

**Experiment Number:** 20320 - 03  
**Test Type:** CHRONIC  
**Route:** GAVAGE  
**Species/Strain:** RATS/Wistar Han

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

Tetrabromobisphenol A

**CAS Number:** 79-94-7

**Date Report Requested:** 01/23/2013

**Time Report Requested:** 15:06:22

**First Dose M/F:** 07/25/07 / 07/26/07

**Lab:** BAT

F1\_Rev.1\_RE

**NTP Study Number:** C20320

**Lock Date:** 03/24/2011

**Cage Range:** ALL

**Date Range:** ALL

**Reasons For Removal:** 25021 TSAC  
25018 DACC

25020 NATD

25019 MSAC

**Removal Date Range:** ALL

**Treatment Groups:** Include ALL

**Study Gender:** Both

**TDMSE Version:** 3.0.1.0\_004

**PWG Approval Date:** NONE

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Wistar Han RATS MALE	0 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg
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**Disposition Summary**

<b>Animals Initially In Study</b>	<b>60</b>	<b>50</b>	<b>50</b>	<b>60</b>
<b>Early Deaths</b>				
<b>Dosing Accident</b>	<b>1</b>			<b>3</b>
<b>Moribund Sacrifice</b>	<b>14</b>	<b>18</b>	<b>8</b>	<b>6</b>
<b>Natural Death</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>2</b>
<b>Survivors</b>				
<b>Moribund Sacrifice</b>	<b>1</b>			
<b>Terminal Sacrifice</b>	<b>32</b>	<b>28</b>	<b>38</b>	<b>39</b>
<b>Animals Examined Microscopically</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>

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**ALIMENTARY SYSTEM**

Esophagus	(50)	(50)	(50)	(50)
Inflammation	1 (2%)			
Intestine Large, Cecum	(50)	(50)	(50)	(50)
Inflammation				1 (2%)
Ulcer			1 (2%)	
Intestine Large, Colon	(50)	(50)	(50)	(50)
Inflammation			1 (2%)	
Ulcer	2 (4%)			
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Inflammation			1 (2%)	
Parasite Metazoan	1 (2%)	1 (2%)	1 (2%)	
Ulcer	1 (2%)		1 (2%)	
Intestine Small, Duodenum	(50)	(50)	(50)	(50)
Diverticulum				1 (2%)
Metaplasia, Osseous				1 (2%)
Intestine Small, Ileum	(50)	(50)	(50)	(50)
Hyperplasia				1 (2%)
Intestine Small, Jejunum	(50)	(50)	(50)	(50)
Liver	(50)	(50)	(50)	(50)
Angiectasis	2 (4%)	2 (4%)		1 (2%)
Basophilic Focus	19 (38%)	26 (52%)	24 (48%)	13 (26%)
Clear Cell Focus	34 (68%)	33 (66%)	43 (86%)	41 (82%)

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

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Wistar Han RATS MALE	0 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg
Congestion			1 (2%)	
Eosinophilic Focus		3 (6%)		3 (6%)
Fatty Change	28 (56%)	35 (70%)	30 (60%)	27 (54%)
Hepatodiaphragmatic Nodule	1 (2%)		2 (4%)	
Inflammation, Suppurative			1 (2%)	
Mixed Cell Focus	9 (18%)	10 (20%)	12 (24%)	16 (32%)
Necrosis	1 (2%)			
Thrombosis		1 (2%)		
Artery, Vein, Necrosis		1 (2%)		
Bile Duct, Hyperplasia	3 (6%)	5 (10%)	7 (14%)	7 (14%)
Oval Cell, Hyperplasia		1 (2%)		
Mesentery	(3)	(3)	(0)	(2)
Inflammation, Chronic	1 (33%)			
Fat, Necrosis	2 (67%)	3 (100%)		2 (100%)
Pancreas	(50)	(50)	(50)	(50)
Atrophy	4 (8%)	1 (2%)	1 (2%)	2 (4%)
Necrosis	1 (2%)			
Acinus, Hyperplasia	1 (2%)			1 (2%)
Salivary Glands	(50)	(50)	(50)	(49)
Stomach, Forestomach	(50)	(50)	(50)	(50)
Cyst			1 (2%)	
Inflammation, Chronic	6 (12%)	5 (10%)		1 (2%)
Mineralization	1 (2%)			
Necrosis	1 (2%)			
Ulcer	1 (2%)	1 (2%)	2 (4%)	
Epithelium, Hyperplasia			1 (2%)	
Stomach, Glandular	(50)	(50)	(50)	(50)
Inflammation, Chronic	1 (2%)	2 (4%)	1 (2%)	1 (2%)
Mineralization		3 (6%)	4 (8%)	1 (2%)
Necrosis	1 (2%)			
Ulcer	1 (2%)		1 (2%)	1 (2%)
Epithelium, Glands, Hyperplasia		1 (2%)		1 (2%)

CARDIOVASCULAR SYSTEM

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Wistar Han RATS MALE	0 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg
Blood Vessel	(50)	(50)	(50)	(50)
Adventitia, Aorta, Hemorrhage	1 (2%)			
Aorta, Inflammation, Chronic	1 (2%)			
Aorta, Mineralization				1 (2%)
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	33 (66%)	23 (46%)	23 (46%)	30 (60%)
Mineralization				1 (2%)
Atrium, Epicardium, Inflammation, Chronic	1 (2%)			
Endocardium, Hyperplasia	1 (2%)	1 (2%)	1 (2%)	
Epicardium, Fibrosis	1 (2%)			
<b>ENDOCRINE SYSTEM</b>				
Adrenal Cortex	(50)	(50)	(49)	(50)
Cytoplasmic Alteration			1 (2%)	
Degeneration, Cystic	1 (2%)			
Hemorrhage		1 (2%)		
Hyperplasia	12 (24%)	5 (10%)	6 (12%)	9 (18%)
Metaplasia, Osseous			1 (2%)	
Necrosis		2 (4%)	1 (2%)	
Vacuolization Cytoplasmic	17 (34%)	17 (34%)	15 (31%)	16 (32%)
Adrenal Medulla	(49)	(50)	(49)	(50)
Hyperplasia	3 (6%)	1 (2%)	3 (6%)	2 (4%)
Necrosis		1 (2%)	1 (2%)	
Vacuolization Cytoplasmic				1 (2%)
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia	1 (2%)			
Parathyroid Gland	(45)	(48)	(47)	(49)
Hyperplasia	1 (2%)	1 (2%)	2 (4%)	1 (2%)
Pituitary Gland	(50)	(49)	(50)	(48)
Cyst	1 (2%)	3 (6%)		3 (6%)
Pars Distalis, Hyperplasia	8 (16%)	8 (16%)	9 (18%)	7 (15%)
Pars Intermedia, Hyperplasia	2 (4%)	2 (4%)	2 (4%)	2 (4%)
Thyroid Gland	(50)	(50)	(50)	(50)
Cyst	1 (2%)			

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Wistar Han RATS MALE	0 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg
C-cell, Hyperplasia	16 (32%)	27 (54%)	26 (52%)	19 (38%)
Follicle, Hyperplasia	3 (6%)		2 (4%)	2 (4%)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Epididymis	(50)	(50)	(50)	(50)
Atrophy	1 (2%)	1 (2%)		
Granuloma Sperm		1 (2%)		
Preputial Gland	(50)	(50)	(50)	(50)
Inflammation	1 (2%)	6 (12%)	10 (20%)	3 (6%)
Prostate	(50)	(50)	(50)	(50)
Atrophy		1 (2%)		
Fibrosis				1 (2%)
Hyperplasia	2 (4%)			
Inflammation	12 (24%)	19 (38%)	12 (24%)	14 (28%)
Artery, Inflammation	1 (2%)			
Seminal Vesicle	(50)	(50)	(50)	(50)
Atrophy		1 (2%)		
Inflammation	3 (6%)	5 (10%)	2 (4%)	1 (2%)
Testes	(50)	(50)	(50)	(50)
Edema	35 (70%)	32 (64%)	37 (74%)	36 (72%)
Arteriole, Necrosis, Fibrinoid			1 (2%)	
Germinal Epithelium, Atrophy		4 (8%)	1 (2%)	2 (4%)
Germinal Epithelium, Mineralization				2 (4%)

HEMATOPOIETIC SYSTEM

Bone Marrow	(50)	(50)	(50)	(50)
Lymph Node	(3)	(0)	(2)	(1)
Mediastinal, Hyperplasia, Lymphoid	1 (33%)			

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Wistar Han RATS MALE	0 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg
Renal, Ectasia			1 (50%)	
Lymph Node, Mandibular Atrophy	(49)	(50)	(50)	(48)
Ectasia		1 (2%)		
Lymph Node, Mesenteric Atrophy	(50)	(50)	(50)	(50)
Ectasia		1 (2%)		
Hyperplasia, Lymphoid Necrosis		1 (2%)	1 (2%)	4 (8%)
Spleen	(50)	(50)	(50)	(50)
Angiectasis		1 (2%)		
Congestion		1 (2%)		
Hematopoietic Cell Proliferation Necrosis	8 (16%) 1 (2%)	15 (30%)	9 (18%)	10 (20%)
Capsule, Fibrosis		1 (2%)		
Lymphoid Follicle, Atrophy	6 (12%)	5 (10%)		2 (4%)
Thymus	(49)	(49)	(49)	(50)
Atrophy	39 (80%)	46 (94%)	44 (90%)	45 (90%)
Hyperplasia	1 (2%)			
Inflammation, Chronic	1 (2%)			
<b>INTEGUMENTARY SYSTEM</b>				
Mammary Gland	(47)	(50)	(50)	(50)
Skin	(50)	(50)	(50)	(50)
Inflammation	1 (2%)			
Ulcer	10 (20%)	7 (14%)	3 (6%)	6 (12%)
Epidermis, Hyperplasia		1 (2%)		
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone	(50)	(50)	(50)	(50)
Osteosclerosis				1 (2%)
Skeletal Muscle	(1)	(0)	(0)	(1)

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<b>NERVOUS SYSTEM</b>				
Brain	(50)	(50)	(50)	(50)
Compression	9 (18%)	12 (24%)	9 (18%)	5 (10%)
Gliosis				1 (2%)
Peripheral Nerve	(0)	(2)	(1)	(0)
Axon, Degeneration		1 (50%)	1 (100%)	
Spinal Cord	(0)	(2)	(1)	(0)
Axon, Degeneration		1 (50%)	1 (100%)	
<b>RESPIRATORY SYSTEM</b>				
Lung	(50)	(50)	(50)	(50)
Foreign Body				1 (2%)
Hemorrhage		1 (2%)		
Inflammation, Granulomatous	2 (4%)	2 (4%)		3 (6%)
Inflammation, Chronic	8 (16%)	6 (12%)	6 (12%)	6 (12%)
Metaplasia, Osseous				3 (6%)
Alveolar Epithelium, Necrosis		1 (2%)		
Alveolus, Inflammation	1 (2%)			
Arteriole, Thrombosis		1 (2%)		
Bronchiole, Hyperplasia	3 (6%)	2 (4%)	1 (2%)	4 (8%)
Vein, Necrosis				1 (2%)
Nose	(50)	(50)	(50)	(50)
Inflammation	8 (16%)	5 (10%)	7 (14%)	8 (16%)
Ulcer	1 (2%)			
Goblet Cell, Hyperplasia	1 (2%)			1 (2%)
Olfactory Epithelium, Degeneration			2 (4%)	
Trachea	(50)	(50)	(50)	(50)
Inflammation	2 (4%)			
Inflammation, Chronic		1 (2%)		
Perforation				1 (2%)
Peritracheal Tissue, Inflammation	1 (2%)			

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Wistar Han RATS MALE	0 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(50)	(50)	(50)	(50)
Cataract			1 (2%)	
Inflammation	1 (2%)			
Inflammation, Acute		1 (2%)		
Retina, Atrophy	1 (2%)	1 (2%)	3 (6%)	
Harderian Gland	(49)	(50)	(50)	(50)
Hyperplasia		1 (2%)	1 (2%)	2 (4%)
Inflammation	1 (2%)			
<b>URINARY SYSTEM</b>				
Kidney	(50)	(50)	(50)	(50)
Cyst	1 (2%)	1 (2%)	4 (8%)	3 (6%)
Hydronephrosis		2 (4%)	1 (2%)	1 (2%)
Infarct				1 (2%)
Inflammation, Suppurative, Multifocal		1 (2%)		
Inflammation, Suppurative				1 (2%)
Inflammation, Chronic				2 (4%)
Metaplasia, Lipocyte			1 (2%)	
Metaplasia, Osseous				1 (2%)
Nephropathy	39 (78%)	30 (60%)	35 (70%)	31 (62%)
Pelvis, Inflammation, Suppurative	4 (8%)	2 (4%)	2 (4%)	5 (10%)
Renal Tubule, Accumulation, Hyaline Droplet	1 (2%)		1 (2%)	
Renal Tubule, Dilatation			1 (2%)	
Urethra	(1)	(0)	(0)	(0)
Inflammation, Chronic	1 (100%)			
Urinary Bladder	(50)	(50)	(50)	(50)
Inflammation			1 (2%)	
Transitional Epithelium, Hyperplasia		1 (2%)		

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Wistar Han RATS MALE

0 mg/kg

250 mg/kg

500 mg/kg

1000 mg/kg

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

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Wistar Han RATS FEMALE	0 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg
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**Disposition Summary**

<b>Animals Initially In Study</b>	<b>60</b>	<b>50</b>	<b>50</b>	<b>60</b>
<b>Early Deaths</b>				
<b>Dosing Accident</b>	<b>3</b>			<b>4</b>
<b>Moribund Sacrifice</b>	<b>8</b>	<b>14</b>	<b>15</b>	<b>10</b>
<b>Natural Death</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>3</b>
<b>Survivors</b>				
<b>Moribund Sacrifice</b>	<b>1</b>			<b>1</b>
<b>Terminal Sacrifice</b>	<b>34</b>	<b>34</b>	<b>29</b>	<b>32</b>
<b>Animals Examined Microscopically</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>50</b>

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**ALIMENTARY SYSTEM**

Esophagus	(50)	(49)	(50)	(50)
Inflammation	1 (2%)			
Inflammation, Acute				1 (2%)
Perforation	3 (6%)			3 (6%)
Intestine Large, Cecum	(50)	(49)	(50)	(50)
Inflammation			1 (2%)	
Inflammation, Suppurative		1 (2%)		
Intestine Large, Colon	(50)	(50)	(50)	(50)
Inflammation, Suppurative		1 (2%)		
Parasite Metazoan		1 (2%)		
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Parasite Metazoan	3 (6%)	2 (4%)	2 (4%)	1 (2%)
Intestine Small	(0)	(1)	(0)	(0)
Intestine Small, Duodenum	(50)	(50)	(50)	(50)
Intestine Small, Ileum	(50)	(49)	(50)	(50)
Parasite Metazoan	1 (2%)		1 (2%)	
Lymphoid Tissue, Hyperplasia				1 (2%)
Intestine Small, Jejunum	(50)	(50)	(50)	(50)
Liver	(50)	(50)	(50)	(50)
Angiectasis	1 (2%)	1 (2%)		
Basophilic Focus	47 (94%)	38 (76%)	40 (80%)	47 (94%)
Clear Cell Focus	24 (48%)	19 (38%)	19 (38%)	18 (36%)

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Wistar Han RATS FEMALE	0 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg
Congestion	1 (2%)			
Cyst		1 (2%)		
Eosinophilic Focus	1 (2%)	2 (4%)	3 (6%)	1 (2%)
Fatty Change	11 (22%)	12 (24%)	7 (14%)	7 (14%)
Hematopoietic Cell Proliferation	1 (2%)			
Hepatodiaphragmatic Nodule	1 (2%)		1 (2%)	
Inflammation, Suppurative		1 (2%)		
Mixed Cell Focus	13 (26%)	22 (44%)	12 (24%)	20 (40%)
Necrosis		1 (2%)	4 (8%)	2 (4%)
Pigmentation		1 (2%)		
Bile Duct, Cyst	2 (4%)		3 (6%)	1 (2%)
Bile Duct, Hyperplasia	11 (22%)	29 (58%)	21 (42%)	20 (40%)
Centrilobular, Necrosis			1 (2%)	
Oval Cell, Hyperplasia				1 (2%)
Mesentery	(2)	(8)	(5)	(4)
Fat, Necrosis	2 (100%)	3 (38%)	2 (40%)	2 (50%)
Pancreas	(50)	(50)	(50)	(50)
Acinus, Atrophy	4 (8%)	4 (8%)	1 (2%)	
Duct, Cyst	2 (4%)			
Salivary Glands	(50)	(48)	(49)	(49)
Duct, Hyperplasia	1 (2%)			
Duct, Metaplasia, Squamous	1 (2%)			
Stomach, Forestomach	(50)	(50)	(50)	(50)
Inflammation, Suppurative		1 (2%)		
Inflammation, Chronic	2 (4%)	1 (2%)	2 (4%)	2 (4%)
Ulcer	1 (2%)		1 (2%)	
Epithelium, Hyperplasia				1 (2%)
Stomach, Glandular	(50)	(50)	(50)	(50)
Inflammation, Suppurative		1 (2%)		
Inflammation, Acute			1 (2%)	
Inflammation, Chronic	1 (2%)	2 (4%)		
Mineralization	6 (12%)	1 (2%)	1 (2%)	2 (4%)
Ulcer		1 (2%)	2 (4%)	

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Wistar Han RATS FEMALE	0 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg
<b>CARDIOVASCULAR SYSTEM</b>				
Blood Vessel	(50)	(50)	(50)	(50)
Mineralization	1 (2%)			
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	9 (18%)	10 (20%)	3 (6%)	7 (14%)
Congestion	1 (2%)			
Endocardium, Hyperplasia	2 (4%)	2 (4%)	1 (2%)	
Myocardium, Mineralization	1 (2%)			
Pericardium, Inflammation, Acute				1 (2%)
<b>ENDOCRINE SYSTEM</b>				
Adrenal Cortex	(50)	(50)	(50)	(50)
Angiectasis	12 (24%)	7 (14%)	6 (12%)	9 (18%)
Degeneration, Cystic	1 (2%)	1 (2%)	1 (2%)	
Fibrosis			1 (2%)	
Hyperplasia	7 (14%)	7 (14%)	7 (14%)	11 (22%)
Inflammation, Suppurative				1 (2%)
Mineralization				1 (2%)
Necrosis		1 (2%)		
Vacuolization Cytoplasmic	2 (4%)	3 (6%)	5 (10%)	2 (4%)
Capsule, Fibrosis	1 (2%)			
Adrenal Medulla	(49)	(50)	(50)	(50)
Hemorrhage				2 (4%)
Hyperplasia	2 (4%)	2 (4%)		2 (4%)
Inflammation, Suppurative				1 (2%)
Thrombosis			1 (2%)	
Islets, Pancreatic	(50)	(50)	(50)	(50)
Hyperplasia	1 (2%)	1 (2%)	1 (2%)	1 (2%)
Parathyroid Gland	(48)	(39)	(48)	(49)
Pituitary Gland	(50)	(50)	(50)	(50)
Angiectasis	1 (2%)			
Cyst	1 (2%)	1 (2%)	1 (2%)	
Pars Distalis, Hyperplasia	16 (32%)	13 (26%)	14 (28%)	19 (38%)

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

Experiment Number: 20320 - 03  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Wistar Han

**P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)**  
 Tetrabromobisphenol A  
 CAS Number: 79-94-7

Date Report Requested: 01/23/2013  
 Time Report Requested: 15:06:22  
 First Dose M/F: 07/25/07 / 07/26/07  
 Lab: BAT

Wistar Han RATS FEMALE	0 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg
Pars Intermedia, Hyperplasia	2 (4%)	3 (6%)	2 (4%)	1 (2%)
Thyroid Gland	(50)	(48)	(50)	(50)
C-cell, Hyperplasia	32 (64%)	37 (77%)	39 (78%)	36 (72%)
Follicle, Hyperplasia	2 (4%)	4 (8%)	3 (6%)	1 (2%)
Follicular Cell, Hyperplasia	1 (2%)			

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Clitoral Gland	(50)	(50)	(50)	(50)
Hyperplasia			1 (2%)	
Inflammation	4 (8%)	2 (4%)	4 (8%)	5 (10%)
Ovary	(50)	(49)	(50)	(49)
Cyst	1 (2%)	4 (8%)	4 (8%)	6 (12%)
Inflammation, Acute	1 (2%)			
Stromal Hyperplasia, Mixed Cell	1 (2%)			
Bilateral, Cyst	1 (2%)			
Bursa, Dilatation	4 (8%)	2 (4%)	5 (10%)	8 (16%)
Rete Ovarii, Cyst	1 (2%)		6 (12%)	6 (12%)
Uterus	(50)	(50)	(50)	(50)
Adenomyosis				2 (4%)
Cyst	1 (2%)			1 (2%)
Dilatation	1 (2%)	4 (8%)	3 (6%)	2 (4%)
Hyperplasia, Glandular, Focal			1 (2%)	
Inflammation, Suppurative	7 (14%)	3 (6%)	2 (4%)	3 (6%)
Ulcer				1 (2%)
Cervix, Hyperplasia, Stromal		1 (2%)	4 (8%)	2 (4%)
Endometrium, Hyperplasia, Adenomatous				1 (2%)
Endometrium, Hyperplasia, Cystic	8 (16%)	13 (26%)	11 (22%)	18 (36%)
Vagina	(1)	(1)	(1)	(1)
Cyst			1 (100%)	
Necrosis	1 (100%)			

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Wistar Han RATS FEMALE	0 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg
<b>HEMATOPOIETIC SYSTEM</b>				
Bone Marrow	(50)	(50)	(50)	(50)
Lymph Node	(0)	(1)	(1)	(0)
Mediastinal, Congestion		1 (100%)		
Mediastinal, Ectasia			1 (100%)	
Lymph Node, Mandibular	(50)	(48)	(49)	(49)
Lymph Node, Mediastinal	(0)	(0)	(1)	(0)
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Hyperplasia, Plasma Cell		1 (2%)		
Inflammation, Suppurative		1 (2%)		
Spleen	(50)	(50)	(50)	(50)
Hematopoietic Cell Proliferation	26 (52%)	30 (60%)	26 (52%)	26 (52%)
Inflammation, Suppurative		1 (2%)		
Lymphoid Follicle, Atrophy	3 (6%)	2 (4%)	2 (4%)	1 (2%)
Red Pulp, Atrophy		1 (2%)		
Thymus	(50)	(50)	(49)	(50)
Atrophy	43 (86%)	43 (86%)	40 (82%)	45 (90%)
Cyst			1 (2%)	
Hemorrhage				1 (2%)
Hyperplasia	1 (2%)	2 (4%)		
Epithelial Cell, Hyperplasia		1 (2%)		
<b>INTEGUMENTARY SYSTEM</b>				
Mammary Gland	(50)	(50)	(50)	(50)
Galactocele	3 (6%)	1 (2%)	2 (4%)	2 (4%)
Hyperplasia	1 (2%)	2 (4%)		
Inflammation, Suppurative				1 (2%)
Skin	(50)	(50)	(50)	(50)
Inflammation			1 (2%)	
Ulcer			1 (2%)	
Epidermis, Hyperplasia				1 (2%)
Vein, Cyst				1 (2%)

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Experiment Number: 20320 - 03  
 Test Type: CHRONIC  
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Wistar Han RATS FEMALE	0 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone	(50)	(50)	(50)	(50)
Fracture				1 (2%)
Hyperplasia			1 (2%)	
Skeletal Muscle	(0)	(2)	(1)	(1)
Inflammation, Acute				1 (100%)
<b>NERVOUS SYSTEM</b>				
Brain	(50)	(50)	(50)	(50)
Compression	11 (22%)	10 (20%)	9 (18%)	6 (12%)
Hippocampus, Necrosis	1 (2%)			
Meninges, Inflammation, Acute	1 (2%)			
Peripheral Nerve	(0)	(1)	(0)	(0)
Spinal Cord	(0)	(1)	(0)	(0)
<b>RESPIRATORY SYSTEM</b>				
Lung	(50)	(50)	(50)	(50)
Congestion			1 (2%)	
Inflammation, Granulomatous	1 (2%)	2 (4%)		4 (8%)
Inflammation, Chronic	2 (4%)		3 (6%)	1 (2%)
Alveolar Epithelium, Hyperplasia	1 (2%)	2 (4%)	1 (2%)	
Bronchiole, Hyperplasia	1 (2%)	1 (2%)		1 (2%)
Serosa, Inflammation, Suppurative				1 (2%)
Nose	(50)	(50)	(50)	(50)
Inflammation	11 (22%)	8 (16%)	7 (14%)	9 (18%)
Trachea	(50)	(49)	(50)	(50)
Inflammation	2 (4%)			

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Wistar Han RATS FEMALE	0 mg/kg	250 mg/kg	500 mg/kg	1000 mg/kg
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(50)	(48)	(49)	(49)
Cataract			2 (4%)	1 (2%)
Degeneration	1 (2%)			1 (2%)
Malformation	1 (2%)			
Cornea, Inflammation		1 (2%)		
Retina, Atrophy		2 (4%)	3 (6%)	4 (8%)
Harderian Gland	(50)	(48)	(49)	(49)
Inflammation		1 (2%)		1 (2%)
<hr/>				
<b>URINARY SYSTEM</b>				
Kidney	(50)	(50)	(50)	(50)
Accumulation, Hyaline Droplet				1 (2%)
Cyst	2 (4%)	1 (2%)	2 (4%)	
Hydronephrosis	1 (2%)	1 (2%)		2 (4%)
Infarct		1 (2%)	1 (2%)	
Inflammation, Suppurative		2 (4%)		1 (2%)
Inflammation, Chronic	1 (2%)			
Nephropathy	9 (18%)	15 (30%)	13 (26%)	9 (18%)
Thrombosis		2 (4%)		
Pelvis, Inflammation, Suppurative	2 (4%)	4 (8%)	3 (6%)	1 (2%)
Renal Tubule, Autolysis	1 (2%)	1 (2%)	1 (2%)	
Urinary Bladder	(50)	(50)	(50)	(50)
Inflammation	1 (2%)			1 (2%)

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

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