

TDMS No. 96015 - 05
Test Type: CHRONIC
Route: DOSED WATER
Species/Strain: RATS/F 344

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

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Requested: 10/22/2007

Time Report Requested: 08:24:14

First Dose M/F: 09/05/01 / 09/05/01

Lab: SRI

E2_Rev.1_R2

C Number: C96015
Lock Date: 04/30/2004
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
TDMSE Version: 1.8.0

TDMS No. 96015 - 05
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/F 344

PO3: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Water disinfection byproducts (Dibromoacetonitrile)

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FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Disposition Summary				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	12	11	22	10
Natural Death	7	6	3	5
Survivors				
Terminal Sacrifice	31	33	25	35
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(48)	(50)	(50)	(50)
Epithelium, Hyperkeratosis	6 (13%)	8 (16%)	34 (68%)	46 (92%)
Intestine Large, Cecum	(48)	(49)	(50)	(47)
Inflammation, Chronic	1 (2%)			
Ulcer			1 (2%)	
Intestine Large, Colon	(48)	(50)	(49)	(47)
Intestine Large, Rectum	(49)	(50)	(50)	(49)
Intestine Small, Duodenum	(49)	(49)	(50)	(48)
Congestion			1 (2%)	
Intestine Small, Ileum	(46)	(48)	(50)	(47)
Intestine Small, Jejunum	(47)	(46)	(49)	(47)
Liver	(50)	(50)	(50)	(50)
Angiectasis, Focal	1 (2%)	5 (10%)	3 (6%)	3 (6%)
Congestion		4 (8%)	2 (4%)	6 (12%)
Degeneration, Cystic, Focal	5 (10%)	5 (10%)	8 (16%)	4 (8%)
Fibrosis, Focal	1 (2%)			
Hematopoietic Cell Proliferation	1 (2%)	3 (6%)		
Hemorrhage			1 (2%)	
Hepatodiaphragmatic Nodule	5 (10%)	6 (12%)	3 (6%)	2 (4%)
Inflammation, Chronic	28 (56%)	31 (62%)	29 (58%)	34 (68%)
Necrosis	3 (6%)			
Bile Duct, Hyperplasia	45 (90%)	47 (94%)	47 (94%)	46 (92%)
Hepatocyte, Basophilic Focus	26 (52%)	32 (64%)	23 (46%)	25 (50%)
Hepatocyte, Clear Cell Focus	24 (48%)	22 (44%)	19 (38%)	22 (44%)
Hepatocyte, Cytologic Alterations, Focal	1 (2%)	5 (10%)	2 (4%)	6 (12%)
Hepatocyte, Cytoplasmic Alteration, Focal	2 (4%)			
Hepatocyte, Eosinophilic Focus	7 (14%)	8 (16%)	4 (8%)	7 (14%)
Hepatocyte, Mixed Cell Focus	26 (52%)	24 (48%)	19 (38%)	29 (58%)
Hepatocyte, Necrosis		8 (16%)	7 (14%)	4 (8%)
Hepatocyte, Necrosis, Focal	1 (2%)			
Hepatocyte, Vacuolization Cytoplasmic	37 (74%)	37 (74%)	36 (72%)	29 (58%)

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

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FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Serosa, Fibrosis		1 (2%)		
Mesentery	(14)	(18)	(18)	(15)
Accessory Spleen	1 (7%)	1 (6%)		
Fibrosis			1 (6%)	
Pigmentation			1 (6%)	
Fat, Necrosis, Focal	9 (64%)	10 (56%)	12 (67%)	7 (47%)
Oral Mucosa	(50)	(50)	(50)	(50)
Erosion	1 (2%)			
Pancreas	(49)	(50)	(50)	(50)
Hyperplasia, Lymphoid	1 (2%)			1 (2%)
Inflammation		2 (4%)		
Lipomatosis				1 (2%)
Vacuolization Cytoplasmic			1 (2%)	
Acinus, Atrophy, Focal	24 (49%)	37 (74%)	33 (66%)	30 (60%)
Acinus, Atrophy, Diffuse				1 (2%)
Acinus, Cytoplasmic Alteration	1 (2%)			
Acinus, Hyperplasia, Focal		1 (2%)		1 (2%)
Duct, Cyst	24 (49%)	21 (42%)	24 (48%)	16 (32%)
Salivary Glands	(50)	(50)	(50)	(50)
Atrophy, Focal	1 (2%)			1 (2%)
Vacuolization Cytoplasmic				1 (2%)
Stomach, Forestomach	(50)	(49)	(50)	(50)
Inflammation			2 (4%)	
Ulcer	1 (2%)	1 (2%)	4 (8%)	3 (6%)
Epithelium, Cyst				1 (2%)
Epithelium, Hyperkeratosis				1 (2%)
Epithelium, Hyperplasia	4 (8%)	2 (4%)	8 (16%)	7 (14%)
Stomach, Glandular	(50)	(50)	(50)	(50)
Cyst				1 (2%)
Erosion	5 (10%)	4 (8%)	5 (10%)	6 (12%)
Fibrosis			1 (2%)	1 (2%)
Inflammation				1 (2%)
Inflammation, Focal	1 (2%)			
Ulcer	2 (4%)	2 (4%)	3 (6%)	3 (6%)
Epithelium, Hyperplasia				1 (2%)
Glands, Ectasia	4 (8%)	3 (6%)	3 (6%)	10 (20%)
Glands, Hyperplasia			2 (4%)	2 (4%)
Tongue	(50)	(50)	(50)	(50)
Epithelium, Hyperplasia			1 (2%)	2 (4%)
Tooth	(1)	(0)	(0)	(0)
Malformation	1 (100%)			

CARDIOVASCULAR SYSTEM

Blood Vessel	(1)	(0)	(1)	(0)
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PO3: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Water disinfection byproducts (Dibromoacetonitrile)

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FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Aneurysm	1 (100%)			
Hemorrhage	1 (100%)			
Inflammation, Chronic			1 (100%)	
Thrombosis			1 (100%)	
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	39 (78%)	44 (88%)	38 (76%)	45 (90%)
Thrombosis	2 (4%)		3 (6%)	1 (2%)
ENDOCRINE SYSTEM				
Adrenal Cortex	(50)	(50)	(50)	(50)
Accessory Adrenal Cortical Nodule	3 (6%)	3 (6%)	3 (6%)	2 (4%)
Angiectasis		1 (2%)		3 (6%)
Cytoplasmic Alteration, Focal	3 (6%)		2 (4%)	3 (6%)
Hematopoietic Cell Proliferation	1 (2%)			
Hyperplasia, Focal	5 (10%)	7 (14%)	1 (2%)	8 (16%)
Infiltration Cellular, Mixed Cell		1 (2%)		1 (2%)
Necrosis		1 (2%)		
Vacuolization Cytoplasmic	6 (12%)	3 (6%)	5 (10%)	11 (22%)
Capsule, Inflammation, Focal	1 (2%)			
Adrenal Medulla	(50)	(50)	(49)	(49)
Hyperplasia	1 (2%)		1 (2%)	
Hyperplasia, Focal	4 (8%)	9 (18%)	5 (10%)	4 (8%)
Necrosis		1 (2%)		
Islets, Pancreatic	(49)	(50)	(50)	(50)
Hyperplasia	3 (6%)		2 (4%)	5 (10%)
Parathyroid Gland	(46)	(44)	(43)	(47)
Hyperplasia			2 (5%)	2 (4%)
Pituitary Gland	(50)	(50)	(48)	(49)
Angiectasis	7 (14%)	8 (16%)	3 (6%)	6 (12%)
Cyst	2 (4%)	3 (6%)	4 (8%)	2 (4%)
Hemorrhage	5 (10%)		2 (4%)	2 (4%)
Pars Distalis, Cyst		2 (4%)	3 (6%)	
Pars Distalis, Cytoplasmic Alteration, Focal	4 (8%)	2 (4%)	3 (6%)	2 (4%)
Pars Distalis, Degeneration, Cystic, Focal	1 (2%)			
Pars Distalis, Hyperplasia			1 (2%)	1 (2%)
Pars Distalis, Hyperplasia, Focal	6 (12%)	8 (16%)	2 (4%)	5 (10%)
Rathke's Cleft, Cyst		1 (2%)		
Thyroid Gland	(49)	(47)	(49)	(46)
Cyst		1 (2%)		
C-cell, Hyperplasia	38 (78%)	38 (81%)	45 (92%)	44 (96%)
Follicle, Degeneration, Cystic, Focal	1 (2%)	1 (2%)	1 (2%)	
Follicle, Pigmentation, Focal				1 (2%)
Follicular Cell, Hyperplasia, Focal	5 (10%)	6 (13%)		4 (9%)

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FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
GENERAL BODY SYSTEM				
Peritoneum	(2)	(6)	(0)	(2)
Inflammation				1 (50%)
Mesothelium, Tunica Vaginalis, Hyperplasia	2 (100%)			
Tissue NOS	(1)	(0)	(2)	(1)
Abdominal, Fibrosis			1 (50%)	1 (100%)
Thoracic, Hemorrhage	1 (100%)			
GENITAL SYSTEM				
Coagulating Gland	(1)	(0)	(1)	(0)
Inflammation	1 (100%)			
Epididymis	(50)	(50)	(50)	(50)
Atrophy		1 (2%)		
Fibrosis		1 (2%)		
Granuloma Sperm				1 (2%)
Inflammation	2 (4%)		1 (2%)	
Epithelium, Vacuolization Cytoplasmic	1 (2%)			1 (2%)
Preputial Gland	(48)	(50)	(50)	(50)
Cyst			1 (2%)	
Degeneration, Cystic	1 (2%)		2 (4%)	1 (2%)
Hyperplasia, Cystic	1 (2%)	3 (6%)	1 (2%)	1 (2%)
Inflammation	27 (56%)	27 (54%)	24 (48%)	22 (44%)
Prostate	(49)	(50)	(50)	(50)
Inflammation	36 (73%)	29 (58%)	34 (68%)	33 (66%)
Epithelium, Hyperplasia	7 (14%)	15 (30%)	5 (10%)	10 (20%)
Seminal Vesicle	(50)	(49)	(50)	(50)
Atrophy, Focal		1 (2%)		
Epithelium, Hyperplasia			1 (2%)	
Testes	(50)	(50)	(50)	(50)
Atrophy	14 (28%)	10 (20%)	4 (8%)	6 (12%)
Cyst		1 (2%)		
Hemorrhage			1 (2%)	1 (2%)
Inflammation, Granulomatous				1 (2%)
Interstitial Cell, Hyperplasia, Focal	3 (6%)	4 (8%)	7 (14%)	2 (4%)
HEMATOPOIETIC SYSTEM				
Bone Marrow	(50)	(50)	(50)	(50)
Hyperplasia	2 (4%)	5 (10%)	4 (8%)	6 (12%)
Hyperplasia, Histiocytic, Focal		1 (2%)		1 (2%)

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FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Lymph Node	(26)	(24)	(19)	(21)
Ectasia				1 (5%)
Fibrosis				1 (5%)
Bronchial, Hyperplasia, Lymphoid				1 (5%)
Deep Cervical, Hemorrhage	1 (4%)	1 (4%)		
Mediastinal, Ectasia	1 (4%)	1 (4%)	3 (16%)	1 (5%)
Mediastinal, Hemorrhage	4 (15%)	2 (8%)	1 (5%)	4 (19%)
Mediastinal, Hyperplasia, Lymphoid		2 (8%)	4 (21%)	1 (5%)
Mediastinal, Pigmentation		1 (4%)		
Pancreatic, Ectasia		2 (8%)	1 (5%)	2 (10%)
Pancreatic, Hemorrhage	1 (4%)	3 (13%)	1 (5%)	4 (19%)
Pancreatic, Hyperplasia, Lymphoid	1 (4%)	1 (4%)		
Pancreatic, Pigmentation			1 (5%)	
Lymph Node, Mandibular	(1)	(0)	(3)	(0)
Ectasia	1 (100%)			
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Atrophy				1 (2%)
Ectasia	2 (4%)	2 (4%)	2 (4%)	4 (8%)
Fibrosis	1 (2%)			
Hemorrhage		1 (2%)	1 (2%)	2 (4%)
Hyperplasia, Histiocytic			1 (2%)	1 (2%)
Hyperplasia, Lymphoid	2 (4%)	4 (8%)	2 (4%)	3 (6%)
Spleen	(49)	(50)	(50)	(50)
Accessory Spleen		1 (2%)	2 (4%)	
Congestion	1 (2%)		2 (4%)	
Fibrosis, Focal	3 (6%)		3 (6%)	1 (2%)
Hematopoietic Cell Proliferation	2 (4%)	4 (8%)	2 (4%)	3 (6%)
Hemorrhage			1 (2%)	1 (2%)
Hyperplasia, Histiocytic, Focal		1 (2%)	1 (2%)	1 (2%)
Hyperplasia, Lymphoid		1 (2%)		
Infiltration Cellular, Mixed Cell			1 (2%)	
Necrosis, Focal	1 (2%)		2 (4%)	
Pigmentation			1 (2%)	
Lymphoid Follicle, Atrophy			1 (2%)	1 (2%)
Red Pulp, Depletion Cellular	1 (2%)			
Thymus	(43)	(50)	(44)	(45)
Atrophy	1 (2%)			
Ectopic Parathyroid Gland		1 (2%)		
Hemorrhage	1 (2%)			
Hyperplasia, Lymphoid				1 (2%)
INTEGUMENTARY SYSTEM				
Mammary Gland	(46)	(49)	(47)	(46)
Dilatation	13 (28%)	9 (18%)	14 (30%)	9 (20%)

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FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Fibrosis	1 (2%)			
Inflammation, Granulomatous, Focal	1 (2%)			
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion	2 (4%)	2 (4%)		1 (2%)
Hyperkeratosis, Focal		2 (4%)		2 (4%)
Inflammation, Focal		1 (2%)	1 (2%)	
Ulcer				1 (2%)
Epidermis, Hyperplasia, Focal		1 (2%)	2 (4%)	1 (2%)
Subcutaneous Tissue, Edema				1 (2%)
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Fibrous Osteodystrophy				1 (2%)
Hyperostosis		1 (2%)		
Femur, Hyperostosis			1 (2%)	
Skeletal Muscle	(1)	(3)	(1)	(1)
Fibrosis			1 (100%)	
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Compression, Focal	5 (10%)	8 (16%)	12 (24%)	9 (18%)
Hemorrhage			1 (2%)	
Hemorrhage, Focal	4 (8%)	2 (4%)	3 (6%)	2 (4%)
Peripheral Nerve	(2)	(0)	(4)	(0)
RESPIRATORY SYSTEM				
Lung	(50)	(50)	(50)	(50)
Congestion	1 (2%)	1 (2%)	2 (4%)	1 (2%)
Hemorrhage			1 (2%)	1 (2%)
Infiltration Cellular, Mixed Cell		2 (4%)		
Inflammation	2 (4%)	2 (4%)		2 (4%)
Metaplasia, Osseous, Focal	1 (2%)			
Metaplasia, Squamous, Focal			1 (2%)	
Alveolar Epithelium, Hyperplasia	12 (24%)	10 (20%)	8 (16%)	6 (12%)
Serosa, Fibrosis				1 (2%)
Nose	(50)	(50)	(50)	(50)
Foreign Body			1 (2%)	
Inflammation			1 (2%)	2 (4%)
Nasolacrimal Duct, Inflammation	2 (4%)			
Trachea	(50)	(50)	(50)	(50)

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FISCHER 344 RATS MALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Inflammation				1 (2%)
SPECIAL SENSES SYSTEM				
Eye	(48)	(47)	(48)	(47)
Atrophy	1 (2%)		1 (2%)	
Cataract			1 (2%)	
Edema			1 (2%)	
Retina, Degeneration			1 (2%)	
Harderian Gland	(50)	(50)	(50)	(50)
Hyperplasia, Lymphoid, Focal	1 (2%)			
Inflammation		1 (2%)		
Epithelium, Hyperplasia, Focal	3 (6%)	3 (6%)	1 (2%)	6 (12%)
Zymbal's Gland	(0)	(0)	(2)	(0)
URINARY SYSTEM				
Kidney	(49)	(50)	(50)	(50)
Infarct	2 (4%)	1 (2%)	2 (4%)	
Mineralization			1 (2%)	
Nephropathy	48 (98%)	47 (94%)	45 (90%)	45 (90%)
Renal Tubule, Accumulation, Hyaline Droplet	1 (2%)	7 (14%)	1 (2%)	1 (2%)
Renal Tubule, Cyst	2 (4%)			1 (2%)
Renal Tubule, Pigmentation	2 (4%)	2 (4%)		2 (4%)
Urethra	(0)	(1)	(1)	(0)
Urinary Bladder	(50)	(50)	(49)	(50)
Hemorrhage	1 (2%)		1 (2%)	

*** END OF MALE ***

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FISCHER 344 RATS FEMALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Disposition Summary				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	9	11	16	12
Natural Death	12	4	5	7
Survivors				
Terminal Sacrifice	29	35	29	31
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(49)	(50)	(50)	(50)
Ulcer				1 (2%)
Epithelium, Hyperkeratosis	10 (20%)	8 (16%)	28 (56%)	48 (96%)
Intestine Large, Cecum	(46)	(50)	(47)	(50)
Intestine Large, Colon	(48)	(50)	(49)	(50)
Intestine Large, Rectum	(49)	(49)	(48)	(49)
Intestine Small, Duodenum	(49)	(50)	(50)	(49)
Intestine Small, Ileum	(45)	(48)	(49)	(49)
Intestine Small, Jejunum	(42)	(48)	(48)	(46)
Liver	(50)	(50)	(50)	(50)
Angiectasis, Focal	2 (4%)	1 (2%)	1 (2%)	3 (6%)
Congestion	3 (6%)	5 (10%)	4 (8%)	6 (12%)
Degeneration, Cystic, Focal	1 (2%)		1 (2%)	
Hematopoietic Cell Proliferation			3 (6%)	1 (2%)
Hepatodiaphragmatic Nodule	7 (14%)	5 (10%)	6 (12%)	3 (6%)
Infiltration Cellular, Lymphocyte			1 (2%)	
Inflammation, Chronic	35 (70%)	41 (82%)	30 (60%)	34 (68%)
Thrombosis	1 (2%)			
Bile Duct, Hyperplasia	29 (58%)	29 (58%)	32 (64%)	29 (58%)
Hepatocyte, Basophilic Focus	39 (78%)	47 (94%)	41 (82%)	41 (82%)
Hepatocyte, Clear Cell Focus	11 (22%)	15 (30%)	14 (28%)	14 (28%)
Hepatocyte, Cytologic Alterations, Focal	6 (12%)	10 (20%)	16 (32%)	16 (32%)
Hepatocyte, Eosinophilic Focus	2 (4%)	3 (6%)	6 (12%)	1 (2%)
Hepatocyte, Mixed Cell Focus	14 (28%)	25 (50%)	15 (30%)	25 (50%)
Hepatocyte, Necrosis	2 (4%)	1 (2%)	6 (12%)	3 (6%)
Hepatocyte, Syncytial Alteration, Focal	1 (2%)			
Hepatocyte, Vacuolization Cytoplasmic	22 (44%)	27 (54%)	29 (58%)	23 (46%)
Mesentery	(20)	(11)	(17)	(15)
Accessory Spleen		1 (9%)		1 (7%)
Fat, Necrosis, Focal	14 (70%)	8 (73%)	10 (59%)	11 (73%)
Oral Mucosa	(50)	(50)	(50)	(50)

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FISCHER 344 RATS FEMALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Hyperplasia		1 (2%)		2 (4%)
Pancreas	(50)	(50)	(50)	(50)
Acinus, Atrophy, Focal	12 (24%)	20 (40%)	19 (38%)	17 (34%)
Acinus, Atrophy, Diffuse		1 (2%)		
Acinus, Cytoplasmic Alteration				1 (2%)
Acinus, Hyperplasia	1 (2%)			
Acinus, Hyperplasia, Focal	1 (2%)			
Duct, Cyst	8 (16%)	13 (26%)	7 (14%)	4 (8%)
Salivary Glands	(50)	(50)	(50)	(50)
Atrophy, Focal	1 (2%)			
Stomach, Forestomach	(50)	(50)	(50)	(50)
Erosion			1 (2%)	1 (2%)
Inflammation		1 (2%)	1 (2%)	
Ulcer	5 (10%)		1 (2%)	2 (4%)
Epithelium, Hyperplasia	4 (8%)	4 (8%)	8 (16%)	4 (8%)
Stomach, Glandular	(49)	(50)	(50)	(50)
Erosion	4 (8%)		4 (8%)	1 (2%)
Inflammation, Focal				1 (2%)
Mineralization		1 (2%)		
Ulcer			2 (4%)	1 (2%)
Epithelium, Hyperplasia	1 (2%)			
Glands, Ectasia	10 (20%)	4 (8%)	10 (20%)	26 (52%)
Glands, Hyperplasia				2 (4%)
Neuroendocrine Cell, Hyperplasia				1 (2%)
Tongue	(50)	(50)	(50)	(50)
Epithelium, Hyperplasia	1 (2%)	1 (2%)	2 (4%)	6 (12%)
Tooth	(1)	(0)	(0)	(0)
Peridental Tissue, Inflammation	1 (100%)			

CARDIOVASCULAR SYSTEM

Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	34 (68%)	36 (72%)	36 (72%)	35 (70%)
Thrombosis	3 (6%)		2 (4%)	1 (2%)
Endocardium, Hyperplasia		1 (2%)		

ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(50)	(50)	(50)
Accessory Adrenal Cortical Nodule	6 (12%)	1 (2%)	1 (2%)	2 (4%)
Angiectasis	5 (10%)	1 (2%)	3 (6%)	1 (2%)
Cytoplasmic Alteration, Focal	2 (4%)		4 (8%)	1 (2%)
Hyperplasia	1 (2%)			
Hyperplasia, Focal	2 (4%)	9 (18%)	10 (20%)	8 (16%)

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

TDMS No. 96015 - 05
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: RATS/F 344

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

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

Date Report Requested: 10/22/2007
 Time Report Requested: 08:24:14
 First Dose M/F: 09/05/01 / 09/05/01
 Lab: SRI

FISCHER 344 RATS FEMALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Infiltration Cellular, Mixed Cell Necrosis			1 (2%)	2 (4%)
Pigmentation	1 (2%)			1 (2%)
Vacuolization Cytoplasmic	9 (18%)	8 (16%)	9 (18%)	6 (12%)
Adrenal Medulla	(49)	(50)	(50)	(50)
Angiectasis			1 (2%)	
Hyperplasia, Focal	2 (4%)	2 (4%)	1 (2%)	5 (10%)
Infiltration Cellular, Mixed Cell				1 (2%)
Vacuolization Cytoplasmic, Focal			1 (2%)	
Islets, Pancreatic	(50)	(50)	(50)	(49)
Hyperplasia		1 (2%)	1 (2%)	
Parathyroid Gland	(42)	(42)	(43)	(43)
Atrophy	1 (2%)			
Hyperplasia	1 (2%)			
Pituitary Gland	(49)	(48)	(50)	(50)
Angiectasis	6 (12%)	3 (6%)	5 (10%)	7 (14%)
Cyst	5 (10%)	3 (6%)	2 (4%)	4 (8%)
Fibrosis, Focal				1 (2%)
Hemorrhage	6 (12%)	4 (8%)		2 (4%)
Hyperplasia, Histiocytic, Focal	1 (2%)			
Pars Distalis, Cyst	4 (8%)	6 (13%)	5 (10%)	12 (24%)
Pars Distalis, Cytoplasmic Alteration, Focal	1 (2%)	2 (4%)		2 (4%)
Pars Distalis, Hyperplasia				2 (4%)
Pars Distalis, Hyperplasia, Focal	8 (16%)	7 (15%)	9 (18%)	10 (20%)
Pars Intermedia, Hyperplasia, Focal	1 (2%)			
Pars Intermedia, Vacuolization Cytoplasmic, Focal			1 (2%)	
Rathke's Cleft, Cyst	1 (2%)		1 (2%)	1 (2%)
Thyroid Gland	(46)	(48)	(48)	(46)
C-cell, Hyperplasia	38 (83%)	44 (92%)	45 (94%)	42 (91%)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Clitoral Gland	(50)	(50)	(47)	(50)
Cyst				1 (2%)
Degeneration, Cystic	2 (4%)	2 (4%)	4 (9%)	6 (12%)
Hyperplasia		1 (2%)		
Hyperplasia, Cystic	4 (8%)	3 (6%)	8 (17%)	4 (8%)
Inflammation	7 (14%)	2 (4%)	1 (2%)	3 (6%)
Metaplasia, Squamous			1 (2%)	

TDMS No. 96015 - 05
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PO3: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Water disinfection byproducts (Dibromoacetonitrile)

CAS Number: 3252-43-5

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 Lab: SRI

FISCHER 344 RATS FEMALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Ovary	(50)	(50)	(50)	(50)
Angiectasis	1 (2%)			
Cyst	3 (6%)	4 (8%)	3 (6%)	6 (12%)
Oviduct	(1)	(0)	(1)	(0)
Uterus	(50)	(50)	(50)	(50)
Decidual Reaction		1 (2%)		
Hemorrhage	1 (2%)	2 (4%)		1 (2%)
Cervix, Hypertrophy	1 (2%)			
Endometrium, Hyperplasia, Cystic	32 (64%)	38 (76%)	39 (78%)	32 (64%)
Vagina	(6)	(2)	(7)	(7)
Inflammation		1 (50%)	1 (14%)	2 (29%)
Inflammation, Suppurative	1 (17%)			
Epithelium, Cyst			1 (14%)	1 (14%)

HEMATOPOIETIC SYSTEM

Bone Marrow	(49)	(50)	(50)	(50)
Hyperplasia	3 (6%)	1 (2%)	5 (10%)	2 (4%)
Hyperplasia, Histiocytic, Focal	1 (2%)	1 (2%)		1 (2%)
Hyperplasia, Reticulum Cell, Diffuse		1 (2%)		
Inflammation, Granulomatous		1 (2%)		
Lymph Node	(21)	(15)	(23)	(15)
Congestion			1 (4%)	
Deep Cervical, Hemorrhage	1 (5%)		1 (4%)	
Mediastinal, Ectasia	1 (5%)		4 (17%)	
Mediastinal, Hemorrhage	7 (33%)	6 (40%)	6 (26%)	3 (20%)
Mediastinal, Hyperplasia, Histiocytic			1 (4%)	
Mediastinal, Hyperplasia, Lymphoid	1 (5%)	2 (13%)	4 (17%)	2 (13%)
Mediastinal, Inflammation, Granulomatous	1 (5%)			
Mediastinal, Pigmentation		1 (7%)		1 (7%)
Pancreatic, Amyloid Deposition			1 (4%)	
Pancreatic, Ectasia	1 (5%)			
Pancreatic, Hemorrhage	3 (14%)	2 (13%)	2 (9%)	2 (13%)
Pancreatic, Inflammation, Granulomatous	1 (5%)			
Lymph Node, Mandibular	(3)	(2)	(2)	(2)
Ectasia	1 (33%)			
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Ectasia	1 (2%)		2 (4%)	1 (2%)
Hemorrhage			1 (2%)	
Hyperplasia, Lymphoid	2 (4%)	1 (2%)		2 (4%)
Inflammation, Granulomatous	1 (2%)	1 (2%)		
Pigmentation	1 (2%)			
Spleen	(50)	(50)	(50)	(50)
Hematopoietic Cell Proliferation	4 (8%)	2 (4%)	4 (8%)	5 (10%)
Hyperplasia, Histiocytic, Focal	2 (4%)			

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FISCHER 344 RATS FEMALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Inflammation, Granulomatous	1 (2%)	1 (2%)		
Pigmentation	6 (12%)			1 (2%)
Lymphoid Follicle, Atrophy				1 (2%)
Thymus	(48)	(49)	(48)	(49)
Hemorrhage				1 (2%)
Hyperplasia, Lymphoid	2 (4%)	1 (2%)		
INTEGUMENTARY SYSTEM				
Mammary Gland	(49)	(50)	(50)	(50)
Dilatation	38 (78%)	41 (82%)	33 (66%)	32 (64%)
Fibrosis		1 (2%)	2 (4%)	1 (2%)
Galactocele	2 (4%)			1 (2%)
Skin	(50)	(50)	(50)	(49)
Cyst Epithelial Inclusion			1 (2%)	
Ulcer	1 (2%)	1 (2%)		1 (2%)
Subcutaneous Tissue, Fibrosis, Focal	1 (2%)			
Subcutaneous Tissue, Necrosis, Fatty			1 (2%)	
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Hyperostosis				1 (2%)
Cranium, Hyperostosis			1 (2%)	
Skeletal Muscle	(3)	(0)	(0)	(0)
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Compression, Focal	12 (24%)	12 (24%)	19 (38%)	6 (12%)
Hemorrhage, Focal	2 (4%)	1 (2%)	1 (2%)	2 (4%)
Spinal Cord	(5)	(3)	(2)	(4)
Atrophy, Focal	1 (20%)			
Hemorrhage, Focal				1 (25%)
RESPIRATORY SYSTEM				
Lung	(50)	(50)	(50)	(50)
Congestion	3 (6%)	1 (2%)	1 (2%)	2 (4%)
Hemorrhage	1 (2%)		1 (2%)	2 (4%)
Hyperplasia, Histiocytic, Focal		1 (2%)		
Inflammation	3 (6%)	1 (2%)	3 (6%)	7 (14%)

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

TDMS No. 96015 - 05
 Test Type: CHRONIC
 Route: DOSED WATER
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P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

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FISCHER 344 RATS FEMALE	0 MG/L	50 MG/L	100 MG/L	200 MG/L
Metaplasia, Squamous, Focal	1 (2%)			
Alveolar Epithelium, Hyperplasia	10 (20%)	5 (10%)	2 (4%)	5 (10%)
Interstitialium, Edema	1 (2%)			
Nose	(50)	(50)	(50)	(50)
Nasolacrimal Duct, Inflammation		1 (2%)		1 (2%)
Trachea	(50)	(50)	(50)	(50)
SPECIAL SENSES SYSTEM				
Eye	(47)	(50)	(50)	(48)
Atrophy		2 (4%)	1 (2%)	3 (6%)
Cataract	3 (6%)	2 (4%)		
Exudate	1 (2%)			
Retina, Degeneration	2 (4%)	2 (4%)		
Harderian Gland	(50)	(50)	(50)	(50)
Degeneration, Cystic, Focal				1 (2%)
Hyperplasia, Lymphoid, Focal	1 (2%)			
Inflammation			1 (2%)	
Epithelium, Hyperplasia, Focal	4 (8%)		1 (2%)	1 (2%)
Zymbal's Gland	(0)	(0)	(1)	(0)
URINARY SYSTEM				
Kidney	(50)	(49)	(50)	(49)
Congestion				1 (2%)
Infarct	1 (2%)	1 (2%)		4 (8%)
Infiltration Cellular, Lymphocyte			1 (2%)	
Mineralization		1 (2%)		
Nephropathy	33 (66%)	36 (73%)	44 (88%)	43 (88%)
Pelvis, Inflammation, Chronic	1 (2%)			7 (14%)
Renal Tubule, Accumulation, Hyaline Droplet	11 (22%)	18 (37%)	17 (34%)	14 (29%)
Renal Tubule, Cyst	1 (2%)	1 (2%)		1 (2%)
Renal Tubule, Hyperplasia, Focal			1 (2%)	
Renal Tubule, Pigmentation	1 (2%)			
Urinary Bladder	(50)	(50)	(49)	(50)

*** END OF REPORT ***