, Metaplasia | 2 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 2 |
| Olfactory Epithelium, Mineralization | | | 1 | | | 1 | | | | | | | | | | 2 | | | | | | 1 | 1 | 1 | |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | 1 | | | | 4 | 1 | | | | | | | | | |
| Respiratory Epithelium, Inflammation, Chronic | | | | | 1 | | 1 | | | 1 | | | | | | 2 | | | 1 | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--|---|---|--|--|--|---|---|--|--|--|---|---|--|--|--|--|--|--|---|---|--|---|--|
| Pleura | | + | + | | | | + | + | | | | + | + | | | | | | | + | + | | + | |
|--------|--|---|---|--|--|--|---|---|--|--|--|---|---|--|--|--|--|--|--|---|---|--|---|--|

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 7 7 6 7 5 6 7 7 6 7 7 4 7 7 7 6 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| 3 3 3 7 3 6 8 3 3 9 3 3 8 0 3 3 4 3 3 3 3 3 3 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 2 2 0 2 3 5 1 2 4 1 0 8 3 1 1 8 1 0 1 2 1 2 1 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 120 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cyst | 3 | | 2 | | | | | | | | | 4 | | | | | | | | | | | | | 3 3.0 |
| Hyperplasia | | | | | | | | | | | | 3 | | | | | | | | | | | | | 2 3.5 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cyst | | | | 4 | | | | | | | | | | | | | 4 | | | | | | | | 9 3.3 |
| Hyperplasia, Adenomatous | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hemorrhage | | | | | | | | | | | | 4 | | | | | | | | | | 4 | | | 3 4.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | 4 | 4 | 2 4.0 |
| Endometrium, Hyperplasia | | | | | | | 1 | | | 4 | | | | | 3 | | 1 | | 2 | 2 | | 3 | | | 11 2.3 |
| Vagina | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | 4 | | | | | | | | | | | | | 1 4.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|
| | 7 7 7 6 7 5 6 7 7 6 7 7 4 7 7 7 6 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE
120 PPM
ANIMAL ID | 3 3 3 7 3 6 8 3 3 9 3 3 8 0 3 3 4 3 3 3 3 3 3 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 2 2 0 2 3 5 1 2 4 1 0 8 3 1 1 8 1 0 1 2 1 2 1 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 2 2 2 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Eye | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Cornea, Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Lens, Cataract | 2 | | | | | | | | | | | | | | | | | | | | | | | | 11 1.9 |
| Retina, Atrophy | 1 | | | | | | | | | | | | | | | | | | | | | | | | 7 2.1 |
| Harderian Gland | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Kidney | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Nephropathy, Chronic | 1 1 1 1 2 1 2 2 3 1 2 1 1 2 3 3 2 2 1 4 2 1 2 1 2 | | | | | | | | | | | | | | | | | | | | | | | | 49 1.9 |
| Papilla, Mineralization | 1 1 | | | | | | | | | | | | | | | | | | | | | | | | 20 1.1 |
| Pelvis, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Pelvis, Transitional Epithelium, Hyperplasia | 1 | | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Pelvis, Transitional Epithelium, Mineralization | 1 | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 |
| Urinary Bladder | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Transitional Epithelium, Hyperplasia | 3 | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |

*** END OF REPORT ***

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
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 Page 137