TDMS No. 96019 - 05

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a)
WITH AVERAGE SEVERITY GRADES[b]

WATER DISINFECTION BYPRODUCTS (BROMOCHLOROACETIC ACID)

CAS Number: 5589-96-8

Species/Strain: RATS/F 344 Pathologist: GILES, H. - HEATH, J. - Blackshear, P.

F1_R2

Time Report Reqsted: 15:00:22

First Dose M/F: 09/26/01 / 09/26/01

Date Report Regsted: 03/28/2006

Lab: SRI

C Number: C96019

Lock Date: 07/14/2004

Cage Range: ALL

Test Type: CHRONIC

Route: DOSED WATER

Date Range: ALL

Reasons For Removal: 25021 TSAC 25020 NATD 25019 MSAC

Removal Date Range: ALL

Treatment Groups: Include ALL

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED WATER

Species/Strain: RATS/F 344

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FISCHER 344 RATS MALE	0 MG/L	250 MG/L	500 MG/L	1000 MG/L
Disposition Summary				
Animals Initially in Study	66	66	66	66
Early Deaths	45	47	47	47
Moribund Sacrifice Natural Death	15 4	17 7	17 8	17 4
Survivors	4	1	0	4
Terminal Sacrifice	31	26	25	29
Animals Examined Microscopically	50	50	50	50
· · · · · · · · · · · · · · · · · · ·				
ALIMENTARY SYSTEM				
Esophagus	(50)	(50)	(50)	(50)
Intestine Large, Cecum	(48)	(48)	(47)	(49)
Edema	5 [1.4]	1 [1.0]	1 [1.0]	6 [1.8]
Inflammation	1 [3.0]			1 [2.0]
Intestine Large, Colon	(50)	(49)	(50)	(48)
Inflammation		1 [4.0]		
Intestine Large, Rectum	(50)	(50)	(50)	(49)
Intestine Small, Duodenum	(50)	(49)	(50)	(49)
Intestine Small, Ileum	(49)	(46)	(47)	(49)
Inflammation	(47)	(46)	(46)	1 [2.0]
Intestine Small, Jejunum Inflammation	(47) 1 [1.0]	(46)	(46)	(48)
Liver	(50)	(50)	(50)	(50)
Amyloid Deposition	(50)	1 [1.0]	(50)	(50)
Angiectasis	2 [1.0]	5 [1.2]	2 [1.0]	2 [1.5]
Basophilic Focus	6	5	4	3
Clear Cell Focus	22	21 [3.0]	23	20
Degeneration, Cystic	13 [1.2]	13 [1.3]	12 [1.3]	18 [1.2]
Eosinophilic Focus	2	5	4	8
Hepatodiaphragmatic Nodule	11 [1.5]	13 [1.9]	7 [1.6]	4 [1.7]
Inflammation, Chronic	10 [1.0]	12 [1.1]	12 [1.1]	8 [1.0]
Malformation		_		1
Mixed Cell Focus	4	3	4	2
Necrosis, Focal	45 [0 4]	2 [1.0]	2 [1.0]	44 [0 4]
Bile Duct, Hyperplasia	45 [2.4]	49 [2.7]	46 [2.5]	44 [2.4]
Centrilobular, Necrosis	4 [1.3]	7 [1.3]	8 [1.4]	8 [1.4]

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

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

WATER DISINFECTION BYPRODUCTS (BROMOCHLOROACETIC ACID)

CAS Number: 5589-96-8

Pathologist: GILES, H. - HEATH, J. - Blackshear, P.

Date Report Regsted: 03/28/2006

Time Report Reqsted: 15:00:22 First Dose M/F: 09/26/01 / 09/26/01

FISCHER 344 RATS MALE	0 MG/L	250 MG/L	500 MG/L	1000 MG/L	
Hepatocyte, Vacuolization Cytoplasmic	3 [2.0]	6 [1.5]	3 [1.7]	2 [2.0]	
Mesentery	(6)	(16)	(15)	(15)	
Accessory Spleen	(0)	()	1 [2.0]	1 [2.0]	
Angiectasis			1 [2.0]	. []	
Degeneration			. [=]	1 [1.0]	
Fat, Necrosis	6 [2.8]	8 [2.6]	9 [2.8]	9 [2.4]	
Oral Mucosa	(0)	(0)	(1)	(1)	
Pancreas	(50)	(50)	(50)	(ŠÓ)	
Atrophy	29 [1.3]	28 [1.5]	26 [1.6]	29 [1.4]	
Cyst				1 [2.0]	
Acinus, Hyperplasia, Focal	7 [1.4]	3 [1.3]	2 [2.0]	7 [1.9]	
Salivary Glands	(50)	(50)	(50)	(50)	
Inflammation	(,	()	()	1 [2.0]	
Stomach, Forestomach	(50)	(50)	(50)	(50)	
Edema	4 [2.3]	4 [1.8]	4 [1.5]	6 [2.3]	
Erosion			1 [1.0]	1 [1.0]	
Inflammation, Chronic Active		1 [2.0]			
Ulcer	3 [3.0]	3 [2.7]	2 [3.5]	5 [3.6]	
Epithelium, Hyperplasia	6 [2.2]	5 [2.4]	5 [1.8]	8 [2.5]	
Stomach, Glandular	(50)	(50)	(50)	(50)	
Edema	4 [1.5]	3 [1.7]	1 [1.0]	6 [1.7]	
Erosion	7 [2.4]	5 [2.2]	7 [2.0]	8 [1.8]	
Hyperplasia	1 [2.0]				
Ulcer	2 [3.0]	3 [1.7]	2 [3.0]		
Tongue	(0)	(1)	(0)	(1)	
Hyperplasia				1 [1.0]	
Tooth	(0)	(0)	(0)	(2)	
Malformation				2 [2.0]	
ARDIOVASCULAR SYSTEM					
Heart	(50)	(50)	(50)	(50)	
Cardiomyopathy	47 [1.7]	46 [1.7]	48 [1.8]	48 [1.7]	
Thrombosis	4 [2.3]	3 [3.3]	4 [3.0]	6 [3.3]	
NDOCRINE SYSTEM					
Adrenal Cortex	(50)	(50)	(50)	(50)	
Accessory Adrenal Cortical Nodule	23 [1.0]	27 [1.1]	28 [1.0]	19 [1.1]	

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

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

WATER DISINFECTION BYPRODUCTS (BROMOCHLOROACETIC ACID)

CAS Number: 5589-96-8

Pathologist: GILES, H. - HEATH, J. - Blackshear, P.

Date Report Reqsted: 03/28/2006

Time Report Reqsted: 15:00:22 First Dose M/F: 09/26/01 / 09/26/01

FISCHER 344 RATS MALE	0 MG/L	250 MG/L	500 MG/L	1000 MG/L	
Hyperplasia, Focal	11 [1.8]	13 [1.5]	12 [1.3]	9 [1.3]	
Hyperplasia, Diffuse	1 -1	1 [2.0]	1	- 1	
Hypertrophy, Focal	5 [1.4]	3 [1.0]	3 [1.0]	4 [1.5]	
Necrosis	1 [4.0]	- 1 - 1		1 -1	
Bilateral, Atrophy			1 [4.0]		
Adrenal Medulla	(50)	(50)	(50)	(50)	
Hyperplasia	19 [1.8]	22 [2.0]	20 [1.8]	28 [2.0]	
Necrosis		[]	_0 [0]	1 [3.0]	
Islets, Pancreatic	(50)	(50)	(50)	(50)	
Hyperplasia	(00)	1 [3.0]	(33)	1 [2.0]	
Pituitary Gland	(48)	(50)	(50)	(50)	
Pars Distalis, Angiectasis	23 [2.1]	27 [2.3]	23 [2.3]	20 [2.2]	
Pars Distalis, Cyst	5 [1.6]	1 [1.0]	4 [1.5]	4 [1.5]	
Pars Distalis, Hemorrhage	1 [4.0]	1 [1.0]	4 [1.0]	4 [1:0]	
Pars Distalis, Hyperplasia	1 [4.0]			1 [4.0]	
Pars Distalis, Hyperplasia, Focal	10 [1.9]	8 [1.1]	9 [2.0]	9 [1.6]	
Pars Intermedia, Cyst	10 [1.9]	0[1.1]	1 [1.0]	9 [1.0]	
Thyroid Gland	(50)	(50)	(50)	(50)	
Ultimobranchial Cyst	2 [1.0]	3 [1.0]	3 [1.0]	1 [1.0]	
C-cell, Hyperplasia	21 [1.7]	15 [2.0]	15 [2.0]	24 [1.4]	
Follicle, Cyst	11 [1.3]	11 [1.3]	5 [1.4]	9 [1.0]	
GENERAL BODY SYSTEM					
Peritoneum	(0)	(4)	(2)	(3)	
GENITAL SYSTEM					
Epididymis	(50)	(50)	(50)	(50)	
Hyperplasia, Mesothelium		1 [1.0]			
Preputial Gland	(50)	(49)	(50)	(49)	
Cyst	4 [1.8]	4 [1.5]	3 [1.7]	7 [1.9]	
Inflammation, Chronic	3 [2.0]	2 [2.0]	8 [1.8]	6 [1.8]	
Prostate	(50)	(50)	(50)	(50)	
Inflammation, Chronic	36 [1.̈7]	32 [1.7]	35 [1.8]	34 [1 [°] .8]	
Epithelium, Hyperplasia	7 [1.3]	4 [1.0]	7 [1.0]	5 [1.2]	
Seminal Vesicle	(50)	(50)	(50)	(50)	
Inflammation	(/	()	()	1 [3.0]	
Testes	(50)	(50)	(50)	(50)	
	(/	(/	(/	V = - 1	

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

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED WATER

Species/Strain: RATS/F 344

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FISCHER 344 RATS MALE	0 MG/L	250 MG/L	500 MG/L	1000 MG/L	
Germinal Epithelium, Atrophy	13 [2.5]	12 [2.3]	7 [2.3]	10 [2.3]	
IEMATOPOIETIC SYSTEM					
Bone Marrow	(50)	(50)	(50)	(50)	
Hyperplasia	5 [2.2]	7 [2.0]	8 [2.1]	3 [2.0]	
Myelofibrosis		1 [1.0]	- 1	2 [2.0]	
Lymph Node	(14)	(31)	(19)	(25)	
Deep Cervical, Hemorrhage	,	1 [2.0]	(- /	(- /	
Mediastinal, Congestion	1 [1.0]				
Mediastinal, Hemorrhage	. []	6 [1.3]	1 [3.0]	4 [1.5]	
Mediastinal, Hyperplasia, Lymphoid	6 [1.5]	8 [1.3]	9 [1.2]	7 [1.4]	
Pancreatic, Amyloid Deposition	- []	1 [3.0]	- []	. []	
Pancreatic, Hyperplasia, Lymphoid		4 [1.0]	4 [1.0]		
Lymph Node, Mandibular	(1)	(3)	(0)	(0)	
Hyperplasia, Lymphoid	(-)	1 [1.0]	(-)	(-)	
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)	
Hyperplasia, Lymphoid	()	9 [1.2]	4 [1.0]	()	
Spleen	(50)	(50)	(50)	(50)	
Accessory Spleen	()	()	()	1 [1.0]	
Amyloid Deposition		1 [1.0]		1	
Fibrosis	1 [1.0]	2 [1.5]	2 [2.0]	3 [2.0]	
Hematopoietic Cell Proliferation	5 [2.0]	7 [2.3]	6 [2.7]	3 [3.0]	
Necrosis	0 [=.0]	1 [3.0]	ر <u>۱</u> ـــ۰۰ ا	0 [0.0]	
Pigmentation		1 [1.0]	2 [1.5]	1 [1.0]	
Lymphoid Follicle, Hyperplasia		1 [3.0]	_[0]	. [0]	
Thymus	(49)	(50)	(50)	(48)	
	(- /	(/	()		
NTEGUMENTARY SYSTEM					
Mammary Gland	(50)	(50)	(50)	(50)	
Cyst	21 [1.5]	14 [1.5]	16 [1.6]	18 [1.2]	
Hyperplasia	2 [1.5]			1 [2.0]	
Skin	(50)	(50)	(50)	(50)	
Cyst Epithelial Inclusion	2 [2.5]	2 [2.0]	1 [3.0]	3 [2.3]	
Hyperplasia	2 [2.5]			2 [2.0]	
Inflammation, Chronic	1 [2.0]			-	
Epidermis, Hyperplasia			1 [3.0]		

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Route: DOSED WATER

Species/Strain: RATS/F 344

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FISCHER 344 RATS MALE	0 MG/L	250 MG/L	500 MG/L	1000 MG/L	
MUSCULOSKELETAL SYSTEM					
Bone Cranium, Osteopetrosis	(50)	(50) 4 [1.5]	(50)	(50) 2 [1.5]	
Femur, Osteopetrosis Skeletal Muscle	1 [3.0] (1)	(4)	(0)	1 [2.0] (1)	
NERVOUS SYSTEM					
Brain Compression Hemorrhage Necrosis	(50) 5 [3.4] 2 [1.0] 1 [2.0]	(50) 8 [3.3] 3 [1.7]	(50) 11 [3.0] 4 [2.3]	(50) 5 [3.4] 1 [4.0]	
RESPIRATORY SYSTEM					
Lung Hemorrhage Infiltration Cellular, Histiocyte Inflammation, Chronic Alveolar Epithelium, Hyperplasia Nose Foreign Body Inflammation, Chronic Nasolacrimal Duct, Cyst	(50) 2 [1.0] 24 [1.2] 5 [1.2] 7 [1.6] (50) 14 [1.1] 18 [1.2] 1 [2.0]	(50) 2 [1.0] 23 [1.0] 3 [1.0] 14 [1.9] (50) 9 [1.0] 9 [1.0] 1 [4.0]	(50) 27 [1.0] 7 [1.3] 14 [1.6] (50) 14 [1.2] 16 [1.6]	(50) 3 [1.3] 25 [1.0] 6 [1.3] 10 [1.9] (50) 18 [1.0] 21 [1.2]	
SPECIAL SENSES SYSTEM					
Eye Cataract Harderian Gland Hyperplasia, Focal	(50) 2 [2.5] (50) 1 [1.0]	(50) 3 [2.3] (50) 1 [1.0]	(50) 3 [2.0] (50)	(50) 2 [2.0] (50)	
Inflammation, Chronic Zymbal's Gland	1 [1.0] (1)	1 [2.0] (1)	(1)	3 [1.0] (0)	
JRINARY SYSTEM					
Kidney	(50)	(50)	(50)	(50)	

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b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

TDMS No. 96019 - 05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/F 344

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FISCHER 344 RATS MALE	0 MG/L	250 MG/L	500 MG/L	1000 MG/L	
Cyst	1 [1.0]			1 [2.0]	
Infarct	1 [1.0]	2 [2.0]		2 [2.5]	
Nephropathy	47 [1.8]	47 [1.9]	43 [1.9]	45 [2.1]	
Pelvis, Inflammation				1 [2.0]	
Renal Tubule, Pigmentation			1 [4.0]		
Transitional Epithelium, Hyperplasia	1 [1.0]			2 [1.0]	
Urinary Bladder	(50)	(50)	(50)	(49)	
Hemorrhage	` ,	` ,	, ,	1 [2.0]	
Inflammation				1 [2.0]	

^{***} END OF MALE ***

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

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FISCHER 344 RATS FEMALE	0 MG/L	250 MG/L	500 MG/L	1000 MG/L
Disposition Summary				
Animals Initially in Study	66	66	66	66
Early Deaths				
Moribund Sacrifice	12	14	9	13
Natural Death	4	5	4	2
Survivors				
Natural Death			1	
Terminal Sacrifice	34	31	36	35
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Intestine Large, Cecum	(48)	(47)	(48)	(49)
Intestine Large, Colon	(50)	(49)	(50)	(50)
Hyperplasia	()	(- /	()	1 [2.0]
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Hyperplasia	,	,	1 [4.0]	,
Inflammation				1 [2.0]
Intestine Small, Duodenum	(49)	(48)	(49)	(49)
Ectopic Tissue		1 [1.0]		
Intestine Small, Ileum	(47)	(47)	(48)	(48)
Intestine Small, Jejunum	(47)	(47)	(48)	(48)
Liver	(50)	(50)	(50)	(50)
Angiectasis		2 [1.0]	2 [1.0]	
Basophilic Focus	39	37	37	31
Clear Cell Focus	14	11	16	17
Degeneration, Cystic Eosinophilic Focus	1 [1.0] 1	6	9	15
Hemorrhage	1 [1.0]	Ö	9	10
Hepatodiaphragmatic Nodule	1 [1.0] 11 [1.7]	10 [1.9]	5 [2.0]	8 [1.7]
Inflammation, Chronic	14 [1.1]	17 [1.1]	19 [1.2]	10 [1.0]
Mixed Cell Focus	14[1.1]	4	19 [1.2] 6	10 [1.0]
Necrosis, Focal		•	1 [1.0]	2 [1.0]
Bile Duct, Hyperplasia	19 [1.5]	19 [1.9]	21 [1.7]	16 [2.1]
Hepatocyte, Vacuolization Cytoplasmic	6 [1.7]	4 [1.0]	3 [1.7]	3 [1.0]
Mesentery	(9)	(9)	(9)	(6)
Accessory Spleen	1 <u>[</u> 1.0]	• •	1 [2.0]	, ,

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

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED WATER

Species/Strain: RATS/F 344

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FISCHER 344 RATS FEMALE	0 MG/L	250 MG/L	500 MG/L	1000 MG/L	
				4 50 03	
Hemorrhage	7 10 01	0.10.41	0.10.41	1 [2.0]	
Fat, Necrosis	7 [2.6]	9 [2.4]	8 [2.4]	4 [2.3]	
Oral Mucosa	(2)	(0)	(0)	(1)	
Pancreas	(50)	(50)	(50)	(50)	
Atrophy	21 [1.2]	20 [1.5]	22 [1.2]	22 [1.2]	
Cyst	1 [1.0]				
Acinus, Hyperplasia, Focal	2 [1.0]	1 [2.0]	1 [1.0]	()	
Stomach, Forestomach	(50)	(50)	(50)	(50)	
Edema		2 [2.0]	2 [2.0]	1 [1.0]	
Erosion			1 [2.0]		
Perforation				1 [4.0]	
Ulcer	1 [3.0]	2 [3.5]		1 [4.0]	
Epithelium, Hyperplasia	6 [1.0]	2 [3.0]	3 [2.0]	6 [1.5]	
Stomach, Glandular	(50)	(50)	(50)	(50)	
Edema		1 [1.0]	3 [2.0]	2 [1.5]	
Erosion	2 [1.0]		5 [2.4]	2 [1.5]	
Ulcer		2 [2.0]		1 [3.0]	
Tongue	(1)	(0)	(1)	(0)	
CARDIOVASCULAR SYSTEM					
Heart	(50)	(50)	(50)	(50)	
Cardiomyopathy	(50) 44 [1.3]	43 [1.3]	(50) 48 [1.2]	(50) 44 [1.4]	
Thrombosis	44 [1.3]	43 [1.3] 1 [4.0]	40 [1.2]	44 [1.4]	
THIOHIDOSIS		1 [4.0]			
ENDOCRINE SYSTEM					
Adrenal Cortex	(50)	(50)	(50)	(50)	
Accessory Adrenal Cortical Nodule	17 [1.0]	11 [1.0]	12 [1.0]	13 [1.1]	
Hyperplasia, Focal	17 [2.0]	17 [2.1]	18 [1.7]	25 [2.1]	
Hypertrophy, Focal	5 [1.2]	2 [1.0]	3 [1.0]	6 [1.3]	
Adrenal Medulla	(49)	(47)	(50)	(50)	
Hemorrhage	(10)	(''')	(00)	1 [3.0]	
Hyperplasia	5 [1.8]	6 [2.0]	4 [1.5]	7 [1.7]	
Necrosis	0 [1.0]	[۲.0]	. [1.0]	1 [3.0]	
Islets, Pancreatic	(49)	(50)	(50)	(50)	
Hyperplasia	1 [4.0]	(00)	1 [1.0]	(00)	
Pituitary Gland	(50)	(50)	(50)	(50)	
Pars Distalis, Angiectasis	32 [2.0]	32 [2.4]	33 [2.0]	30 [1.8]	
r ara Distana, migiectasia	اک اِک.ان]	اح رح.	00 [Z.0]	00 [1.0]	

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

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

TDMS No. 96019 - 05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

WATER DISINFECTION BYPRODUCTS (BROMOCHLOROACETIC ACID)

CAS Number: 5589-96-8

Pathologist: GILES, H. - HEATH, J. - Blackshear, P.

Date Report Regsted: 03/28/2006

Time Report Reqsted: 15:00:22 First Dose M/F: 09/26/01 / 09/26/01

Street	FISCHER 344 RATS FEMALE	0 MG/L	250 MG/L	500 MG/L	1000 MG/L
Pars Distalis, Hyperplasia, Focal Pars Intermedia, Cyst 11(1.0) 11(1.0	Pars Distalis, Cyst	28 [1.6]	27 [1.8]	31 [1.8]	29 [2.0]
Pars Intermedia, Cyst	Pars Distalis, Hyperplasia				
hyroid Gland (49) (50) (50) (50) Ultimobranchial Cyst 1 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 1 [1.0] 2 [1.0] 4 [1.0]	Pars Distalis, Hyperplasia, Focal	14 [1.6]	11 [1.8]		17 [2.1]
Últimobranchial Cyst 1 1, 0 2 1, 0 1 1, 0 2 1, 0 1 1, 0 2 1, 0 1 1, 0 2 1, 0 1 1, 0 2 1	Pars Intermedia, Cyst	(40)	(50)		(50)
C-cell, Hyperplasia 25 [1.5] 28 [1.8] 23 [1.4] 23 [1.4] Follicle, Cyst 5 [1.0] 3 [1.7] 2 [2.0] 4 [1.0] ERAL BODY SYSTEM IDIONE INTAL SYSTEM Citional Gland (50) (49) (50) (47) (71.1] Hyperplasia 1 [2.0] (71.6] 7 [1.1] Hyperplasia 1 [2.0] (50) (50) (50) (50) (50) (50) (50) (50)		(49) 1 [1 0]			
Follicle, Čyst 5 [1.0] 3 [1.7] 2 [2.0] 4 [1.0] IJERAL BODY SYSTEM Jone JITAL SYSTEM JUNE SYSTEM JULE SYS					
State Stat					
Company	NERAL BODY SYSTEM				
Citional Gland (50) (49) (50) (47) Cyst 4 [2.0] 6 [2.0] 7 [1.6] 7 [1.1] Hyperplasia 1 [2.0] 1 [2.0] Inflammation, Chronic 2 [2.0] 2 [1.0] 3 [1.7] 2 [1.0] Inflammation, Chronic Active Vary (50) (50) (50) (50) (50) Cyst 7 [1.7] 10 [1.9] 6 [1.8] 11 [1.5] Iterus (50) (50) (50) (50) Cyst (50) (50) (50) Cyst 1 [1.0] 1 [1.0] Hemorrhage 1 [2.0] 1 [1.0] 1 [1.0] Hydrometra 1 [1.0] 2 [1.5] 4 [1.3] 4 [1.3] Inflammation, Chronic Cervix, Cyst 1 [2.0] Cervix, Hypertrophy Endometrium, Cyst 1 [3.0] Endometrium, Hyperplasia (0) (1) (0) (1) Cyst 1 [2.0] Inflammation, Acute 1 [4.0]	None				
Cyst 4 [2.0] 6 [2.0] 7 [1.6] 7 [1.1] Hyperplasia 1 [2.0] 1 [2.0] 1 [2.0] Inflammation, Chronic 2 [2.0] 2 [1.0] 3 [1.7] 2 [1.0] Inflammation, Chronic Active 1 [3.0] 1 [3.0] Ovary (50) (50) (50) (50) (50) Cyst 7 [1.7] 10 [1.9] 6 [1.8] 11 [1.5] Iterus (50) (50) (50) (50) Cyst 1 [2.0] 1 [1.0] 1 [1.0] Hemorrhage 1 [2.0] 1 [1.0] 1 [1.0] Hydrometra 1 [1.0] 2 [1.5] 4 [1.3] 4 [1.3] Inflammation, Chronic 1 [2.0] 1 [2.0] 1 [2.0] Cervix, Cyst 1 [2.0] 1 [2.0] 1 [3.0] Cervix, Hypertrophy 1 [3.0] 1 [3.0] 1 [3.0] Endometrium, Hyperplasia 1 [3.0] 1 [2.0] 1 [3.0] Cyst 1 [2.0] 1 [2.0] 1 [4.0]	NITAL SYSTEM				
Cyst 4 [2.0] 6 [2.0] 7 [1.6] 7 [1.1] Hyperplasia 1 [2.0] 1 [2.0] 1 [2.0] Inflammation, Chronic 2 [2.0] 2 [1.0] 3 [1.7] 2 [1.0] Inflammation, Chronic Active 1 [3.0] 1 [3.0] Ovary (50) (50) (50) (50) (50) Cyst 7 [1.7] 10 [1.9] 6 [1.8] 11 [1.5] Iterus (50) (50) (50) (50) Cyst 1 [2.0] 1 [1.0] 1 [1.0] Hemorrhage 1 [2.0] 1 [1.0] 1 [1.0] Hydrometra 1 [1.0] 2 [1.5] 4 [1.3] 4 [1.3] Inflammation, Chronic 1 [2.0] 1 [2.0] 1 [2.0] Cervix, Cyst 1 [2.0] 1 [2.0] 1 [3.0] Cervix, Hypertrophy 1 [3.0] 1 [3.0] 1 [3.0] Endometrium, Hyperplasia 1 [3.0] 1 [2.0] 1 [3.0] Cyst 1 [2.0] 1 [2.0] 1 [4.0]	Clitoral Gland	(50)	(49)	(50)	(47)
Hyperplasia 1 [2.0]			6 [2.0]		
Inflammation, Chronic Inflammation, Chronic Active 2 [2.0] 2 [1.0] 3 [1.7] 2 [1.0] Inflammation, Chronic Active (50) (50) (50) (50) Cyst 7 [1.7] 10 [1.9] 6 [1.8] 11 [1.5] Iterus (50) (50) (50) (50) Cyst 1 [1.0] 1 [1.0] 1 [1.0] Hemorrhage 1 [2.0] 1 [1.0] 1 [1.0] Hydrometra 1 [1.0] 2 [1.5] 4 [1.3] 4 [1.3] Inflammation, Chronic 1 [2.0] 1 [2.0] 1 [2.0] Cervix, Cyst 1 [2.0] 1 [3.0] Cervix, Hypertrophy 1 [3.0] 1 [3.0] Endometrium, Hyperplasia 1 [3.0] 1 [3.0] agina (0) (1) (0) (1) Cyst 1 [2.0] 1 [4.0] Inflammation, Acute	Hyperplasia		- 1	1	
Ovary (50) (50) (50) (50) Cyst 7 [1.7] 10 [1.9] 6 [1.8] 11 [1.5] Iterus (50) (50) (50) (50) Cyst 1 [1.0] 1 [1.0] 1 [1.0] Hemorrhage 1 [2.0] 1 [1.0] 1 [1.0] Hydrometra 1 [1.0] 2 [1.5] 4 [1.3] 4 [1.3] Inflammation, Chronic 1 [2.0] 1 [2.0] Cervix, Cyst 1 [2.0] 1 [2.0] Cervix, Hypertrophy 1 [3.0] Endometrium, Cyst 1 [3.0] agina (0) (1) (0) (1) Cyst 1 [2.0] Inflammation, Acute 1 [4.0]	Inflammation, Chronic	2 [2.0]	2 [1.0]	3 [1.7]	2 [1.0]
Cyst 7 [1.7] 10 [1.9] 6 [1.8] 11 [1.5] Iterus (50) (50) (50) (50) Cyst 1 [1.0] 1 [1.0] 1 [1.0] Hemorrhage 1 [2.0] 1 [1.0] 1 [1.0] Hydrometra 1 [1.0] 2 [1.5] 4 [1.3] 4 [1.3] Inflammation, Chronic 1 [2.0] 1 [2.0] Cervix, Cyst 1 [2.0] 1 [2.0] Cervix, Hypertrophy 1 [3.0] 1 [3.0] Endometrium, Cyst 1 [3.0] 1 [3.0] 'agina (0) (1) (0) (1) Cyst 1 [2.0] 1 [4.0]					1 [3.0]
Sterus S	Ovary				
Cyst					
Hemorrhage 1 [2.0] 1 [1.0] Hydrometra 1 [1.0] 2 [1.5] 4 [1.3] 4 [1.3] Inflammation, Chronic 1 [2.0] Cervix, Cyst 1 [2.0] Cervix, Hypertrophy 1 [3.0] Endometrium, Cyst 1 [3.0] Aggina (0) (1) (0) (1) Cyst 1 [2.0] Inflammation, Acute 1 [4.0]		(50)	(50)		
Hydrometra 1 [1.0] 2 [1.5] 4 [1.3] 4 [1.3] Inflammation, Chronic 1 [2.0] Cervix, Cyst 1 [2.0] 1 [2.0] 1 [3.0] Endometrium, Cyst 1 [3.0] Inflammation, Hyperplasia 1 [3.0] Inflammation, Acute 1 [2.0] 1 [4.0]			4 [0 0]	1 [1.0]	
Inflammation, Chronic 1 [2.0] Cervix, Cyst 1 [2.0] 1 [2.0] Cervix, Hypertrophy 1 [3.0] Endometrium, Cyst 1 [3.0] Inflammation, Hyperplasia 1 [3.0] Inflammation, Acute 1 [2.0]		1 [1 0]		4 [4 2]	1 [1.0]
Cervix, Cyst 1 [2.0] 1 [2.0] Cervix, Hypertrophy 1 [3.0] Endometrium, Cyst 1 Endometrium, Hyperplasia 1 [3.0] /agina (0) (1) (0) (1) Cyst 1 [2.0] 1 [4.0] Inflammation, Acute 1 [4.0]		1 [1.0]	2 [1.5] 1 [2 0]	4 [1.3]	4 [1.3]
Cervix, Hypertrophy 1 [3.0] Endometrium, Cyst 1 Endometrium, Hyperplasia 1 [3.0] /agina (0) (1) (0) (1) Cyst 1 [2.0] 1 [4.0] Inflammation, Acute 1 [4.0]			1 [2.0]	1 [2 0]	1 [2 0]
Endometrium, Cyst Endometrium, Hyperplasia I [3.0] I				1 [2.0]	
Endometrium, Hyperplasia 1 [3.0] /agina (0) (1) (0) (1) Cyst 1 [2.0] Inflammation, Acute 1 [4.0]					
Yagina (0) (1) (0) (1) Cyst 1 [2.0] Inflammation, Acute 1 [4.0]		1 [3.0]			
Cyst 1 [2.0] Inflammation, Acute 1 [4.0]	Vagina		(1)	(0)	(1)
Inflammation, Acute 1 [4.0]	Cyst	` ,	1 [2.0]		
MATOPOIETIC SYSTEM	Inflammation, Acute				1 [4.0]
IATOT OLE TIO OTOTEW	MATOPOIETIC SYSTEM				
one Marrow (50) (50) (50)	Bone Marrow	(50)	(50)	(50)	(50)

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

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

WATER DISINFECTION BYPRODUCTS (BROMOCHLOROACETIC ACID)

CAS Number: 5589-96-8

Pathologist: GILES, H. - HEATH, J. - Blackshear, P.

Date Report Reqsted: 03/28/2006

Time Report Reqsted: 15:00:22 First Dose M/F: 09/26/01 / 09/26/01

FISCHER 344 RATS FEMALE	0 MG/L	250 MG/L	500 MG/L	1000 MG/L	
Hyperplasia	6 [1.7]	7 [1.9]	5 [1.6]	6 [1.7]	
Myelofibrosis	1 [2.0]				
Lymph Node	(15)	(20)	(11)	(16)	
Deep Cervical, Hyperplasia, Lymphoid	1 [1.0]				
Mediastinal, Hemorrhage	2 [1.5]	1 [1.0]		2 [1.0]	
Mediastinal, Hyperplasia, Lymphoid	6 [1.5]	14 [1.1]	8 [1.0]	11 [1.3]	
Pancreatic, Hyperplasia, Lymphoid	1 [1.0]		1 [1.0]	1 [1.0]	
Lymph Node, Mandibular	(0)	(2)	(1)	(1)	
Hyperplasia, Lymphoid	4	4		1 [1.0]	
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)	
Edema				1 [2.0]	
Hyperplasia, Lymphoid	2 [1.0]	3 [1.0]	3 [1.7]	8 [1.4]	
Spleen	(50)	(50)	(50)	(50)	
Fibrosis			1 [1.0]	2 [1.5]	
Hematopoietic Cell Proliferation	3 [1.3]	11 [1.2]	10 [1.2]	8 [2.0]	
Necrosis	1 [2.0]				
Pigmentation	3 [1.7]	6 [1.0]	4 [1.0]	2 [2.5]	
Thymus	(50)	(50)	(50)	(50)	
INTEGUMENTARY SYSTEM					
Mammary Gland	(50)	(50)	(50)	(50)	
Cyst	47 [1.5]	47 [1.5]	46 [1.6]	45 [1.6]	
Skin	(50)	(50)	(50)	(50)	
Cyst Epithelial Inclusion	(30)	1 [3.0]	(50)	(50)	
Edema		1 [1.0]			
Hyperkeratosis	1 [1.0]	1 [1.0]			
Inflammation, Chronic	1 [4.0]				
milanination, onlone	1 [4.0]				
MUSCULOSKELETAL SYSTEM					
Bone	(50)	(50)	(50)	(50)	
Cranium, Osteopetrosis	(00)	1 [2.0]	(55)	(55)	
Femur, Osteopetrosis	1 [2.0]	1 [1.0]		3 [2.0]	
NERVOUS SYSTEM					
Brain	(50)	(50)	(50)	(50)	
Diani	(50)	(30)	(50)	(00)	

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

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

WATER DISINFECTION BYPRODUCTS (BROMOCHLOROACETIC ACID)

CAS Number: 5589-96-8

Pathologist: GILES, H. - HEATH, J. - Blackshear, P.

Date Report Regsted: 03/28/2006

Time Report Reqsted: 15:00:22 First Dose M/F: 09/26/01 / 09/26/01

FISCHER 344 RATS FEMALE	0 MG/L	250 MG/L	500 MG/L	1000 MG/L	
Compression Hemorrhage	10 [2.8]	15 [2.3]	9 [2.1] 3 [2.7]	10 [2.1]	
RESPIRATORY SYSTEM					
Lung Congestion	(50)	(50) 2 [1.0]	(50)	(50)	
Hemorrhage	1 [1.0]			2 [2.0]	
Infiltration Cellular, Histiocyte Inflammation, Chronic	36 [1.0] 8 [1.0]	44 [1.0] 10 [1.0]	44 [1.0] 6 [1.0]	45 [1.0] 7 [1.0]	
Metaplasia, Osseous			1 [1.0]	,	
Alveolar Epithelium, Hyperplasia Pleura, Fibrosis	5 [1.8] 1 [2.0]	7 [2.1]	8 [1.6]	18 [1.8]	
Nose	(50)	(50)	(50)	(50)	
Foreign Body	2 [1.0]	1 [1.0]	3 [1.0]	2 [1.0]	
Inflammation, Chronic	3 [2.0]	1 [1.0]	3 [1.0]	6 [1.5]	
SPECIAL SENSES SYSTEM					
Eye	(50)	(50)	(50)	(50)	
Cataract	4 [2.5]	2 [2.5]	2 [2.5]	3 [2.3]	
Harderian Gland	(50)	(50)	(50)	(50)	
Inflammation, Chronic Zymbal's Gland	3 [1.0] (0)	5 [1.0] (2)	4 [1.0] (0)	(0)	
URINARY SYSTEM					
Kidney	(50)	(50)	(50)	(50)	
Infarct		2 [2.0]	2 [2.0]	7 [1.7]	
Nephropathy	36 [1.1]	42 [1.1]	43 [1.4]	40 [1.3]	
Cortex, Inflammation, Chronic Transitional Epithelium, Hyperplasia,		3 [1.7]	2 [2.0]	1 [2.0] 6 [2.3]	
Diffuse Transitional Epithelium, Inflammation,		3 [1.7]	3 [2.0]	6 [2.2]	
Chronic Active					
Urinary Bladder	(50)	(50)	(50)	(50)	

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

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TDMS No. 96019 - 05

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/F 344

P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH AVERAGE SEVERITY GRADES[b]

WATER DISINFECTION BYPRODUCTS (BROMOCHLOROACETIC ACID)

CAS Number: 5589-96-8

Pathologist: GILES, H. - HEATH, J. - Blackshear, P.

Date Report Regsted: 03/28/2006

Time Report Reqsted: 15:00:22 First Dose M/F: 09/26/01 / 09/26/01

Lab: SRI

FISCHER 344 RATS FEMALE 0 MG/L 250 MG/L 500 MG/L 1000 MG
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*** END OF REPORT ***

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

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)