

Experiment Number: 03038 - 04
Test Type: CHRONIC
Route: DOSED WATER
Species/Strain: MICE/B6C3F1/N

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

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:11:56

First Dose M/F: 01/17/12 / 01/16/12

Lab: BAT

Final Version 2

NTP Study Number: C03038
Lock Date: 05/25/2016
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 3.0.2.3_002
PWG Approval Date: NONE

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B6C3F1/N MICE MALE	0 mg/L	500 mg/L	1000 mg/L	2000 mg/L
Disposition Summary				
Animals Initially In Study	50	50	50	50
Early Deaths				
Accidentally Killed	1			
Moribund Sacrifice	5	3	4	5
Natural Death	18	16	9	9
Survivors				
Moribund Sacrifice				1
Natural Death			2	
Terminal Sacrifice	26	31	35	35
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(50)	(50)	(50)	(50)
Inflammation, Chronic Active	1 (2%)	1 (2%)		
Gallbladder	(48)	(47)	(50)	(49)
Intestine Large, Cecum	(50)	(50)	(50)	(50)
Edema			1 (2%)	
Hemorrhage		1 (2%)		
Pigment	3 (6%)	7 (14%)	17 (34%)	32 (64%)
Intestine Large, Colon	(50)	(50)	(50)	(50)
Edema			1 (2%)	
Ulcer			1 (2%)	
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Inflammation, Acute		1 (2%)		
Intestine Small, Duodenum	(49)	(50)	(50)	(50)
Intestine Small, Ileum	(50)	(50)	(50)	(50)
Edema			1 (2%)	
Intestine Small, Jejunum	(50)	(50)	(50)	(50)
Inflammation, Chronic Active	1 (2%)			
Ulcer	1 (2%)			
Peyer's Patch, Hyperplasia	1 (2%)		1 (2%)	1 (2%)
Liver	(50)	(50)	(50)	(50)
Angiectasis	1 (2%)	1 (2%)		

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

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B6C3F1/N MICE MALE	0 mg/L	500 mg/L	1000 mg/L	2000 mg/L
Atypia Cellular				2 (4%)
Basophilic Focus	2 (4%)	5 (10%)	5 (10%)	7 (14%)
Clear Cell Focus	16 (32%)	14 (28%)	12 (24%)	13 (26%)
Eosinophilic Focus	23 (46%)	20 (40%)	25 (50%)	14 (28%)
Extramedullary Hematopoiesis	4 (8%)	1 (2%)	3 (6%)	1 (2%)
Fatty Change, Diffuse	2 (4%)		4 (8%)	2 (4%)
Hemorrhage			1 (2%)	1 (2%)
Hepatodiaphragmatic Nodule				1 (2%)
Hyperplasia, Nodular			2 (4%)	
Infiltration Cellular, Mixed Cell	1 (2%)	6 (12%)	5 (10%)	4 (8%)
Karyomegaly				1 (2%)
Mineral	1 (2%)			
Mixed Cell Focus	8 (16%)	4 (8%)	11 (22%)	9 (18%)
Bile Duct, Cyst	1 (2%)			1 (2%)
Bile Duct, Inflammation, Chronic		1 (2%)		
Hepatocyte, Fatty Change, Focal	2 (4%)	5 (10%)	4 (8%)	5 (10%)
Hepatocyte, Multinucleated				1 (2%)
Hepatocyte, Necrosis	9 (18%)	8 (16%)	3 (6%)	8 (16%)
Mesentery	(8)	(3)	(6)	(4)
Inflammation, Chronic Active	3 (38%)			
Polyarteritis Nodosa		1 (33%)		
Artery, Inflammation, Chronic Active			1 (17%)	
Fat, Necrosis	2 (25%)	2 (67%)	3 (50%)	2 (50%)
Oral Mucosa	(0)	(1)	(0)	(0)
Pancreas	(50)	(50)	(50)	(50)
Acinus, Atrophy	2 (4%)	2 (4%)		
Duct, Cyst	1 (2%)			
Salivary Glands	(50)	(50)	(50)	(50)
Duct, Hyperplasia	1 (2%)			
Stomach, Forestomach	(50)	(50)	(50)	(50)
Cyst		1 (2%)	1 (2%)	
Hyperkeratosis			1 (2%)	
Infiltration Cellular, Mast Cell			1 (2%)	
Ulcer	2 (4%)		1 (2%)	
Epithelium, Hyperplasia	2 (4%)	2 (4%)	3 (6%)	
Stomach, Glandular	(50)	(50)	(50)	(50)

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B6C3F1/N MICE MALE	0 mg/L	500 mg/L	1000 mg/L	2000 mg/L
Cyst		3 (6%)		
Erosion	1 (2%)	1 (2%)	1 (2%)	1 (2%)
Mineral		2 (4%)	1 (2%)	
Polyarteritis Nodosa		1 (2%)		
Ulcer	1 (2%)			
Epithelium, Degeneration				1 (2%)
Glands, Degeneration			1 (2%)	
Tooth	(42)	(33)	(44)	(35)
Dental Dysplasia	41 (98%)	31 (94%)	43 (98%)	34 (97%)
Inflammation, Suppurative		1 (3%)		4 (11%)
Inflammation, Chronic Active	2 (5%)		1 (2%)	

CARDIOVASCULAR SYSTEM

Blood Vessel	(49)	(50)	(50)	(50)
Polyarteritis Nodosa		1 (2%)		
Aorta, Necrosis				1 (2%)
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	7 (14%)	3 (6%)	6 (12%)	4 (8%)
Hemorrhage	1 (2%)			
Inflammation, Suppurative			1 (2%)	
Inflammation, Acute		1 (2%)		
Mineral			2 (4%)	1 (2%)
Polyarteritis Nodosa		1 (2%)		
Thrombus		1 (2%)		
Atrium, Thrombus	1 (2%)	2 (4%)		
Coronary Artery, Inflammation, Chronic Active	1 (2%)			
Valve, Inflammation, Suppurative				1 (2%)

ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(50)	(50)	(50)
Accessory Adrenal Cortical Nodule		2 (4%)	2 (4%)	2 (4%)
Angiectasis			1 (2%)	
Extramedullary Hematopoiesis		1 (2%)	1 (2%)	

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Hyperplasia	5 (10%)	4 (8%)	3 (6%)	3 (6%)
Hypertrophy	19 (38%)	20 (40%)	21 (42%)	17 (34%)
Necrosis	1 (2%)	1 (2%)		
Subcapsular, Hyperplasia	1 (2%)	6 (12%)	4 (8%)	3 (6%)
Adrenal Medulla	(49)	(50)	(48)	(50)
Hyperplasia		1 (2%)		
Islets, Pancreatic	(47)	(50)	(49)	(50)
Hyperplasia	37 (79%)	33 (66%)	32 (65%)	28 (56%)
Parathyroid Gland	(44)	(43)	(48)	(43)
Cyst		1 (2%)		
Pituitary Gland	(48)	(50)	(49)	(50)
Cyst		2 (4%)	1 (2%)	2 (4%)
Pars Distalis, Hyperplasia	2 (4%)	2 (4%)	3 (6%)	1 (2%)
Thyroid Gland	(50)	(49)	(50)	(50)
Infiltration Cellular, Lymphocyte			1 (2%)	
C-cell, Hyperplasia		1 (2%)		
Follicle, Cyst	1 (2%)		2 (4%)	
Follicle, Degeneration	12 (24%)	8 (16%)	8 (16%)	9 (18%)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Coagulating Gland	(0)	(0)	(1)	(0)
Epididymis	(50)	(49)	(50)	(50)
Atrophy		1 (2%)		1 (2%)
Granuloma Sperm	3 (6%)	1 (2%)	1 (2%)	
Infiltration Cellular, Mononuclear Cell	1 (2%)			
Inflammation, Chronic Active	1 (2%)	1 (2%)		1 (2%)
Spermatocele		1 (2%)		
Preputial Gland	(49)	(50)	(50)	(50)
Cyst	14 (29%)	16 (32%)	20 (40%)	15 (30%)
Hyperplasia				1 (2%)

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Inflammation, Suppurative	7 (14%)	13 (26%)	8 (16%)	4 (8%)
Inflammation, Chronic Active	6 (12%)	2 (4%)	6 (12%)	9 (18%)
Prostate	(50)	(50)	(50)	(50)
Hyperplasia		1 (2%)	1 (2%)	
Inflammation, Suppurative	1 (2%)			1 (2%)
Inflammation, Chronic Active	5 (10%)	2 (4%)	3 (6%)	
Artery, Inflammation, Chronic Active			1 (2%)	
Seminal Vesicle	(50)	(50)	(50)	(50)
Atrophy	1 (2%)			
Inflammation, Suppurative	3 (6%)			1 (2%)
Inflammation, Chronic Active	3 (6%)		1 (2%)	
Testis	(50)	(50)	(50)	(50)
Inflammation, Suppurative		1 (2%)		
Germinal Epithelium, Atrophy			1 (2%)	
Germinal Epithelium, Degeneration	11 (22%)	20 (40%)	20 (40%)	20 (40%)
Germinal Epithelium, Pigment	1 (2%)			

HEMATOPOIETIC SYSTEM

Bone Marrow	(50)	(50)	(50)	(50)
Angiectasis	1 (2%)			
Atrophy	1 (2%)			
Hypercellularity	15 (30%)	35 (70%)	26 (52%)	19 (38%)
Hypocellularity				1 (2%)
Lymph Node	(3)	(4)	(6)	(1)
Atrophy	1 (33%)			
Hyperplasia, Lymphocyte		1 (25%)	1 (17%)	
Lymph Node, Mandibular	(48)	(50)	(49)	(48)
Atrophy	1 (2%)	1 (2%)		1 (2%)
Hyperplasia, Lymphocyte	1 (2%)		2 (4%)	1 (2%)
Hyperplasia, Plasma Cell	1 (2%)	4 (8%)	2 (4%)	
Infiltration Cellular, Neutrophil	1 (2%)	1 (2%)		
Infiltration Cellular, Histiocyte	2 (4%)	1 (2%)		
Infiltration Cellular, Mixed Cell	1 (2%)			
Pigment	1 (2%)			

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Lymph Node, Mesenteric	(50)	(46)	(48)	(48)
Angiectasis	2 (4%)			1 (2%)
Atrophy	4 (8%)	4 (9%)	2 (4%)	2 (4%)
Erythrophagocytosis		1 (2%)		
Extramedullary Hematopoiesis	4 (8%)	5 (11%)	5 (10%)	4 (8%)
Hemorrhage		2 (4%)		
Hyperplasia, Lymphocyte	3 (6%)		1 (2%)	1 (2%)
Hyperplasia, Plasma Cell			3 (6%)	1 (2%)
Infiltration Cellular, Neutrophil	1 (2%)			
Infiltration Cellular, Histiocyte	2 (4%)	1 (2%)		
Infiltration Cellular, Mixed Cell			1 (2%)	
Inflammation, Suppurative	1 (2%)			
Inflammation, Acute				1 (2%)
Lymphatic Sinus, Ectasia	1 (2%)			
Spleen	(49)	(50)	(49)	(50)
Amyloid		1 (2%)		
Extramedullary Hematopoiesis	10 (20%)	17 (34%)	10 (20%)	5 (10%)
Hemorrhage		1 (2%)		
Pigment			1 (2%)	2 (4%)
Capsule, Fibrosis			1 (2%)	
Red Pulp, Atrophy	6 (12%)	3 (6%)	3 (6%)	7 (14%)
White Pulp, Atrophy	8 (16%)	6 (12%)	5 (10%)	8 (16%)
White Pulp, Hyperplasia	3 (6%)			2 (4%)
Thymus	(45)	(44)	(44)	(41)
Atrophy	19 (42%)	14 (32%)	10 (23%)	6 (15%)
Hyperplasia, Atypical, Lymphocyte	2 (4%)			
Inflammation, Chronic Active		1 (2%)		
Polyarteritis Nodosa		1 (2%)		

INTEGUMENTARY SYSTEM

Mammary Gland	(1)	(2)	(2)	(4)
Cyst			1 (50%)	
Inflammation, Suppurative			1 (50%)	
Skin	(50)	(50)	(50)	(50)

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B6C3F1/N MICE MALE	0 mg/L	500 mg/L	1000 mg/L	2000 mg/L
Cyst			1 (2%)	
Ulcer	1 (2%)		2 (4%)	
Epidermis, Hyperplasia		1 (2%)		
Subcutaneous Tissue, Edema	1 (2%)	2 (4%)		
Subcutaneous Tissue, Inflammation, Chronic Active		1 (2%)		
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Fibro-Osseous Lesion	4 (8%)	3 (6%)	4 (8%)	4 (8%)
Increased Bone	2 (4%)			
Joint, Degeneration	1 (2%)			
Skeletal Muscle	(1)	(1)	(1)	(0)
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Hemorrhage	2 (4%)			
Infiltration Cellular, Lymphocyte			1 (2%)	1 (2%)
Necrosis		2 (4%)	3 (6%)	
Polyarteritis Nodosa		1 (2%)		
Thrombus	1 (2%)			
Artery, Amyloid		1 (2%)		
Choroid Plexus, Hyperplasia			1 (2%)	
Brain Trigeminal Ganglion	(0)	(0)	(1)	(0)
Peripheral Nerve	(0)	(0)	(1)	(0)
Spinal Cord	(1)	(0)	(1)	(0)
RESPIRATORY SYSTEM				
Lung	(50)	(50)	(50)	(50)
Infiltration Cellular, Histiocyte				2 (4%)
Inflammation, Chronic		1 (2%)		

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B6C3F1/N MICE MALE	0 mg/L	500 mg/L	1000 mg/L	2000 mg/L
Pigment	1 (2%)			
Thrombus	1 (2%)			
Alveolar Epithelium, Hyperplasia	1 (2%)	3 (6%)	7 (14%)	5 (10%)
Alveolus, Pigment		1 (2%)		
Serosa, Inflammation, Chronic Active			1 (2%)	
Nose	(50)	(50)	(50)	(50)
Foreign Body		2 (4%)	1 (2%)	
Inflammation, Suppurative	1 (2%)	1 (2%)		1 (2%)
Inflammation, Chronic Active		1 (2%)	1 (2%)	
Polyp, Inflammatory	1 (2%)	1 (2%)	1 (2%)	
Olfactory Epithelium, Metaplasia, Respiratory	19 (38%)	16 (32%)	12 (24%)	10 (20%)
Respiratory Epithelium, Accumulation, Hyaline Droplet		5 (10%)		1 (2%)
Respiratory Epithelium, Hyperplasia	4 (8%)	1 (2%)	4 (8%)	6 (12%)
Trachea	(50)	(50)	(50)	(50)
SPECIAL SENSES SYSTEM				
Ear	(1)	(0)	(0)	(0)
Eye	(50)	(50)	(50)	(50)
Phthisis Bulbi		1 (2%)	1 (2%)	1 (2%)
Cornea, Inflammation, Acute		1 (2%)	1 (2%)	1 (2%)
Lens, Cataract		1 (2%)		2 (4%)
Retina, Dysplasia			4 (8%)	
Harderian Gland	(50)	(50)	(50)	(50)
Hyperplasia		3 (6%)	1 (2%)	1 (2%)
Inflammation, Suppurative				1 (2%)
URINARY SYSTEM				
Kidney	(50)	(50)	(50)	(50)
Bacteria	2 (4%)			
Cyst			1 (2%)	7 (14%)
Glomerulosclerosis	2 (4%)			
Infarct	3 (6%)		4 (8%)	4 (8%)

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Infiltration Cellular, Mononuclear Cell	1 (2%)			
Infiltration Cellular, Plasma Cell	1 (2%)			
Inflammation, Suppurative	1 (2%)			
Metaplasia, Osseous	1 (2%)		1 (2%)	3 (6%)
Mineral	18 (36%)	10 (20%)	9 (18%)	6 (12%)
Nephropathy, Chronic Progressive	43 (86%)	48 (96%)	47 (94%)	47 (94%)
Pigment	30 (60%)	10 (20%)	18 (36%)	44 (88%)
Polyarteritis Nodosa		1 (2%)		
Thrombus				1 (2%)
Artery, Infiltration Cellular, Lymphocyte				1 (2%)
Artery, Inflammation, Chronic Active	1 (2%)		1 (2%)	1 (2%)
Glomerulus, Amyloid		1 (2%)		
Papilla, Mineral			1 (2%)	
Papilla, Necrosis	1 (2%)		1 (2%)	
Pelvis, Dilation	3 (6%)			
Pelvis, Inflammation, Suppurative	1 (2%)	1 (2%)		1 (2%)
Pelvis, Inflammation, Chronic Active	2 (4%)	1 (2%)		
Renal Tubule, Accumulation, Hyaline Droplet			1 (2%)	
Renal Tubule, Atypia Cellular				1 (2%)
Renal Tubule, Cyst	5 (10%)	7 (14%)	6 (12%)	9 (18%)
Renal Tubule, Hyperplasia		3 (6%)	1 (2%)	
Renal Tubule, Necrosis				3 (6%)
Renal Tubule, Regeneration	2 (4%)	21 (42%)	32 (64%)	38 (76%)
Ureter	(1)	(0)	(0)	(0)
Urethra	(1)	(0)	(0)	(0)
Inflammation, Chronic Active	1 (100%)			
Urinary Bladder	(50)	(50)	(50)	(50)
Inflammation, Suppurative				1 (2%)
Inflammation, Chronic Active	1 (2%)	1 (2%)		

*** END OF MALE ***

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Disposition Summary

Animals Initially In Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	2	1	2	
Natural Death	10	8	10	10
Survivors				
Natural Death		1		
Terminal Sacrifice	38	40	38	40
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(50)	(50)	(50)	(50)
Inflammation, Chronic Active	1 (2%)		2 (4%)	2 (4%)
Gallbladder	(48)	(50)	(47)	(50)
Cyst		1 (2%)		
Inflammation, Chronic Active				1 (2%)
Intestine Large, Cecum	(50)	(50)	(50)	(50)
Pigment		3 (6%)	7 (14%)	14 (28%)
Polyarteritis Nodosa				1 (2%)
Intestine Large, Colon	(50)	(50)	(50)	(50)
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Polyarteritis Nodosa				1 (2%)
Intestine Small, Duodenum	(49)	(50)	(50)	(49)
Polyarteritis Nodosa				1 (2%)
Intestine Small, Ileum	(50)	(50)	(50)	(50)
Polyarteritis Nodosa				1 (2%)
Intestine Small, Jejunum	(50)	(50)	(49)	(50)
Inflammation, Chronic	1 (2%)			
Inflammation, Chronic Active	2 (4%)			
Peyer's Patch, Hyperplasia, Lymphocyte		1 (2%)		
Peyer's Patch, Inflammation, Granulomatous			1 (2%)	
Liver	(50)	(50)	(50)	(50)
Angiectasis	1 (2%)	2 (4%)	4 (8%)	1 (2%)
Basophilic Focus	2 (4%)	7 (14%)	5 (10%)	2 (4%)

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B6C3F1/N MICE FEMALE	0 mg/L	500 mg/L	1000 mg/L	2000 mg/L
Clear Cell Focus	1 (2%)	1 (2%)	1 (2%)	1 (2%)
Eosinophilic Focus	8 (16%)	17 (34%)	16 (32%)	10 (20%)
Erythrophagocytosis	1 (2%)	1 (2%)		
Extramedullary Hematopoiesis	1 (2%)	2 (4%)	3 (6%)	1 (2%)
Fatty Change, Diffuse	6 (12%)	1 (2%)	1 (2%)	2 (4%)
Infiltration Cellular, Mixed Cell	24 (48%)	22 (44%)	27 (54%)	23 (46%)
Inflammation, Focal	14 (28%)	24 (48%)	21 (42%)	23 (46%)
Inflammation, Chronic Active		1 (2%)		
Mixed Cell Focus	1 (2%)	3 (6%)	2 (4%)	2 (4%)
Tension Lipidosis		1 (2%)		
Bile Duct, Cyst			1 (2%)	
Hepatocyte, Fatty Change, Focal	1 (2%)	2 (4%)	1 (2%)	
Hepatocyte, Necrosis	2 (4%)	4 (8%)	1 (2%)	5 (10%)
Mesentery	(10)	(12)	(13)	(7)
Inflammation, Granulomatous			1 (8%)	
Polyarteritis Nodosa				1 (14%)
Fat, Necrosis	8 (80%)	9 (75%)	10 (77%)	4 (57%)
Oral Mucosa	(1)	(0)	(1)	(0)
Gingival, Foreign Body			1 (100%)	
Gingival, Inflammation, Chronic			1 (100%)	
Pancreas	(50)	(50)	(50)	(50)
Basophilic Focus	1 (2%)	1 (2%)		
Inflammation, Chronic Active				1 (2%)
Acinus, Atrophy	1 (2%)	1 (2%)		1 (2%)
Acinus, Hyperplasia		1 (2%)		
Duct, Cyst	1 (2%)		2 (4%)	2 (4%)
Salivary Glands	(50)	(50)	(49)	(49)
Pigment	1 (2%)			
Stomach, Forestomach	(50)	(50)	(50)	(50)
Cyst		2 (4%)	1 (2%)	
Ulcer				1 (2%)
Epithelium, Hyperplasia	1 (2%)	2 (4%)	1 (2%)	2 (4%)
Stomach, Glandular	(50)	(50)	(50)	(50)
Cyst	2 (4%)	6 (12%)	6 (12%)	3 (6%)
Inflammation, Chronic Active				1 (2%)
Polyarteritis Nodosa				1 (2%)

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

Experiment Number: 03038 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1/N

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)
 Sodium Tungstate Dihydrate
 CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
 Time Report Requested: 10:11:56
 First Dose M/F: 01/17/12 / 01/16/12
 Lab: BAT

B6C3F1/N MICE FEMALE	0 mg/L	500 mg/L	1000 mg/L	2000 mg/L
Epithelium, Hyperplasia			1 (2%)	
Glands, Necrosis		1 (2%)		
Tongue	(1)	(1)	(0)	(0)
Tooth	(2)	(5)	(2)	(1)
Dental Dysplasia	2 (100%)	5 (100%)	2 (100%)	1 (100%)

CARDIOVASCULAR SYSTEM

Blood Vessel	(47)	(50)	(49)	(50)
Polyarteritis Nodosa				1 (2%)
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	1 (2%)	1 (2%)		3 (6%)
Inflammation, Suppurative	1 (2%)			
Inflammation, Chronic Active				1 (2%)
Mineral	1 (2%)	1 (2%)		
Thrombus	1 (2%)			
Artery, Inflammation, Chronic			1 (2%)	
Artery, Inflammation, Chronic Active	1 (2%)			
Artery, Metaplasia, Cartilagenous	1 (2%)			
Atrium, Thrombus			1 (2%)	
Coronary Artery, Inflammation, Chronic Active		1 (2%)		
Epicardium, Inflammation, Chronic Active				1 (2%)
Valve, Inflammation, Suppurative				1 (2%)
Valve, Inflammation, Acute				1 (2%)
Valve, Inflammation, Chronic		1 (2%)		1 (2%)
Valve, Inflammation, Chronic Active		2 (4%)		
Valve, Thrombus		1 (2%)		2 (4%)

ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(50)	(50)	(50)
Accessory Adrenal Cortical Nodule	3 (6%)	1 (2%)	3 (6%)	2 (4%)
Angiectasis			1 (2%)	
Extramedullary Hematopoiesis	1 (2%)			2 (4%)
Hemorrhage		1 (2%)		

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Experiment Number: 03038 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1/N

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

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:11:56

First Dose M/F: 01/17/12 / 01/16/12

Lab: BAT

B6C3F1/N MICE FEMALE	0 mg/L	500 mg/L	1000 mg/L	2000 mg/L
Hyperplasia		1 (2%)		1 (2%)
Hypertrophy	1 (2%)		1 (2%)	3 (6%)
Necrosis				1 (2%)
Subcapsular, Hyperplasia	1 (2%)			1 (2%)
Adrenal Medulla	(50)	(50)	(50)	(49)
Hyperplasia			1 (2%)	2 (4%)
Thrombus		1 (2%)		
Islets, Pancreatic	(48)	(50)	(49)	(50)
Hyperplasia	5 (10%)	10 (20%)	4 (8%)	4 (8%)
Parathyroid Gland	(45)	(40)	(42)	(43)
Cyst		2 (5%)	3 (7%)	
Pituitary Gland	(50)	(50)	(47)	(50)
Angiectasis	1 (2%)	2 (4%)		
Cyst	1 (2%)	1 (2%)	1 (2%)	
Pars Distalis, Hyperplasia	21 (42%)	23 (46%)	16 (34%)	18 (36%)
Thyroid Gland	(49)	(50)	(49)	(50)
Angiectasis			1 (2%)	
Inflammation, Chronic Active	1 (2%)	1 (2%)		
Follicle, Degeneration	19 (39%)	17 (34%)	19 (39%)	16 (32%)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Clitoral Gland	(49)	(49)	(49)	(49)
Ovary	(49)	(49)	(50)	(50)
Angiectasis	2 (4%)			1 (2%)
Atrophy	2 (4%)			
Cyst	8 (16%)	4 (8%)	5 (10%)	3 (6%)
Corpus Luteum, Hyperplasia		1 (2%)	1 (2%)	
Follicle, Cyst	4 (8%)	7 (14%)	4 (8%)	4 (8%)
Follicle, Hemorrhage				1 (2%)
Interstitial Cell, Hyperplasia	1 (2%)			

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

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019
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 Lab: BAT

B6C3F1/N MICE FEMALE	0 mg/L	500 mg/L	1000 mg/L	2000 mg/L
Paraovarian Tissue, Cyst				2 (4%)
Uterus	(50)	(50)	(50)	(50)
Angiectasis	3 (6%)	1 (2%)	1 (2%)	2 (4%)
Fibrosis			1 (2%)	
Hemorrhage			1 (2%)	
Infiltration Cellular, Neutrophil	6 (12%)	3 (6%)	5 (10%)	4 (8%)
Infiltration Cellular, Mixed Cell	1 (2%)		1 (2%)	1 (2%)
Inflammation, Suppurative		2 (4%)	1 (2%)	1 (2%)
Inflammation, Acute	2 (4%)	2 (4%)		2 (4%)
Inflammation, Chronic Active				1 (2%)
Polyarteritis Nodosa	1 (2%)			2 (4%)
Endometrium, Hyperplasia, Cystic	41 (82%)	36 (72%)	37 (74%)	42 (84%)
Vagina	(50)	(50)	(50)	(50)
Inflammation, Suppurative		2 (4%)		
Inflammation, Acute	1 (2%)		2 (4%)	
Inflammation, Chronic Active	1 (2%)			
Polyarteritis Nodosa				1 (2%)

HEMATOPOIETIC SYSTEM

Bone Marrow	(48)	(50)	(49)	(48)
Hypercellularity	17 (35%)	24 (48%)	18 (37%)	20 (42%)
Hypocellularity	1 (2%)	2 (4%)		1 (2%)
Lymph Node	(9)	(8)	(8)	(3)
Ectasia		1 (13%)		
Hemorrhage	2 (22%)	1 (13%)	2 (25%)	
Hyperplasia, Lymphocyte	3 (33%)			
Infiltration Cellular, Histiocyte	1 (11%)		1 (13%)	
Polyarteritis Nodosa	1 (11%)			
Lymph Node, Mandibular	(49)	(49)	(48)	(50)
Atrophy	2 (4%)			1 (2%)
Extramedullary Hematopoiesis	1 (2%)			
Hemorrhage	1 (2%)		1 (2%)	
Hyperplasia, Lymphocyte		2 (4%)		1 (2%)
Hyperplasia, Plasma Cell	1 (2%)	1 (2%)		

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Experiment Number: 03038 - 04
 Test Type: CHRONIC
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 Lab: BAT

B6C3F1/N MICE FEMALE	0 mg/L	500 mg/L	1000 mg/L	2000 mg/L
Infiltration Cellular, Mast Cell	1 (2%)			
Lymph Node, Mesenteric	(49)	(49)	(49)	(50)
Angiectasis		1 (2%)		
Atrophy	1 (2%)	1 (2%)	1 (2%)	
Extramedullary Hematopoiesis	3 (6%)	2 (4%)	1 (2%)	3 (6%)
Hemorrhage	1 (2%)			
Hyperplasia, Lymphocyte		7 (14%)	3 (6%)	4 (8%)
Hyperplasia, Plasma Cell	1 (2%)	1 (2%)		1 (2%)
Infiltration Cellular, Histiocyte	1 (2%)			
Inflammation, Chronic Active			1 (2%)	
Lymphatic Sinus, Ectasia		2 (4%)		1 (2%)
Spleen	(50)	(48)	(49)	(50)
Accessory Spleen	1 (2%)			
Extramedullary Hematopoiesis	5 (10%)	18 (38%)	13 (27%)	8 (16%)
Hyperplasia, Lymphocyte	2 (4%)			
Hyperplasia, Plasma Cell	1 (2%)			
Infiltration Cellular, Histiocyte				2 (4%)
Pigment	1 (2%)			
Red Pulp, Atrophy	2 (4%)		3 (6%)	1 (2%)
White Pulp, Atrophy	3 (6%)	2 (4%)	3 (6%)	1 (2%)
White Pulp, Hyperplasia	7 (14%)	6 (13%)	5 (10%)	6 (12%)
Thymus	(49)	(48)	(50)	(50)
Atrophy	3 (6%)	3 (6%)	4 (8%)	5 (10%)
Hyperplasia, Atypical, Lymphocyte	2 (4%)	2 (4%)		2 (4%)

INTEGUMENTARY SYSTEM

Mammary Gland	(49)	(50)	(50)	(49)
Hyperplasia	2 (4%)	3 (6%)		1 (2%)
Skin	(50)	(50)	(50)	(50)
Infiltration Cellular, Mast Cell				1 (2%)
Inflammation, Chronic Active				1 (2%)
Ulcer		1 (2%)		1 (2%)
Epidermis, Hyperplasia		1 (2%)		
Sweat Gland, Hyperplasia			1 (2%)	

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 Lab: BAT

B6C3F1/N MICE FEMALE	0 mg/L	500 mg/L	1000 mg/L	2000 mg/L
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Fibro-Osseous Lesion	15 (30%)	23 (46%)	8 (16%)	8 (16%)
Fibrous Osteodystrophy				1 (2%)
Increased Bone	1 (2%)	2 (4%)	1 (2%)	1 (2%)
Skeletal Muscle	(2)	(0)	(1)	(0)
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Atrophy				1 (2%)
Compression		1 (2%)		
Cyst Epithelial Inclusion			1 (2%)	
Gliosis				1 (2%)
Necrosis		1 (2%)	2 (4%)	
Polyarteritis Nodosa		1 (2%)		3 (6%)
RESPIRATORY SYSTEM				
Larynx	(0)	(1)	(0)	(0)
Infiltration Cellular, Mixed Cell		1 (100%)		
Lung	(50)	(50)	(50)	(50)
Hemorrhage				1 (2%)
Hyperplasia, Lymphocyte	1 (2%)			
Infiltration Cellular, Histiocyte				1 (2%)
Inflammation, Chronic Active		1 (2%)		
Thrombus		1 (2%)		
Alveolar Epithelium, Hyperplasia	4 (8%)	5 (10%)	3 (6%)	4 (8%)
Nose	(50)	(50)	(50)	(50)
Hemorrhage			1 (2%)	
Inflammation, Suppurative		1 (2%)		1 (2%)
Inflammation, Acute			2 (4%)	1 (2%)

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B6C3F1/N MICE FEMALE	0 mg/L	500 mg/L	1000 mg/L	2000 mg/L
Nerve, Olfactory Epithelium, Atrophy				1 (2%)
Olfactory Epithelium, Metaplasia	15 (30%)	18 (36%)	15 (30%)	13 (26%)
Respiratory Epithelium, Accumulation, Hyaline Droplet	1 (2%)	2 (4%)		1 (2%)
Respiratory Epithelium, Hyperplasia	2 (4%)	1 (2%)		
Trachea	(50)	(50)	(48)	(50)
Inflammation, Acute	1 (2%)			
Polyarteritis Nodosa	1 (2%)			

SPECIAL SENSES SYSTEM

Eye	(50)	(50)	(48)	(50)
Phthisis Bulbi			1 (2%)	
Lens, Cataract	1 (2%)	1 (2%)	1 (2%)	
Retina, Dysplasia			1 (2%)	
Harderian Gland	(50)	(50)	(48)	(50)
Hyperplasia	1 (2%)	2 (4%)	3 (6%)	3 (6%)

URINARY SYSTEM

Kidney	(50)	(50)	(50)	(50)
Glomerulopathy	1 (2%)			
Glomerulopathy, Hyaline			1 (2%)	
Infarct	5 (10%)	2 (4%)	5 (10%)	3 (6%)
Infiltration Cellular, Mononuclear Cell		1 (2%)	1 (2%)	
Inflammation, Chronic			1 (2%)	
Metaplasia, Osseous			1 (2%)	1 (2%)
Mineral	2 (4%)			
Nephropathy, Chronic Progressive	33 (66%)	26 (52%)	26 (52%)	27 (54%)
Pigment			6 (12%)	1 (2%)
Polyarteritis Nodosa				2 (4%)
Papilla, Necrosis	1 (2%)			
Pelvis, Dilation		1 (2%)		
Pelvis, Inflammation, Chronic Active			1 (2%)	
Renal Tubule, Accumulation, Hyaline Droplet	2 (4%)	2 (4%)	1 (2%)	1 (2%)

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Experiment Number: 03038 - 04
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B6C3F1/N MICE FEMALE	0 mg/L	500 mg/L	1000 mg/L	2000 mg/L
Renal Tubule, Cyst	1 (2%)			
Renal Tubule, Degeneration			1 (2%)	
Renal Tubule, Hyperplasia		2 (4%)		
Renal Tubule, Necrosis	1 (2%)	5 (10%)	1 (2%)	3 (6%)
Renal Tubule, Regeneration		1 (2%)	7 (14%)	7 (14%)
Urinary Bladder	(50)	(50)	(49)	(50)
Polyarteritis Nodosa				1 (2%)

*** END OF REPORT ***

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