

TDMS No. 99031 - 03
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: RATS/F 344/N

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

Ginkgo biloba extract
CAS Number: 90045-36-6

Date Report Requested: 01/17/2011
Time Report Requested: 12:22:19
First Dose M/F: 03/23/05 / 03/24/05
Lab: BAT

F1_R2

C Number: C99031
Lock Date: 05/21/2008
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 2.3.0
PWG Approval Date: NONE

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FISCHER 344 RATS MALE	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
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Disposition Summary

Animals Initially In Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	7	8	10	14
Natural Death	5	5	9	20
Survivors				
Terminal Sacrifice	38	37	31	16
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(50)	(50)	(50)	(50)
Intestine Large, Cecum	(50)	(49)	(50)	(50)
Inflammation, Chronic				1 (2%)
Thrombosis	1 (2%)			
Ulcer	1 (2%)			
Intestine Large, Colon	(50)	(50)	(50)	(50)
Parasite Metazoan			2 (4%)	1 (2%)
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Inflammation, Acute				1 (2%)
Parasite Metazoan	3 (6%)	8 (16%)	5 (10%)	5 (10%)
Intestine Small, Duodenum	(50)	(50)	(50)	(50)
Intestine Small, Ileum	(50)	(49)	(50)	(50)
Intestine Small, Jejunum	(50)	(50)	(50)	(50)
Liver	(50)	(50)	(50)	(50)
Angiectasis	2 (4%)	5 (10%)	2 (4%)	3 (6%)
Basophilic Focus	30 (60%)	37 (74%)	23 (46%)	22 (44%)
Clear Cell Focus	31 (62%)	30 (60%)	18 (36%)	11 (22%)
Congestion	1 (2%)			
Degeneration, Cystic	4 (8%)	14 (28%)	10 (20%)	14 (28%)
Eosinophilic Focus	14 (28%)	21 (42%)	19 (38%)	21 (42%)
Fatty Change, Focal	3 (6%)			
Fibrosis		1 (2%)		
Hepatodiaphragmatic Nodule	2 (4%)	3 (6%)	3 (6%)	
Inflammation, Chronic	44 (88%)	41 (82%)	30 (60%)	32 (64%)

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

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FISCHER 344 RATS MALE	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
Mixed Cell Focus	19 (38%)	32 (64%)	24 (48%)	17 (34%)
Necrosis	1 (2%)	4 (8%)	6 (12%)	7 (14%)
Thrombosis				1 (2%)
Bile Duct, Hyperplasia	32 (64%)	43 (86%)	46 (92%)	46 (92%)
Hepatocyte, Fatty Change	27 (54%)	18 (36%)	23 (46%)	31 (62%)
Hepatocyte, Hypertrophy	1 (2%)	17 (34%)	26 (52%)	27 (54%)
Oval Cell, Hyperplasia		1 (2%)	1 (2%)	10 (20%)
Mesentery	(4)	(4)	(8)	(5)
Thrombosis				1 (20%)
Fat, Necrosis	2 (50%)	2 (50%)	5 (63%)	3 (60%)
Pancreas	(50)	(50)	(50)	(50)
Inflammation, Chronic		1 (2%)	1 (2%)	
Mineralization	1 (2%)			
Necrosis				1 (2%)
Acinus, Atrophy	22 (44%)	23 (46%)	14 (28%)	20 (40%)
Acinus, Hyperplasia	11 (22%)	7 (14%)	5 (10%)	12 (24%)
Duct, Cyst	3 (6%)	5 (10%)	10 (20%)	3 (6%)
Salivary Glands	(50)	(50)	(50)	(50)
Stomach, Forestomach	(50)	(50)	(50)	(50)
Inflammation, Chronic	4 (8%)	1 (2%)	6 (12%)	6 (12%)
Mineralization			1 (2%)	
Ulcer	2 (4%)		4 (8%)	4 (8%)
Stomach, Glandular	(50)	(50)	(50)	(50)
Inflammation, Suppurative		1 (2%)		
Inflammation, Chronic		1 (2%)	1 (2%)	
Mineralization	1 (2%)	1 (2%)	1 (2%)	6 (12%)
Ulcer	2 (4%)			2 (4%)
Epithelium, Hyperplasia	1 (2%)			
Glands, Ectasia	17 (34%)	30 (60%)	19 (38%)	12 (24%)
Glands, Hyperplasia		2 (4%)		1 (2%)

CARDIOVASCULAR SYSTEM

Blood Vessel	(50)	(50)	(50)	(50)
Thrombosis				1 (2%)

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FISCHER 344 RATS MALE	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
Aorta, Mineralization	1 (2%)			2 (4%)
Pulmonary Vein, Mineralization	1 (2%)			
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	50 (100%)	48 (96%)	49 (98%)	50 (100%)
Atrium, Thrombosis	3 (6%)		1 (2%)	3 (6%)
Myocardium, Mineralization	1 (2%)			2 (4%)
Valve, Inflammation, Chronic			1 (2%)	

ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(50)	(50)	(50)
Cytoplasmic Alteration		1 (2%)		
Degeneration, Cystic	2 (4%)	4 (8%)		
Hyperplasia, Focal	12 (24%)	9 (18%)	9 (18%)	8 (16%)
Hypertrophy, Focal	7 (14%)	10 (20%)	9 (18%)	3 (6%)
Hypertrophy, Diffuse	3 (6%)	3 (6%)	5 (10%)	11 (22%)
Infiltration Cellular, Mononuclear Cell		1 (2%)		
Inflammation, Chronic				1 (2%)
Necrosis		1 (2%)	2 (4%)	1 (2%)
Vacuolization Cytoplasmic, Focal	17 (34%)	17 (34%)	16 (32%)	13 (26%)
Vacuolization Cytoplasmic, Diffuse	18 (36%)	25 (50%)	33 (66%)	34 (68%)
Adrenal Medulla	(50)	(50)	(50)	(50)
Hyperplasia	15 (30%)	16 (32%)	8 (16%)	10 (20%)
Necrosis			1 (2%)	
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia	3 (6%)	2 (4%)	5 (10%)	2 (4%)
Parathyroid Gland	(47)	(48)	(48)	(47)
Hyperplasia	1 (2%)	3 (6%)	2 (4%)	7 (15%)
Pituitary Gland	(50)	(50)	(50)	(50)
Angiectasis			1 (2%)	1 (2%)
Cyst	5 (10%)	4 (8%)	7 (14%)	8 (16%)
Pars Distalis, Hyperplasia	19 (38%)	18 (36%)	18 (36%)	16 (32%)
Pars Intermedia, Hyperplasia	1 (2%)			1 (2%)
Thyroid Gland	(50)	(50)	(49)	(45)
C-cell, Hyperplasia	35 (70%)	29 (58%)	27 (55%)	24 (53%)

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FISCHER 344 RATS MALE	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
Follicle, Hyperplasia		7 (14%)	9 (18%)	5 (11%)
Follicular Cell, Hypertrophy	13 (26%)	37 (74%)	41 (84%)	41 (91%)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Coagulating Gland	(0)	(0)	(1)	(0)
Inflammation, Chronic			1 (100%)	
Epididymis	(50)	(50)	(50)	(50)
Granuloma Sperm		1 (2%)	3 (6%)	
Inflammation, Chronic				1 (2%)
Mineralization		1 (2%)		
Preputial Gland	(50)	(50)	(50)	(50)
Cyst	2 (4%)			
Hyperplasia	2 (4%)	1 (2%)		
Inflammation, Chronic	49 (98%)	48 (96%)	47 (94%)	49 (98%)
Metaplasia, Cartilagenous			1 (2%)	
Prostate	(50)	(50)	(50)	(50)
Hyperplasia	6 (12%)	3 (6%)	3 (6%)	4 (8%)
Inflammation	36 (72%)	27 (54%)	25 (50%)	32 (64%)
Necrosis	1 (2%)			
Seminal Vesicle	(50)	(50)	(50)	(50)
Inflammation	2 (4%)	3 (6%)	2 (4%)	4 (8%)
Testes	(50)	(50)	(50)	(50)
Germinal Epithelium, Atrophy	1 (2%)		1 (2%)	1 (2%)
Germinal Epithelium, Necrosis			1 (2%)	
Interstitial Cell, Hyperplasia				1 (2%)

HEMATOPOIETIC SYSTEM

Bone Marrow	(50)	(50)	(48)	(50)
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FISCHER 344 RATS MALE	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
Hyperplasia	14 (28%)	15 (30%)	21 (44%)	26 (52%)
Necrosis			1 (2%)	
Lymph Node	(2)	(2)	(9)	(10)
Deep Cervical, Hyperplasia, Plasma Cell				1 (10%)
Mediastinal, Ectasia			1 (11%)	1 (10%)
Mediastinal, Hyperplasia, Lymphoid		1 (50%)	1 (11%)	3 (30%)
Mediastinal, Hyperplasia, Plasma Cell				1 (10%)
Mediastinal, Infiltration Cellular, Histiocyte		1 (50%)		
Mediastinal, Inflammation, Suppurative	1 (50%)			
Pancreatic, Necrosis				1 (10%)
Renal, Hyperplasia, Lymphoid				1 (10%)
Lymph Node, Mandibular	(0)	(0)	(1)	(0)
Ectasia			1 (100%)	
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Ectasia			1 (2%)	
Hyperplasia, Lymphoid		1 (2%)		
Infiltration Cellular, Histiocyte	1 (2%)	1 (2%)		
Necrosis		1 (2%)	1 (2%)	1 (2%)
Spleen	(50)	(50)	(50)	(50)
Fibrosis	1 (2%)	1 (2%)		
Hematopoietic Cell Proliferation	3 (6%)	8 (16%)	4 (8%)	6 (12%)
Hemorrhage		1 (2%)		
Necrosis		1 (2%)	1 (2%)	1 (2%)
Lymphoid Follicle, Atrophy	2 (4%)	1 (2%)	4 (8%)	14 (28%)
Thymus	(47)	(50)	(47)	(47)
Atrophy	47 (100%)	48 (96%)	46 (98%)	46 (98%)
Epithelial Cell, Hyperplasia	1 (2%)	1 (2%)		1 (2%)

INTEGUMENTARY SYSTEM

Mammary Gland	(50)	(50)	(50)	(50)
Hyperplasia				1 (2%)
Inflammation, Chronic		1 (2%)		
Duct, Cyst	12 (24%)	19 (38%)	13 (26%)	12 (24%)
Skin	(50)	(50)	(50)	(50)

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FISCHER 344 RATS MALE	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
Cyst Epithelial Inclusion Lymphatic, Subcutaneous Tissue, Cyst Sebaceous Gland, Cyst Subcutaneous Tissue, Hemorrhage		1 (2%) 1 (2%) 1 (2%)		1 (2%)
MUSCULOSKELETAL SYSTEM				
Bone Hyperostosis	(50)	(50) 1 (2%)	(50) 1 (2%)	(50) 1 (2%)
NERVOUS SYSTEM				
Brain Necrosis Hippocampus, Necrosis Peripheral Nerve Axon, Degeneration Spinal Cord	(50)	(50) 1 (2%)	(50)	(50) 1 (2%) 1 (2%) (1) 1 (100%) (1)
RESPIRATORY SYSTEM				
Lung Inflammation, Acute Inflammation, Chronic Metaplasia, Osseous Thrombosis Alveolar Epithelium, Hyperplasia Bronchiole, Hyperplasia Bronchus, Hyperplasia Nose Foreign Body Hemorrhage Inflammation, Chronic Active Respiratory Metaplasia	(50) 19 (38%) 1 (2%) 8 (16%) 1 (2%) 1 (2%) (50) 11 (22%) 33 (66%) 1 (2%)	(50) 14 (28%) 1 (2%) 4 (8%) (49) 5 (10%) 32 (65%)	(50) 12 (24%) 2 (4%) 1 (2%) 2 (4%) (49) 9 (18%) 1 (2%) 38 (78%)	(50) 1 (2%) 8 (16%) 2 (4%) 5 (10%) (50) 5 (10%) 46 (92%)

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FISCHER 344 RATS MALE	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
Synechia, Focal	1 (2%)		1 (2%)	
Thrombosis			1 (2%)	
Glands, Hyperplasia	1 (2%)			
Goblet Cell, Respiratory Epithelium, Hyperplasia	20 (40%)	18 (37%)	41 (84%)	34 (68%)
Goblet Cell, Transitional Epithelium, Hyperplasia			1 (2%)	
Nasolacrimal Duct, Inflammation, Chronic Active	1 (2%)			
Nerve, Olfactory Epithelium, Atrophy		17 (35%)	14 (29%)	23 (46%)
Olfactory Epithelium, Accumulation, Hyaline Droplet	45 (90%)	43 (88%)	14 (29%)	
Olfactory Epithelium, Atrophy	1 (2%)	26 (53%)	37 (76%)	31 (62%)
Olfactory Epithelium, Foreign Body			1 (2%)	
Olfactory Epithelium, Hyperplasia				1 (2%)
Olfactory Epithelium, Pigmentation		39 (80%)	42 (86%)	30 (60%)
Olfactory Epithelium, Respiratory Metaplasia	9 (18%)	30 (61%)	40 (82%)	32 (64%)
Respiratory Epithelium, Hyperplasia	14 (28%)	28 (57%)	45 (92%)	35 (70%)
Respiratory Epithelium, Inflammation, Chronic Submucosa, Fibrosis	1 (2%)			8 (16%)
Transitional Epithelium, Hyperplasia	2 (4%)	18 (37%)	43 (88%)	31 (62%)
Pleura	(0)	(0)	(1)	(0)
Trachea	(50)	(50)	(50)	(50)
Inflammation, Chronic	1 (2%)			2 (4%)

SPECIAL SENSES SYSTEM

Eye	(50)	(50)	(50)	(50)
Cataract	1 (2%)	4 (8%)		
Degeneration		1 (2%)		
Anterior Chamber, Inflammation, Suppurative				2 (4%)
Retina, Atrophy		1 (2%)		
Harderian Gland	(50)	(50)	(50)	(50)
Atrophy		1 (2%)		
Inflammation		2 (4%)		
Zymbal's Gland	(1)	(0)	(0)	(1)

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FISCHER 344 RATS MALE	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
<hr/>				
URINARY SYSTEM				
Kidney	(50)	(50)	(50)	(50)
Hydronephrosis	1 (2%)			1 (2%)
Infarct			1 (2%)	
Nephropathy	49 (98%)	49 (98%)	49 (98%)	50 (100%)
Papilla, Necrosis	3 (6%)	1 (2%)		1 (2%)
Pelvis, Inflammation, Acute				1 (2%)
Renal Tubule, Cyst	1 (2%)	1 (2%)	1 (2%)	1 (2%)
Renal Tubule, Hyperplasia	1 (2%)			
Urinary Bladder	(50)	(50)	(50)	(50)
Inflammation, Acute				2 (4%)
Inflammation, Chronic	2 (4%)	1 (2%)		2 (4%)
Mineralization				1 (2%)
Necrosis	1 (2%)			
Ulcer				2 (4%)

*** END OF MALE ***

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Disposition Summary

Animals Initially In Study	50	50	50	50
Early Deaths				
Dosing Accident				1
Moribund Sacrifice	9	13	7	4
Natural Death	4	10	6	13
Survivors				
Natural Death			1	
Terminal Sacrifice	37	27	36	32
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(50)	(50)	(50)	(50)
Intestine Large, Cecum	(50)	(50)	(50)	(49)
Inflammation, Chronic			2 (4%)	
Intestine Large, Colon	(50)	(50)	(50)	(49)
Parasite Metazoan	3 (6%)	2 (4%)	2 (4%)	
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Parasite Metazoan	8 (16%)	4 (8%)	3 (6%)	6 (12%)
Intestine Small, Duodenum	(50)	(50)	(50)	(49)
Intestine Small, Ileum	(50)	(50)	(50)	(49)
Intestine Small, Jejunum	(50)	(50)	(50)	(49)
Liver	(50)	(50)	(50)	(50)
Angiectasis	7 (14%)	2 (4%)	4 (8%)	4 (8%)
Basophilic Focus	48 (96%)	43 (86%)	44 (88%)	40 (80%)
Clear Cell Focus	20 (40%)	7 (14%)	17 (34%)	11 (22%)
Degeneration, Cystic	1 (2%)		2 (4%)	
Eosinophilic Focus	24 (48%)	30 (60%)	38 (76%)	30 (60%)
Fatty Change, Focal	11 (22%)	25 (50%)	30 (60%)	25 (50%)
Hepatodiaphragmatic Nodule	6 (12%)	7 (14%)	1 (2%)	3 (6%)
Inflammation, Chronic	45 (90%)	41 (82%)	41 (82%)	42 (84%)
Mixed Cell Focus	24 (48%)	12 (24%)	17 (34%)	10 (20%)
Necrosis	5 (10%)	2 (4%)	3 (6%)	3 (6%)
Bile Duct, Hyperplasia	11 (22%)	31 (62%)	31 (62%)	33 (66%)

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Hepatocyte, Fatty Change	14 (28%)	7 (14%)	7 (14%)	9 (18%)
Hepatocyte, Hypertrophy	7 (14%)	15 (30%)	27 (54%)	33 (66%)
Ito Cell, Hyperplasia		1 (2%)		
Mesentery	(10)	(2)	(8)	(11)
Fat, Necrosis	10 (100%)	2 (100%)	8 (100%)	11 (100%)
Oral Mucosa	(0)	(0)	(1)	(0)
Pancreas	(50)	(50)	(50)	(48)
Hemorrhage				1 (2%)
Acinus, Atrophy	17 (34%)	13 (26%)	12 (24%)	20 (42%)
Acinus, Hyperplasia	5 (10%)		2 (4%)	
Duct, Cyst	3 (6%)		1 (2%)	4 (8%)
Duct, Hyperplasia		1 (2%)		
Salivary Glands	(50)	(50)	(50)	(50)
Stomach, Forestomach	(50)	(50)	(50)	(50)
Inflammation, Chronic	1 (2%)	1 (2%)	1 (2%)	1 (2%)
Ulcer	1 (2%)	1 (2%)	2 (4%)	2 (4%)
Stomach, Glandular	(50)	(50)	(50)	(50)
Inflammation, Chronic		2 (4%)		
Mineralization	1 (2%)	2 (4%)		1 (2%)
Ulcer		2 (4%)	3 (6%)	
Glands, Ectasia	35 (70%)	37 (74%)	37 (74%)	36 (72%)
Glands, Hyperplasia	1 (2%)		1 (2%)	

CARDIOVASCULAR SYSTEM

Blood Vessel	(50)	(50)	(50)	(50)
Aorta, Mineralization		1 (2%)		
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	49 (98%)	46 (92%)	46 (92%)	48 (96%)
Atrium, Thrombosis		1 (2%)		1 (2%)
Myocardium, Mineralization				1 (2%)

ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(50)	(50)	(50)
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Degeneration, Cystic	12 (24%)	5 (10%)	7 (14%)	7 (14%)
Hyperplasia, Focal	12 (24%)	10 (20%)	13 (26%)	15 (30%)
Hyperplasia, Diffuse				1 (2%)
Hypertrophy, Focal	6 (12%)	2 (4%)	2 (4%)	5 (10%)
Hypertrophy, Diffuse	3 (6%)	10 (20%)	7 (14%)	9 (18%)
Vacuolization Cytoplasmic, Focal	23 (46%)	14 (28%)	22 (44%)	21 (42%)
Vacuolization Cytoplasmic, Diffuse	4 (8%)	5 (10%)	6 (12%)	4 (8%)
Capsule, Fibrosis	1 (2%)			
Adrenal Medulla	(50)	(50)	(50)	(50)
Hyperplasia	3 (6%)	3 (6%)	5 (10%)	2 (4%)
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia	1 (2%)			
Parathyroid Gland	(38)	(47)	(43)	(35)
Hyperplasia	1 (3%)			
Pituitary Gland	(50)	(50)	(50)	(50)
Angiectasis		2 (4%)		
Cyst	26 (52%)	24 (48%)	29 (58%)	31 (62%)
Pars Distalis, Cyst	1 (2%)			
Pars Distalis, Hyperplasia	11 (22%)	13 (26%)	18 (36%)	23 (46%)
Thyroid Gland	(49)	(50)	(49)	(49)
C-cell, Hyperplasia	40 (82%)	38 (76%)	36 (73%)	21 (43%)
Follicle, Hyperplasia	3 (6%)	3 (6%)	1 (2%)	5 (10%)
Follicular Cell, Hypertrophy	15 (31%)	41 (82%)	45 (92%)	48 (98%)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Clitoral Gland	(50)	(50)	(50)	(50)
Atrophy			1 (2%)	
Cyst			1 (2%)	
Hyperplasia	3 (6%)	4 (8%)	3 (6%)	2 (4%)
Inflammation, Chronic	36 (72%)	39 (78%)	40 (80%)	38 (76%)

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

TDMS No. 99031 - 03
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Ginkgo biloba extract
 CAS Number: 90045-36-6

Date Report Requested: 01/17/2011
 Time Report Requested: 12:22:19
 First Dose M/F: 03/23/05 / 03/24/05
 Lab: BAT

FISCHER 344 RATS FEMALE	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
Mineralization		1 (2%)		
Ovary	(50)	(50)	(50)	(50)
Cyst	3 (6%)	2 (4%)	2 (4%)	3 (6%)
Uterus	(50)	(50)	(50)	(50)
Cyst	4 (8%)			4 (8%)
Decidual Reaction			1 (2%)	
Inflammation, Suppurative	2 (4%)	2 (4%)		5 (10%)
Necrosis		1 (2%)		
Endometrium, Hyperplasia, Cystic	3 (6%)	13 (26%)	11 (22%)	7 (14%)
Vagina	(0)	(2)	(0)	(0)

HEMATOPOIETIC SYSTEM

Bone Marrow	(50)	(50)	(50)	(50)
Hemorrhage	1 (2%)			
Hyperplasia	7 (14%)	11 (22%)	9 (18%)	12 (24%)
Necrosis			1 (2%)	
Lymph Node	(3)	(3)	(3)	(4)
Ectasia				1 (25%)
Deep Cervical, Hyperplasia, Lymphoid		1 (33%)		
Mediastinal, Ectasia				1 (25%)
Mediastinal, Hemorrhage		1 (33%)		
Mediastinal, Hyperplasia, Lymphoid			1 (33%)	3 (75%)
Pancreatic, Congestion	1 (33%)			
Lymph Node, Mesenteric	(50)	(50)	(50)	(49)
Pigmentation, Hemosiderin				1 (2%)
Spleen	(50)	(50)	(50)	(50)
Hematopoietic Cell Proliferation	14 (28%)	18 (36%)	13 (26%)	13 (26%)
Hyperplasia, Histiocytic	1 (2%)	1 (2%)	1 (2%)	2 (4%)
Infarct		1 (2%)		
Necrosis			1 (2%)	
Thrombosis		1 (2%)		
Lymphoid Follicle, Atrophy	9 (18%)	6 (12%)	9 (18%)	5 (10%)
Thymus	(50)	(48)	(49)	(48)
Atrophy	48 (96%)	47 (98%)	46 (94%)	47 (98%)

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TDMS No. 99031 - 03
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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Ginkgo biloba extract
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Date Report Requested: 01/17/2011
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FISCHER 344 RATS FEMALE	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
Ectopic Parathyroid Gland		1 (2%)		
Ectopic Thyroid		1 (2%)		1 (2%)
INTEGUMENTARY SYSTEM				
Mammary Gland	(50)	(50)	(50)	(50)
Duct, Cyst	14 (28%)	10 (20%)	8 (16%)	6 (12%)
Skin	(50)	(50)	(50)	(50)
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Hyperostosis				1 (2%)
Skeletal Muscle	(0)	(0)	(1)	(0)
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Congestion				1 (2%)
Hydrocephalus	1 (2%)			
Artery, Meninges, Inflammation, Chronic		1 (2%)		
Hippocampus, Necrosis				1 (2%)
Hypothalamus, Congestion		1 (2%)		
Peripheral Nerve	(1)	(0)	(0)	(0)
Spinal Cord	(1)	(0)	(0)	(0)
Congestion	1 (100%)			
RESPIRATORY SYSTEM				
Larynx	(0)	(0)	(0)	(1)
Foreign Body				1 (100%)
Lung	(50)	(50)	(50)	(50)
Cyst	1 (2%)			

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Ginkgo biloba extract
 CAS Number: 90045-36-6

Date Report Requested: 01/17/2011
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 Lab: BAT

FISCHER 344 RATS FEMALE	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
Inflammation, Suppurative			1 (2%)	
Inflammation, Chronic	7 (14%)	3 (6%)	11 (22%)	6 (12%)
Inflammation, Chronic Active				1 (2%)
Metaplasia, Osseous	2 (4%)	1 (2%)		1 (2%)
Thrombosis			1 (2%)	
Alveolar Epithelium, Hyperplasia	3 (6%)		3 (6%)	2 (4%)
Nose	(49)	(49)	(50)	(46)
Foreign Body	1 (2%)	1 (2%)	1 (2%)	7 (15%)
Inflammation, Chronic Active	22 (45%)	16 (33%)	26 (52%)	38 (83%)
Goblet Cell, Olfactory Epithelium, Hyperplasia		1 (2%)		
Goblet Cell, Respiratory Epithelium, Hyperplasia	6 (12%)	2 (4%)	18 (36%)	35 (76%)
Nerve, Olfactory Epithelium, Atrophy		15 (31%)	22 (44%)	33 (72%)
Olfactory Epithelium, Accumulation, Hyaline Droplet	44 (90%)	39 (80%)	25 (50%)	
Olfactory Epithelium, Atrophy		18 (37%)	25 (50%)	37 (80%)
Olfactory Epithelium, Degeneration		1 (2%)		
Olfactory Epithelium, Hemorrhage	1 (2%)			
Olfactory Epithelium, Hyperplasia				1 (2%)
Olfactory Epithelium, Pigmentation		37 (76%)	43 (86%)	40 (87%)
Olfactory Epithelium, Regeneration			1 (2%)	2 (4%)
Olfactory Epithelium, Respiratory Metaplasia	8 (16%)	4 (8%)	32 (64%)	37 (80%)
Respiratory Epithelium, Hyperplasia	9 (18%)	9 (18%)	19 (38%)	34 (74%)
Transitional Epithelium, Hyperplasia		6 (12%)	32 (64%)	36 (78%)
Trachea	(50)	(50)	(50)	(50)
Inflammation, Chronic			1 (2%)	1 (2%)
SPECIAL SENSES SYSTEM				
Eye	(50)	(50)	(50)	(50)
Cataract		2 (4%)	3 (6%)	2 (4%)
Degeneration			1 (2%)	
Retinal Detachment				1 (2%)
Retina, Atrophy		2 (4%)	1 (2%)	
Retina, Hemorrhage				1 (2%)
Retrolbulbar, Inflammation, Chronic			1 (2%)	

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 Lab: BAT

FISCHER 344 RATS FEMALE	0 mg/kg	100 mg/kg	300 mg/kg	1000 mg/kg
Harderian Gland	(50)	(50)	(50)	(50)
Hyperplasia				1 (2%)
Inflammation, Chronic	4 (8%)	6 (12%)	8 (16%)	7 (14%)
<hr/>				
URINARY SYSTEM				
Kidney	(50)	(50)	(50)	(50)
Hydronephrosis			1 (2%)	
Infarct	2 (4%)	2 (4%)	1 (2%)	6 (12%)
Inflammation, Chronic	2 (4%)		1 (2%)	
Nephropathy	41 (82%)	42 (84%)	43 (86%)	42 (84%)
Renal Tubule, Cyst			1 (2%)	
Renal Tubule, Hyperplasia	3 (6%)	1 (2%)	3 (6%)	
Renal Tubule, Mineralization	1 (2%)	1 (2%)		1 (2%)
Renal Tubule, Pigmentation, Lipofuscin	1 (2%)			
Urinary Bladder	(50)	(50)	(50)	(49)
Inflammation, Acute	1 (2%)			

*** END OF REPORT ***

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