

**TDMS No.** 95003 - 05  
**Test Type:** CHRONIC  
**Route:** SKIN APPLICATION  
**Species/Strain:** RATS/F 344/N

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

Methyl trans-styryl ketone

**CAS Number:** 1896-62-4

**Date Report Requested:** 07/06/2010

**Time Report Requested:** 12:57:38

**First Dose M/F:** 04/05/04 / 04/05/04

**Lab:** SRI

F#2\_R2

**C Number:** C95003  
**Lock Date:** 01/29/2007  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 2.2.0

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FISCHER 344 RATS MALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
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**Disposition Summary**

<b>Animals Initially In Study</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>
<b>Early Deaths</b>				
<b>Moribund Sacrifice</b>	<b>15</b>	<b>14</b>	<b>19</b>	<b>17</b>
<b>Natural Death</b>	<b>8</b>	<b>6</b>	<b>9</b>	<b>3</b>
<b>Survivors</b>				
<b>Natural Death</b>		<b>1</b>		<b>1</b>
<b>Terminal Sacrifice</b>	<b>27</b>	<b>29</b>	<b>22</b>	<b>29</b>
<b>Animals Examined Microscopically</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>

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**ALIMENTARY SYSTEM**

Intestine Large, Cecum	(50)	(49)	(49)	(50)
Angiectasis				1 (2%)
Edema	3 (6%)	2 (4%)	2 (4%)	1 (2%)
Infiltration Cellular, Mixed Cell		1 (2%)		
Intestine Large, Colon	(48)	(50)	(50)	(50)
Edema				1 (2%)
Inflammation, Chronic			1 (2%)	
Epithelium, Hyperplasia			1 (2%)	
Intestine Large, Rectum	(46)	(48)	(48)	(48)
Edema				1 (2%)
Epithelium, Hyperplasia			1 (2%)	
Intestine Small, Duodenum	(49)	(50)	(50)	(50)
Epithelium, Hyperplasia	4 (8%)		3 (6%)	
Intestine Small, Ileum	(49)	(48)	(49)	(48)
Hemorrhage				1 (2%)
Intestine Small, Jejunum	(46)	(45)	(45)	(48)
Inflammation, Chronic Active		1 (2%)		
Epithelium, Hyperplasia			1 (2%)	
Liver	(50)	(50)	(50)	(50)
Angiectasis		1 (2%)		1 (2%)
Basophilic Focus	20 (40%)	23 (46%)	19 (38%)	27 (54%)
Clear Cell Focus	16 (32%)	19 (38%)	14 (28%)	10 (20%)
Degeneration, Cystic	4 (8%)	4 (8%)	3 (6%)	1 (2%)

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FISCHER 344 RATS MALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
Eosinophilic Focus	10 (20%)	5 (10%)	2 (4%)	8 (16%)
Fibrosis			1 (2%)	
Hematopoietic Cell Proliferation				1 (2%)
Hepatodiaphragmatic Nodule	3 (6%)	9 (18%)	6 (12%)	7 (14%)
Infiltration Cellular, Mixed Cell	2 (4%)	2 (4%)	4 (8%)	2 (4%)
Mixed Cell Focus	7 (14%)	8 (16%)	8 (16%)	12 (24%)
Necrosis, Focal	1 (2%)	1 (2%)		2 (4%)
Thrombosis		1 (2%)		
Bile Duct, Hyperplasia	40 (80%)	31 (62%)	29 (58%)	37 (74%)
Centrilobular, Necrosis	3 (6%)	5 (10%)	4 (8%)	3 (6%)
Hepatocyte, Hyperplasia, Focal	1 (2%)	1 (2%)	1 (2%)	2 (4%)
Hepatocyte, Vacuolization Cytoplasmic	9 (18%)	6 (12%)	6 (12%)	6 (12%)
Kupffer Cell, Pigmentation	1 (2%)	1 (2%)		1 (2%)
Oval Cell, Hyperplasia		1 (2%)		
Mesentery	(15)	(14)	(7)	(12)
Accessory Spleen	3 (20%)	1 (7%)		3 (25%)
Hemorrhage		1 (7%)		
Mineralization		1 (7%)		
Fat, Necrosis	9 (60%)	8 (57%)	6 (86%)	8 (67%)
Oral Mucosa	(1)	(1)	(0)	(2)
Pancreas	(49)	(50)	(49)	(50)
Atrophy	32 (65%)	27 (54%)	27 (55%)	26 (52%)
Cyst	14 (29%)	10 (20%)	7 (14%)	10 (20%)
Acinus, Cytoplasmic Alteration	2 (4%)	3 (6%)	4 (8%)	5 (10%)
Acinus, Hyperplasia, Focal	4 (8%)	1 (2%)	1 (2%)	2 (4%)
Salivary Glands	(50)	(50)	(48)	(50)
Atrophy	1 (2%)	1 (2%)		
Necrosis		2 (4%)		
Stomach, Forestomach	(50)	(50)	(50)	(50)
Edema	3 (6%)	1 (2%)	6 (12%)	3 (6%)
Erosion	1 (2%)		1 (2%)	
Fibrosis				1 (2%)
Inflammation, Chronic Active	1 (2%)	2 (4%)		
Perforation			1 (2%)	
Ulcer	6 (12%)	6 (12%)	8 (16%)	3 (6%)
Epithelium, Hyperplasia	8 (16%)	6 (12%)	8 (16%)	5 (10%)

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Lab: SRI

FISCHER 344 RATS MALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
Stomach, Glandular	(50)	(50)	(50)	(50)
Cyst	1 (2%)			1 (2%)
Edema	1 (2%)	3 (6%)	2 (4%)	1 (2%)
Erosion	7 (14%)	5 (10%)	6 (12%)	4 (8%)
Inflammation, Chronic Active	1 (2%)			
Mineralization		1 (2%)		
Ulcer	4 (8%)	3 (6%)	1 (2%)	1 (2%)
Epithelium, Hyperplasia				1 (2%)
Glands, Hyperplasia	1 (2%)	2 (4%)		3 (6%)
Tongue	(1)	(3)	(4)	(1)
Epithelium, Hyperplasia		2 (67%)	1 (25%)	1 (100%)

CARDIOVASCULAR SYSTEM

Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	45 (90%)	42 (84%)	46 (92%)	45 (90%)
Inflammation, Chronic	1 (2%)		1 (2%)	
Thrombosis	5 (10%)	8 (16%)	3 (6%)	3 (6%)

ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(50)	(50)	(50)
Accessory Adrenal Cortical Nodule	25 (50%)	21 (42%)	23 (46%)	26 (52%)
Atrophy		1 (2%)	1 (2%)	
Degeneration, Fatty	30 (60%)	23 (46%)	20 (40%)	25 (50%)
Hyperplasia, Focal	12 (24%)	3 (6%)	4 (8%)	6 (12%)
Hypertrophy, Focal	7 (14%)	11 (22%)	6 (12%)	6 (12%)
Necrosis		1 (2%)		
Adrenal Medulla	(49)	(50)	(50)	(50)
Hyperplasia	22 (45%)	17 (34%)	11 (22%)	20 (40%)
Islets, Pancreatic	(49)	(50)	(49)	(50)
Hyperplasia	4 (8%)	4 (8%)	6 (12%)	2 (4%)
Parathyroid Gland	(49)	(50)	(47)	(47)
Hyperplasia		1 (2%)		
Pituitary Gland	(50)	(49)	(50)	(50)

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FISCHER 344 RATS MALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
Pigmentation		1 (2%)	2 (4%)	
Pars Distalis, Angiectasis	2 (4%)	1 (2%)		6 (12%)
Pars Distalis, Atrophy		1 (2%)		
Pars Distalis, Cyst	2 (4%)	2 (4%)	3 (6%)	
Pars Distalis, Cytoplasmic Alteration, Focal		1 (2%)	1 (2%)	
Pars Distalis, Hyperplasia	1 (2%)			2 (4%)
Pars Distalis, Hyperplasia, Focal	9 (18%)	9 (18%)	5 (10%)	10 (20%)
Pars Intermedia, Angiectasis	4 (8%)	1 (2%)		3 (6%)
Pars Intermedia, Cyst	1 (2%)	7 (14%)		3 (6%)
Pars Intermedia, Hyperplasia, Focal			1 (2%)	
Pars Nervosa, Infiltration Cellular, Mixed Cell	2 (4%)			
Thyroid Gland	(46)	(45)	(43)	(49)
Ultimobranchial Cyst			1 (2%)	1 (2%)
C-cell, Hyperplasia	11 (24%)	9 (20%)	13 (30%)	6 (12%)
Follicle, Cyst	3 (7%)	3 (7%)	1 (2%)	
Follicle, Degeneration, Focal			1 (2%)	1 (2%)
Follicular Cell, Hyperplasia	1 (2%)			
<b>GENERAL BODY SYSTEM</b>				
Tissue NOS	(0)	(0)	(0)	(1)
<b>GENITAL SYSTEM</b>				
Coagulating Gland	(0)	(1)	(0)	(1)
Cyst				1 (100%)
Inflammation, Chronic		1 (100%)		
Epididymis	(50)	(50)	(50)	(50)
Granuloma Sperm			1 (2%)	
Inflammation, Chronic	3 (6%)	4 (8%)	3 (6%)	
Preputial Gland	(50)	(50)	(49)	(50)
Cyst		4 (8%)		
Inflammation, Chronic	14 (28%)	19 (38%)	18 (37%)	13 (26%)
Prostate	(50)	(50)	(50)	(50)
Hyperplasia				1 (2%)

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FISCHER 344 RATS MALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
Inflammation, Chronic Epithelium, Hyperplasia	33 (66%) 3 (6%)	42 (84%) 9 (18%)	39 (78%) 4 (8%)	42 (84%) 5 (10%)
Seminal Vesicle Degeneration	(50)	(50)	(50)	(50) 1 (2%)
Fibrosis	1 (2%)			
Inflammation Inflammation, Chronic			1 (2%) 2 (4%)	
Testes	(50)	(50)	(50)	(50)
Artery, Inflammation, Chronic	1 (2%)	2 (4%)		1 (2%)
Germinal Epithelium, Atrophy	30 (60%)	35 (70%)	27 (54%)	36 (72%)
Interstitial Cell, Hyperplasia	6 (12%)	13 (26%)	8 (16%)	7 (14%)

**HEMATOPOIETIC SYSTEM**

Bone Marrow	(50)	(50)	(50)	(50)
Hyperplasia	2 (4%)	7 (14%)	10 (20%)	3 (6%)
Myelofibrosis	2 (4%)	2 (4%)	1 (2%)	1 (2%)
Thrombosis		1 (2%)		
Lymph Node	(25)	(30)	(21)	(26)
Deep Cervical, Ectasia			1 (5%)	
Deep Cervical, Hyperplasia, Lymphoid	1 (4%)		3 (14%)	
Mediastinal, Ectasia	2 (8%)	6 (20%)	3 (14%)	2 (8%)
Mediastinal, Hemorrhage	3 (12%)	9 (30%)	8 (38%)	4 (15%)
Mediastinal, Hyperplasia, Lymphoid	2 (8%)	8 (27%)	7 (33%)	6 (23%)
Mediastinal, Pigmentation	1 (4%)	3 (10%)	3 (14%)	1 (4%)
Pancreatic, Ectasia	3 (12%)	3 (10%)	2 (10%)	5 (19%)
Pancreatic, Hemorrhage		3 (10%)	2 (10%)	
Pancreatic, Hyperplasia, Histiocytic		1 (3%)		
Pancreatic, Hyperplasia, Lymphoid		2 (7%)		2 (8%)
Pancreatic, Pigmentation		2 (7%)	1 (5%)	
Lymph Node, Mandibular	(3)	(1)	(3)	(4)
Ectasia	1 (33%)		1 (33%)	1 (25%)
Hyperplasia, Lymphoid	1 (33%)			1 (25%)
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Atrophy		2 (4%)		

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FISCHER 344 RATS MALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
Ectasia	5 (10%)	2 (4%)	3 (6%)	5 (10%)
Hemorrhage	4 (8%)	3 (6%)	4 (8%)	8 (16%)
Hyperplasia, Histiocytic		1 (2%)		
Hyperplasia, Lymphoid	3 (6%)	12 (24%)	7 (14%)	11 (22%)
Pigmentation	2 (4%)	1 (2%)	1 (2%)	
Spleen	(50)	(50)	(50)	(50)
Accessory Spleen	1 (2%)	1 (2%)		1 (2%)
Fibrosis	3 (6%)		3 (6%)	3 (6%)
Hematopoietic Cell Proliferation	20 (40%)	21 (42%)	24 (48%)	19 (38%)
Hemorrhage	1 (2%)		1 (2%)	1 (2%)
Necrosis	3 (6%)	2 (4%)	2 (4%)	2 (4%)
Pigmentation		3 (6%)	6 (12%)	3 (6%)
Lymphoid Follicle, Atrophy		1 (2%)	1 (2%)	
Lymphoid Follicle, Hyperplasia	1 (2%)	1 (2%)	2 (4%)	
Thymus	(50)	(50)	(46)	(49)
Cyst	1 (2%)			
Inflammation, Chronic			1 (2%)	

**INTEGUMENTARY SYSTEM**

Mammary Gland	(48)	(49)	(48)	(49)
Hyperplasia	32 (67%)	33 (67%)	30 (63%)	38 (78%)
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion	1 (2%)	1 (2%)		1 (2%)
Hemorrhage	1 (2%)			
Hyperkeratosis				1 (2%)
Inflammation, Suppurative			1 (2%)	
Inflammation, Acute	1 (2%)			
Inflammation, Chronic		1 (2%)	2 (4%)	2 (4%)
Ulcer	15 (30%)	12 (24%)	17 (34%)	22 (44%)
Control, Hyperkeratosis	5 (10%)	1 (2%)	5 (10%)	1 (2%)
Control Epidermis, Hyperplasia	2 (4%)	4 (8%)	3 (6%)	5 (10%)
Epidermis, Hyperplasia	15 (30%)	14 (28%)	18 (36%)	24 (48%)
Epidermis, Site Of Application, Hyperplasia		3 (6%)	3 (6%)	29 (58%)
Site Of Application, Hyperkeratosis	20 (40%)	13 (26%)	33 (66%)	47 (94%)

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Site Of Application, Inflammation, Chronic				1 (2%)
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**MUSCULOSKELETAL SYSTEM**

Bone	(50)	(50)	(50)	(50)
Fibrous Osteodystrophy		1 (2%)		
Femur, Osteopetrosis			1 (2%)	
Skeletal Muscle	(1)	(3)	(2)	(1)
Atrophy			1 (50%)	

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**NERVOUS SYSTEM**

Brain	(50)	(50)	(50)	(50)
Compression	17 (34%)	19 (38%)	20 (40%)	18 (36%)
Fungus			1 (2%)	
Hemorrhage		4 (8%)	2 (4%)	
Necrosis	2 (4%)	1 (2%)		
Pigmentation			1 (2%)	
Perivascular, Inflammation, Pyogranulomatous			1 (2%)	
Spinal Cord	(7)	(4)	(4)	(3)

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**RESPIRATORY SYSTEM**

Lung	(50)	(50)	(50)	(50)
Edema		3 (6%)		
Foreign Body			1 (2%)	1 (2%)
Hemorrhage	2 (4%)	2 (4%)	1 (2%)	1 (2%)
Infiltration Cellular, Histiocyte	14 (28%)	15 (30%)	17 (34%)	22 (44%)
Inflammation, Granulomatous			1 (2%)	
Inflammation, Chronic	4 (8%)	13 (26%)	7 (14%)	9 (18%)
Metaplasia, Osseous		2 (4%)	2 (4%)	4 (8%)
Alveolar Epithelium, Hyperplasia			4 (8%)	8 (16%)
Nose	(50)	(49)	(50)	(50)
Foreign Body	23 (46%)	21 (43%)	21 (42%)	24 (48%)

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Fungus	2 (4%)	9 (18%)	11 (22%)	12 (24%)
Inflammation, Chronic	25 (50%)	24 (49%)	31 (62%)	30 (60%)
Olfactory Epithelium, Metaplasia, Respiratory	7 (14%)	13 (27%)	6 (12%)	12 (24%)
Respiratory Epithelium, Hyperplasia	19 (38%)	18 (37%)	18 (36%)	23 (46%)
Respiratory Epithelium, Metaplasia, Respiratory				1 (2%)
Respiratory Epithelium, Metaplasia, Squamous Turbinate, Necrosis	3 (6%)	7 (14%)	15 (30%)	13 (26%)
	1 (2%)			

**SPECIAL SENSES SYSTEM**

Eye	(50)	(50)	(50)	(50)
Cataract	1 (2%)		1 (2%)	2 (4%)
Inflammation, Acute		1 (2%)		
Inflammation, Chronic			1 (2%)	
Cornea, Hyperplasia			1 (2%)	
Retina, Degeneration	3 (6%)		3 (6%)	6 (12%)
Harderian Gland	(50)	(50)	(50)	(50)
Atrophy		1 (2%)		
Hyperplasia, Focal	1 (2%)		1 (2%)	1 (2%)
Inflammation, Chronic	1 (2%)	2 (4%)	1 (2%)	
Zymbal's Gland	(1)	(1)	(2)	(1)

**URINARY SYSTEM**

Kidney	(50)	(50)	(50)	(50)
Cyst		2 (4%)	2 (4%)	
Glomerulosclerosis			1 (2%)	
Hydronephrosis			1 (2%)	
Infarct	1 (2%)			
Inflammation, Suppurative		1 (2%)		3 (6%)
Inflammation, Chronic	19 (38%)	14 (28%)	16 (32%)	16 (32%)
Nephropathy	44 (88%)	47 (94%)	46 (92%)	47 (94%)
Papilla, Necrosis			1 (2%)	
Renal Tubule, Dilatation			1 (2%)	1 (2%)

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Renal Tubule, Hyperplasia				1 (2%)
Renal Tubule, Necrosis	1 (2%)	1 (2%)		
Renal Tubule, Pigmentation				1 (2%)
Transitional Epithelium, Hyperplasia				1 (2%)
Urethra	(0)	(1)	(1)	(0)
Angiectasis			1 (100%)	
Urinary Bladder	(50)	(50)	(50)	(50)
Hemorrhage		1 (2%)	1 (2%)	
Inflammation, Suppurative			1 (2%)	
Inflammation, Chronic		1 (2%)		
Transitional Epithelium, Hyperplasia		1 (2%)		1 (2%)

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

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FISCHER 344 RATS FEMALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
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**Disposition Summary**

<b>Animals Initially In Study</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>
<b>Early Deaths</b>				
<b>Moribund Sacrifice</b>	<b>10</b>	<b>15</b>	<b>13</b>	<b>15</b>
<b>Natural Death</b>	<b>10</b>	<b>11</b>	<b>10</b>	<b>9</b>
<b>Survivors</b>				
<b>Terminal Sacrifice</b>	<b>30</b>	<b>24</b>	<b>27</b>	<b>26</b>
<b>Animals Examined Microscopically</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>

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ALIMENTARY SYSTEM

Intestine Large, Cecum	(50)	(50)	(50)	(50)
Edema	2 (4%)	3 (6%)	3 (6%)	1 (2%)
Intestine Small, Duodenum	(50)	(50)	(50)	(49)
Epithelium, Hyperplasia			1 (2%)	2 (4%)
Intestine Small, Ileum	(48)	(48)	(49)	(46)
Liver	(50)	(50)	(50)	(50)
Angiectasis	1 (2%)	2 (4%)	1 (2%)	1 (2%)
Basophilic Focus	37 (74%)	37 (74%)	38 (76%)	34 (68%)
Clear Cell Focus	6 (12%)	10 (20%)	4 (8%)	6 (12%)
Cyst			1 (2%)	1 (2%)
Degeneration, Cystic		1 (2%)		
Eosinophilic Focus	5 (10%)	3 (6%)	9 (18%)	6 (12%)
Hematopoietic Cell Proliferation	2 (4%)	1 (2%)	1 (2%)	
Hemorrhage		1 (2%)	1 (2%)	
Hepatodiaphragmatic Nodule	9 (18%)	6 (12%)	6 (12%)	9 (18%)
Infiltration Cellular, Mixed Cell	6 (12%)	7 (14%)	9 (18%)	6 (12%)
Mineralization				1 (2%)
Mixed Cell Focus	6 (12%)	11 (22%)	9 (18%)	5 (10%)
Necrosis, Focal		2 (4%)	1 (2%)	2 (4%)
Necrosis, Diffuse		1 (2%)		
Bile Duct, Hyperplasia	5 (10%)	6 (12%)	7 (14%)	6 (12%)
Centrilobular, Necrosis	1 (2%)	3 (6%)	2 (4%)	4 (8%)
Hepatocyte, Hyperplasia, Focal		3 (6%)	1 (2%)	2 (4%)
Hepatocyte, Vacuolization Cytoplasmic	6 (12%)	6 (12%)	4 (8%)	4 (8%)

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TDMS No. 95003 - 05  
 Test Type: CHRONIC  
 Route: SKIN APPLICATION  
 Species/Strain: RATS/F 344/N

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

Methyl trans-styryl ketone

CAS Number: 1896-62-4

Date Report Requested: 07/06/2010

Time Report Requested: 12:57:38

First Dose M/F: 04/05/04 / 04/05/04

Lab: SRI

FISCHER 344 RATS FEMALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
Kupffer Cell, Hyperplasia	1 (2%)	1 (2%)		1 (2%)
Kupffer Cell, Pigmentation		1 (2%)		
Mesentery	(23)	(18)	(23)	(25)
Accessory Spleen			4 (17%)	3 (12%)
Fibrosis	1 (4%)			
Hemorrhage	1 (4%)			
Fat, Necrosis	22 (96%)	17 (94%)	21 (91%)	20 (80%)
Pancreas	(49)	(50)	(50)	(49)
Atrophy	14 (29%)	8 (16%)	13 (26%)	20 (41%)
Cyst	13 (27%)	16 (32%)	15 (30%)	30 (61%)
Necrosis			1 (2%)	
Acinus, Cytoplasmic Alteration	2 (4%)	2 (4%)	1 (2%)	2 (4%)
Acinus, Hyperplasia, Focal		1 (2%)		
Salivary Glands	(50)	(50)	(50)	(50)
Atrophy	3 (6%)	2 (4%)	2 (4%)	2 (4%)
Cyst	1 (2%)			
Stomach, Forestomach	(50)	(50)	(50)	(50)
Edema	3 (6%)	5 (10%)	2 (4%)	1 (2%)
Hyperplasia		1 (2%)		
Inflammation, Chronic Active	3 (6%)	2 (4%)	2 (4%)	
Perforation				1 (2%)
Ulcer	4 (8%)	8 (16%)	3 (6%)	4 (8%)
Epithelium, Hyperplasia	9 (18%)	3 (6%)	5 (10%)	7 (14%)
Stomach, Glandular	(50)	(50)	(50)	(50)
Edema	1 (2%)	2 (4%)		1 (2%)
Erosion	2 (4%)	4 (8%)	3 (6%)	5 (10%)
Ulcer	1 (2%)	1 (2%)	1 (2%)	1 (2%)
Tongue	(0)	(0)	(1)	(3)
Epithelium, Hyperplasia			1 (100%)	2 (67%)

CARDIOVASCULAR SYSTEM

Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	36 (72%)	35 (70%)	35 (70%)	35 (70%)
Thrombosis		3 (6%)		1 (2%)

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FISCHER 344 RATS FEMALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
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ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(50)	(50)	(50)
Accessory Adrenal Cortical Nodule	10 (20%)	19 (38%)	16 (32%)	24 (48%)
Angiectasis			1 (2%)	
Atrophy		1 (2%)		
Degeneration, Fatty	17 (34%)	22 (44%)	25 (50%)	16 (32%)
Hyperplasia, Focal	5 (10%)	7 (14%)	8 (16%)	5 (10%)
Hypertrophy, Focal	12 (24%)	11 (22%)	10 (20%)	6 (12%)
Necrosis			1 (2%)	
Adrenal Medulla	(49)	(49)	(47)	(49)
Hyperplasia	5 (10%)	3 (6%)		3 (6%)
Islets, Pancreatic	(49)	(50)	(50)	(49)
Hyperplasia		2 (4%)		
Parathyroid Gland	(50)	(50)	(49)	(44)
Pituitary Gland	(50)	(50)	(50)	(50)
Pigmentation			2 (4%)	
Pars Distalis, Angiectasis	7 (14%)	2 (4%)	9 (18%)	8 (16%)
Pars Distalis, Cyst	22 (44%)	14 (28%)	20 (40%)	16 (32%)
Pars Distalis, Cytoplasmic Alteration, Focal		1 (2%)		1 (2%)
Pars Distalis, Hyperplasia, Focal	10 (20%)	4 (8%)	11 (22%)	9 (18%)
Pars Distalis, Pigmentation				1 (2%)
Pars Intermedia, Angiectasis	1 (2%)	1 (2%)	2 (4%)	2 (4%)
Pars Intermedia, Cyst	1 (2%)	2 (4%)	1 (2%)	4 (8%)
Pars Intermedia, Hyperplasia, Focal	1 (2%)		1 (2%)	
Thyroid Gland	(50)	(50)	(49)	(50)
Ultimobranchial Cyst	1 (2%)		3 (6%)	1 (2%)
C-cell, Hyperplasia	12 (24%)	10 (20%)	5 (10%)	10 (20%)
Follicle, Cyst		2 (4%)		
Follicular Cell, Hyperplasia		1 (2%)		

GENERAL BODY SYSTEM

Tissue NOS	(1)	(1)	(0)	(0)
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FISCHER 344 RATS FEMALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
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GENITAL SYSTEM

Clitoral Gland	(50)	(50)	(50)	(50)
Cyst	6 (12%)	2 (4%)	1 (2%)	3 (6%)
Hyperplasia	3 (6%)	1 (2%)	2 (4%)	3 (6%)
Inflammation, Chronic	9 (18%)	5 (10%)	5 (10%)	5 (10%)
Ovary	(50)	(50)	(48)	(50)
Cyst	10 (20%)	7 (14%)	2 (4%)	5 (10%)
Interstitial Cell, Hyperplasia	1 (2%)			
Uterus	(50)	(50)	(49)	(50)
Hyperplasia, Cystic	5 (10%)	4 (8%)	9 (18%)	4 (8%)
Vagina	(6)	(6)	(7)	(10)
Cyst		1 (17%)		1 (10%)

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HEMATOPOIETIC SYSTEM

Bone Marrow	(50)	(50)	(50)	(50)
Angiectasis		1 (2%)		
Hyperplasia	3 (6%)	6 (12%)	4 (8%)	6 (12%)
Infiltration Cellular, Histiocyte	1 (2%)	1 (2%)		
Myelofibrosis		1 (2%)	1 (2%)	
Lymph Node	(16)	(13)	(14)	(12)
Bronchial, Hyperplasia, Lymphoid	1 (6%)			
Deep Cervical, Hemorrhage		1 (8%)		1 (8%)
Deep Cervical, Pigmentation		1 (8%)		
Mediastinal, Ectasia	1 (6%)	1 (8%)	2 (14%)	
Mediastinal, Hemorrhage	1 (6%)	6 (46%)	7 (50%)	4 (33%)
Mediastinal, Hyperplasia, Lymphoid	5 (31%)	5 (38%)	3 (21%)	4 (33%)
Mediastinal, Pigmentation	5 (31%)	8 (62%)	6 (43%)	4 (33%)
Pancreatic, Ectasia	1 (6%)	1 (8%)		
Pancreatic, Hemorrhage		1 (8%)	1 (7%)	2 (17%)
Pancreatic, Hyperplasia, Histiocytic		1 (8%)		
Pancreatic, Pigmentation	1 (6%)	2 (15%)	1 (7%)	
Lymph Node, Mandibular	(3)	(2)	(3)	(3)

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First Dose M/F: 04/05/04 / 04/05/04

Lab: SRI

FISCHER 344 RATS FEMALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
Ectasia		1 (50%)		
Hemorrhage		1 (50%)		
Hyperplasia, Lymphoid		1 (50%)		
Lymph Node, Mesenteric	(50)	(49)	(50)	(50)
Atrophy	1 (2%)		1 (2%)	3 (6%)
Ectasia		1 (2%)	2 (4%)	
Hemorrhage	4 (8%)	5 (10%)	9 (18%)	8 (16%)
Hyperplasia, Histiocytic	1 (2%)	1 (2%)		
Hyperplasia, Lymphoid	11 (22%)	12 (24%)	13 (26%)	19 (38%)
Pigmentation	6 (12%)	3 (6%)	2 (4%)	6 (12%)
Spleen	(50)	(50)	(50)	(50)
Congestion			1 (2%)	
Fibrosis	1 (2%)		1 (2%)	1 (2%)
Hematopoietic Cell Proliferation	33 (66%)	34 (68%)	29 (58%)	29 (58%)
Hemorrhage	1 (2%)			2 (4%)
Infiltration Cellular, Mixed Cell			1 (2%)	1 (2%)
Metaplasia, Osseous			1 (2%)	
Necrosis	2 (4%)	1 (2%)		1 (2%)
Pigmentation	15 (30%)	12 (24%)	10 (20%)	15 (30%)
Lymphoid Follicle, Atrophy				3 (6%)
Lymphoid Follicle, Hyperplasia				2 (4%)
Thymus	(50)	(49)	(47)	(47)
Atrophy		1 (2%)	1 (2%)	1 (2%)
Cyst			2 (4%)	1 (2%)

INTEGUMENTARY SYSTEM

Mammary Gland	(50)	(50)	(50)	(50)
Hyperplasia	48 (96%)	48 (96%)	47 (94%)	46 (92%)
Inflammation, Chronic		2 (4%)		
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion	1 (2%)			
Hyperkeratosis	1 (2%)	1 (2%)		
Inflammation, Chronic	5 (10%)	1 (2%)	3 (6%)	
Ulcer	3 (6%)	4 (8%)	3 (6%)	4 (8%)

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Lab: SRI

FISCHER 344 RATS FEMALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
Control, Hyperkeratosis	6 (12%)	5 (10%)		3 (6%)
Control, Epidermis, Hyperplasia	1 (2%)			
Control Epidermis, Hyperplasia	5 (10%)	4 (8%)	3 (6%)	5 (10%)
Epidermis, Hyperplasia	10 (20%)	5 (10%)	6 (12%)	4 (8%)
Epidermis, Ulcer	1 (2%)			
Epidermis, Site Of Application, Hyperplasia	1 (2%)	1 (2%)	5 (10%)	39 (78%)
Site Of Application, Hyperkeratosis	9 (18%)	11 (22%)	20 (40%)	47 (94%)
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone	(50)	(50)	(50)	(50)
Fibrous Osteodystrophy				1 (2%)
Femur, Osteopetrosis		2 (4%)	1 (2%)	
Skeletal Muscle	(1)	(1)	(1)	(0)
<b>NERVOUS SYSTEM</b>				
Brain	(50)	(50)	(50)	(50)
Compression	21 (42%)	28 (56%)	15 (30%)	17 (34%)
Hemorrhage	8 (16%)	3 (6%)	2 (4%)	2 (4%)
Necrosis	1 (2%)	3 (6%)	1 (2%)	2 (4%)
Spinal Cord	(1)	(3)	(2)	(3)
Atrophy		1 (33%)		
<b>RESPIRATORY SYSTEM</b>				
Lung	(50)	(50)	(50)	(50)
Edema		1 (2%)		
Foreign Body				1 (2%)
Hemorrhage	7 (14%)	4 (8%)	3 (6%)	7 (14%)
Infiltration Cellular, Histiocyte	14 (28%)	16 (32%)	19 (38%)	22 (44%)
Inflammation, Chronic	10 (20%)	8 (16%)	12 (24%)	7 (14%)
Metaplasia, Osseous	1 (2%)	3 (6%)		3 (6%)
Pigmentation	4 (8%)	4 (8%)	8 (16%)	4 (8%)

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FISCHER 344 RATS FEMALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
Alveolar Epithelium, Hyperplasia	5 (10%)	1 (2%)	6 (12%)	4 (8%)
Bronchiole, Hyperplasia				1 (2%)
Serosa, Hyperplasia	1 (2%)			1 (2%)
Nose	(48)	(50)	(50)	(50)
Foreign Body	2 (4%)	1 (2%)	5 (10%)	3 (6%)
Inflammation, Chronic	8 (17%)	1 (2%)	4 (8%)	9 (18%)
Olfactory Epithelium, Metaplasia, Respiratory	2 (4%)			2 (4%)
Respiratory Epithelium, Hyperplasia	5 (10%)		3 (6%)	4 (8%)
Respiratory Epithelium, Metaplasia, Squamous	1 (2%)		2 (4%)	

**SPECIAL SENSES SYSTEM**

Eye	(50)	(50)	(50)	(49)
Cataract	2 (4%)	3 (6%)	3 (6%)	3 (6%)
Inflammation, Acute		1 (2%)		
Inflammation, Chronic Active		1 (2%)		
Retina, Degeneration	4 (8%)	4 (8%)	4 (8%)	4 (8%)
Harderian Gland	(50)	(50)	(50)	(50)
Atrophy	1 (2%)	1 (2%)	1 (2%)	
Hyperplasia, Focal	2 (4%)	2 (4%)		
Inflammation, Chronic		1 (2%)	1 (2%)	1 (2%)

**URINARY SYSTEM**

Kidney	(50)	(50)	(50)	(50)
Cyst		1 (2%)	2 (4%)	1 (2%)
Infarct			2 (4%)	
Inflammation, Chronic	4 (8%)	6 (12%)	6 (12%)	3 (6%)
Inflammation, Chronic Active		1 (2%)		
Metaplasia, Lipocyte	1 (2%)			
Nephropathy	45 (90%)	41 (82%)	43 (86%)	40 (80%)
Renal Tubule, Accumulation, Hyaline Droplet	1 (2%)	2 (4%)	3 (6%)	2 (4%)
Renal Tubule, Dilatation	1 (2%)			1 (2%)
Renal Tubule, Hyperplasia				1 (2%)
Renal Tubule, Pigmentation	1 (2%)	1 (2%)	2 (4%)	2 (4%)

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FISCHER 344 RATS FEMALE	0 MG/KG	10 MG/KG	30 MG/KG	90 MG/KG
Transitional Epithelium, Hyperplasia	1 (2%)		1 (2%)	
Urinary Bladder	(50)	(50)	(49)	(50)
Hemorrhage	1 (2%)			1 (2%)
Metaplasia, Squamous		1 (2%)		

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

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