

**Experiment Number:** 03038 - 03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** RATS/HSD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Sodium Tungstate Dihydrate  
**CAS Number:** 10213-10-2

**Date Report Requested:** 06/26/2019  
**Time Report Requested:** 10:13:17  
**First Dose M/F:** 01/30/12 / 01/31/12  
**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

Note: Animals arranged according to days on test.











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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 0mg/L male	DAY ON TEST																								* TOTALS
	06521	06522	06524	06529	06531	06536	06537	06538	06542	06545	06547	06549	06550	06551	06552	06553	06554	06555	06556	06557	06558	06559	06560	06561	
ANIMAL ID	00021	00022	00025	00031	00036	00037	00038	00042	00045	00047	00049	00050	00051	00052	00053	00054	00055	00056	00057	00058	00059	00060	00061	00062	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small, Jejunum Adenocarcinoma	+	+	+	+	+	+	+	+	+	+	+	+	X	+	+	+	+	+	+	+	+	+	+	+	50 1
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cholangioma						X																			1
Hepatocellular Adenoma						X																			1
Mesentery																									2
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Acinus, Adenocarcinoma																									1
Acinus, Adenoma				X			X			X		X		X											6
Acinus, Adenoma, Multiple									X								X		X	X	X		X		8
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 250mg/L male	DAY ON TEST																									* TOTALS
	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	
ANIMAL ID	00064	00065	00066	00068	00074	00078	00080	00082	00085	00086	00087	00088	00089	00093	00094	00095	00096	00097	00098	00099	00100	00101	00102	00103	00104	00105
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

Tongue + 1

**CARDIOVASCULAR SYSTEM**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

**ENDOCRINE SYSTEM**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Pheochromocytoma Benign																									X		8
Pheochromocytoma Malignant																	X		X								2
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adenoma					X					X													X				3
Adenoma, Multiple																							X				1
Carcinoma																X						X			X		3
Parathyroid Gland	M	+	+	+	+	+	+	+	+	+	+	+	+	M	+	M	M	+	+	+	+	+	+	+	+	+	45
Adenoma		X																									1
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Schwannoma Malignant, Metastatic, Peripheral Nerve																											1
Pars Distalis, Adenoma										X										X					X		5
Pars Distalis, Carcinoma									X																		2
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
C-cell, Adenoma																X								X			3

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	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	
ANIMAL ID	00064	00065	00066	00068	00074	00078	00080	00082	00085	00086	00087	00088	00089	00093	00094	00095	00096	00097	00098	00099	00100	00101	00102	00103	00104
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Alveolar/Bronchiolar Adenoma																									1
Carcinosarcoma, Metastatic, Zymbal'S Gland																									1
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Schwannoma Malignant, Metastatic, Brain																									1
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Schwannoma Malignant, Metastatic, Brain																									1
Zymbal's Gland																									1
Carcinosarcoma																									1

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Renal Tubule, Adenoma																									1
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
----------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

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HARLAN SPRAGUE DAWLEY RATS MALE 500mg/L male	DAY ON TEST																									* TOTALS
	0725	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	
ANIMAL ID	00122	00124	00125	00126	00123	00124	00127	00130	00133	00131	00136	00137	00138	00139	00140	00141	00142	00143	00144	00145	00146	00147	00148	00149	00150	00151

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Pheochromocytoma Benign	X			X		X				X									X		X	X		X		11
Pheochromocytoma Malignant																				X						2
Bilateral, Pheochromocytoma Benign																										1
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adenoma										X							X									2
Adenoma, Multiple																										1
Carcinoma									X		X									X						4
Parathyroid Gland	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	45
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Pars Distalis, Adenoma					X										X					X						5
Pars Distalis, Carcinoma																										1
Pars Intermedia, Carcinoma																										1
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
C-cell, Adenoma																								X		5
C-cell, Carcinoma											X								X							4

GENERAL BODY SYSTEM

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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 1000mg/L male	DAY ON TEST																								ANIMAL ID	males (cont...)
	0 0 0 4	0 3 2 9	0 3 5 1	0 4 3 6	0 4 6 7	0 5 6 6	0 5 8 1	0 5 8 8	0 6 0 2	0 6 1 0	0 6 1 3	0 6 1 6	0 6 1 6	0 6 1 7	0 6 5 2	0 6 6 6	0 6 7 3	0 6 7 9	0 6 8 2	0 6 8 5	0 7 2 9	0 7 2 9	0 7 2 9	0 7 2 9		
	0 0 1 8 7	0 0 1 7 3	0 0 1 5 3	0 0 1 6 4	0 0 1 6 4	0 0 1 9 0	0 0 1 7 3	0 0 1 7 6	0 0 1 6 1	0 0 1 7 1	0 0 1 7 4	0 0 1 7 8	0 0 1 7 1	0 0 1 9 5	0 0 1 8 9	0 0 1 5 6	0 0 1 8 2	0 0 1 8 1	0 0 2 5 0	0 0 1 8 5	0 0 1 9 3	0 0 1 6 5	0 0 1 6 3	0 0 1 6 5	0 0 1 6 6	

INTEGUMENTARY SYSTEM

Mammary Gland Adenocarcinoma	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Skin Basal Cell Carcinoma Keratoacanthoma Subcutaneous Tissue, Fibroma Subcutaneous Tissue, Lipoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
																										X

MUSCULOSKELETAL SYSTEM

Bone Tarsal, Osteoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
-------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

NERVOUS SYSTEM

Brain Glioma Malignant Oligodendroglioma Malignant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
						X																				
				X																						

RESPIRATORY SYSTEM

Lung Alveolar/Bronchiolar Adenoma Alveolar/Bronchiolar Carcinoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>HARLAN SPRAGUE DAWLEY RATS</b>	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	9	9	9	9	9	9	9	9	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>MALE</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
<b>1000mg/L male</b>	6	7	7	7	7	8	8	8	9	9	5	5	5	5	6	6	6	6	8	8	8	9	9		
	9	0	2	5	9	3	4	5	5	6	4	7	8	9	0	2	7	8	1	2	8	9	3	4	
																							<b>* TOTALS</b>		

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hepatocellular Adenoma											X														1
Mesentery																									3
Pheochromocytoma Malignant, Metastatic, Adrenal Medulla																							X		1
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Acinus, Adenocarcinoma									X														X		2
Acinus, Adenocarcinoma, Multiple																									1
Acinus, Adenoma				X				X																	5
Acinus, Adenoma, Multiple						X	X		X			X			X	X			X			X	X		11
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	6	7	7	7	7	8	8	8	9	9	5	6	4	7	8	5	9	0	2	7	8	1	8	8	2	
	9	0	2	5	9	3	4	5	5	6	4	7	8	5	9	0	2	7	8	1	8	8	2	8	9	
Squamous Cell Papilloma	X																									1
Stomach, Glandular	+																									50
<b>CARDIOVASCULAR SYSTEM</b>																										
Blood Vessel	+																									49
Heart	+																									50
Schwannoma Malignant	I																									1
<b>ENDOCRINE SYSTEM</b>																										
Adrenal Cortex	+																									50
Adenoma	X																									1
Adrenal Medulla	+																									50
Pheochromocytoma Benign	X																									8
Pheochromocytoma Complex	X																									1
Pheochromocytoma Malignant	X																									3
Islets, Pancreatic	+																									50
Adenoma	X																									5
Adenoma, Multiple	X																									1
Parathyroid Gland	+																									45
Adenoma	X																									2
Pituitary Gland	+																									50
Pars Distalis, Adenoma	X																									7
Pars Intermedia, Adenoma	X																									1
Thyroid Gland	+																									50

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>HARLAN SPRAGUE DAWLEY RATS MALE</b>	<b>1000mg/L male</b>	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		9	9	9	9	9	9	9	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		6	7	7	7	7	8	8	8	9	9	5	5	5	5	6	6	6	8	8	8	8	9	9	9	9
		9	0	2	5	9	3	4	5	5	6	4	7	8	9	0	2	7	8	1	2	8	8	9	3	4
																							<b>* TOTALS</b>			

C-cell, Adenoma	X																									<b>5</b>
C-cell, Adenoma, Multiple																				X						<b>1</b>
C-cell, Carcinoma																				X						<b>3</b>

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	<b>49</b>
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	<b>50</b>
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	<b>50</b>
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	<b>50</b>
Testis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	<b>49</b>

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	<b>50</b>
Lymph Node																										<b>3</b>
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	<b>50</b>
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	<b>49</b>
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	<b>50</b>
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	<b>50</b>

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
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M .. Missing tissue  
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Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

DAY ON TEST	HARLAN SPRAGUE DAWLEY RATS MALE																								* TOTALS	
	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729	0729		0729
1000mg/L male	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	00169	49

INTEGUMENTARY SYSTEM

Mammary Gland Adenocarcinoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
																										1
Skin Basal Cell Carcinoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Keratoacanthoma																										1
Subcutaneous Tissue, Fibroma																										1
Subcutaneous Tissue, Lipoma																										2

MUSCULOSKELETAL SYSTEM

Bone Tarsal, Osteoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
																										1

NERVOUS SYSTEM

Brain Glioma Malignant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Oligodendroglioma Malignant																										1

RESPIRATORY SYSTEM

Lung Alveolar/Bronchiolar Adenoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Alveolar/Bronchiolar Carcinoma																										1
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

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Experiment Number: 03038 - 03

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Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

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First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/L female	DAY ON TEST																									females (cont...)	
	0 2 8 6	0 3 4 4	0 3 8 7	0 4 9 4	0 5 0 2	0 5 0 4	0 5 2 3	0 5 5 0	0 5 6 7	0 5 1 0	0 6 1 2	0 6 1 9	0 6 2 4	0 6 5 2	0 6 7 6	0 6 9 5	0 7 0 8	0 7 1 1	0 7 1 1	0 7 3 0	0 7 3 0	0 7 3 0	0 7 3 0	0 7 3 0			
ANIMAL ID	0 0 2 0 3	0 0 2 2 2	0 0 2 2 0	0 0 2 4 9	0 0 2 1 2	0 0 2 4 7	0 0 2 4 4	0 0 2 1 3	0 0 2 4 1	0 0 2 1 3	0 0 2 4 2	0 0 2 4 3	0 0 2 4 7	0 0 2 2 5	0 0 2 3 4	0 0 2 4 6	0 0 2 0 1	0 0 2 1 1	0 0 2 2 8	0 0 2 2 6	0 0 2 0 7	0 0 2 0 8	0 0 2 0 9	0 0 2 0 0	0 0 2 0 0		
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Thymus	+	+	+	+	+	M	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>INTEGUMENTARY SYSTEM</b>																											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adenocarcinoma												X															
Adenoma														X	X												
Fibroadenoma				X	X	X	X	X					X				X	X	X			X	X	X			
Fibroadenoma, Multiple										X	X	X							X			X					
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Subcutaneous Tissue, Fibroma																											
Subcutaneous Tissue, Fibrosarcoma																											
Subcutaneous Tissue, Hemangiopericytoma																											
Subcutaneous Tissue, Osteosarcoma			X																								
<b>MUSCULOSKELETAL SYSTEM</b>																											
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>NERVOUS SYSTEM</b>																											
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>RESPIRATORY SYSTEM</b>																											

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HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/L female	DAY ON TEST																								females (cont...)
	0 2 8 6	0 3 4 4	0 3 8 7	0 4 9 4	0 5 0 2	0 5 0 4	0 5 2 3	0 5 5 0	0 5 6 7	0 6 1 0	0 6 1 2	0 6 1 9	0 6 2 4	0 6 5 2	0 6 7 6	0 6 9 5	0 7 0 8	0 7 1 1	0 7 1 1	0 7 3 0	0 7 3 0	0 7 3 0	0 7 3 0	0 7 3 0	
ANIMAL ID	0 0 2 0 3	0 0 2 2 2	0 0 2 2 0	0 0 2 2 9	0 0 2 2 2	0 0 2 2 4	0 0 2 2 4	0 0 2 2 3	0 0 2 2 1	0 0 2 2 3	0 0 2 2 4	0 0 2 2 3	0 0 2 2 7	0 0 2 2 5	0 0 2 2 4	0 0 2 2 6	0 0 2 2 1	0 0 2 2 2	0 0 2 2 1	0 0 2 2 8	0 0 2 2 6	0 0 2 2 7	0 0 2 2 8	0 0 2 2 9	0 0 2 2 0

Lung Adenocarcinoma, Metastatic, Mammary Gland Granulosa Cell Tumor Malignant, Metastatic, Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

SYSTEMIC LESIONS

Multiple Organ Lymphoma Malignant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
--------------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
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Experiment Number: 03038 - 03

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First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/L female	DAY ON TEST																								* TOTALS	
	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730		0730
ANIMAL ID	00232	00233	00235	00234	00238	00230	00235	00234	00235	00236	00237	00239	00236	00238	00239	00240	00241	00245	00241	00243	00244	00246	00247	00248	00249	

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small																										1
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hepatocellular Adenoma												X														1
Mesentery																										
Granulosa Cell Tumor Malignant, Metastatic, Ovary																								+	X	1
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Granulosa Cell Tumor Malignant, Metastatic, Ovary																									X	1
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
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HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/L female	DAY ON TEST																									* TOTALS
	0730	0733	0730	0733	0730	0733	0730	0733	0730	0733	0730	0733	0730	0733	0730	0733	0730	0733	0730	0733	0730	0733	0730	0733	0730	
ANIMAL ID	00232	00233	00235	00238	00240	00245	00244	00245	00246	00247	00249	00246	00248	00249	00250	00251	00252	00253	00254	00256	00257	00258	00259	00260	00261	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
<b>CARDIOVASCULAR SYSTEM</b>																										
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Schwannoma Malignant																									2	
<b>ENDOCRINE SYSTEM</b>																										
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Pheochromocytoma Benign																									1	
Pheochromocytoma Malignant																							X		1	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Adenoma																							X		1	
Carcinoma																X									1	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	46	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Pars Distalis, Adenoma			X					X	X	X	X		X	X										X	16	
Pars Distalis, Carcinoma															X										1	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Bilateral, C-cell, Adenoma																									1	
C-cell, Adenoma									X					X											4	
C-cell, Carcinoma																							X		2	

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/L female	DAY ON TEST																									* TOTALS	
	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730		
ANIMAL ID	00232	00233	00235	00234	00238	00230	00205	00214	00215	00216	00217	00219	00226	00227	00228	00229	00231	00232	00233	00234	00236	00237	00238	00239	00240		
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	47		
<b>INTEGUMENTARY SYSTEM</b>																											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Adenocarcinoma					X																				2		
Adenoma																			X						3		
Fibroadenoma			X			X	X		X	X	X		X					X			X			X	22		
Fibroadenoma, Multiple				X								X											X		8		
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Subcutaneous Tissue, Fibroma																						X			1		
Subcutaneous Tissue, Fibrosarcoma																									1		
Subcutaneous Tissue, Hemangiopericytoma				X																					1		
Subcutaneous Tissue, Osteosarcoma																									1		
<b>MUSCULOSKELETAL SYSTEM</b>																											
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
<b>NERVOUS SYSTEM</b>																											
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
<b>RESPIRATORY SYSTEM</b>																											

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/L female	DAY ON TEST																								* TOTALS		
	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730		0730	
ANIMAL ID	00232	00233	00235	00238	00240	00245	00244	00245	00246	00247	00249	00246	00248	00249	00250	00251	00251	00251	00251	00251	00251	00251	00251	00251	00251	00251	
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Adenocarcinoma, Metastatic, Mammary Gland																										1	
Granulosa Cell Tumor Malignant, Metastatic, Ovary																							X			1	
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
<b>SPECIAL SENSES SYSTEM</b>																											
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
<b>URINARY SYSTEM</b>																											
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
<b>SYSTEMIC LESIONS</b>																											
Multiple Organ Lymphoma Malignant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 2	

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically



Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

<b>HARLAN SPRAGUE DAWLEY RATS</b> <b>FEMALE</b> <b>250mg/L female</b>	DAY ON TEST	0300	0309	0400	0503	0505	0602	0606	0606	0606	0606	0606	0707	0707	0707	0707	0707	0707	0707	0707	0707	0707	0707	0707	0707	0707	0707
	ANIMAL ID	00258	00078	00067	00089	00056	00077	00060	00095	00089	00038	00085	00040	00075	00050	00066	00098	00066	00077	00089	00080	00066	00096	00079	00080	00099	00088

females  
(cont...)

**ENDOCRINE SYSTEM**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pheochromocytoma Benign																											
Pheochromocytoma Malignant												X															
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenoma																											
Parathyroid Gland	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+
Carcinoma, Metastatic, Thyroid Gland								X																			
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pars Distalis, Adenoma					X								X	X		X											
Pars Distalis, Carcinoma							X																				
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Schwannoma Malignant, Metastatic, Peripheral Nerve										X																	
Bilateral, C-cell, Adenoma																											
C-cell, Adenoma														X				X		X							X
C-cell, Adenoma, Multiple																						X					
C-cell, Carcinoma							X																				

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically



















Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 500mg/L female	DAY ON TEST	0 2 7 0	0 2 8 8	0 4 2 0	0 4 5 6	0 4 6 3	0 5 0 0	0 5 1 9	0 5 2 9	0 5 8 3	0 5 8 5	0 5 8 8	0 5 9 2	0 5 9 2	0 6 4 2	0 6 5 1	0 6 7 5	0 6 7 6	0 7 1 6	0 7 1 6	0 7 3 0	0 7 3 0	0 7 3 0	0 7 3 0	0 7 3 0	females (cont...)
	ANIMAL ID	0 0 3 0 7	0 0 3 1 0	0 0 3 4 1	0 0 3 2 3	0 0 3 0 3	0 0 3 2 3	0 0 3 1 7	0 0 3 1 1	0 0 3 1 4	0 0 3 0 3	0 0 3 1 6	0 0 3 3 9	0 0 3 2 6	0 0 3 3 0	0 0 3 0 5	0 0 3 4 8	0 0 3 4 4	0 0 3 0 2	0 0 3 1 1	0 0 3 1 3	0 0 3 1 4	0 0 3 1 1	0 0 3 1 5	0 0 3 1 6	

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cholangioma																										
Leiomyosarcoma, Metastatic, Vagina																X										
Mesentery																	+									
Leiomyosarcoma, Metastatic, Vagina																	X									
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

CARDIOVASCULAR SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically













Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 500mg/L female	DAY ON TEST																								* TOTALS		
	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730		0730	
ANIMAL ID	00318	00331	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334	00334		
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Heart Leiomyosarcoma, Metastatic, Vagina	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49 1	
<b>ENDOCRINE SYSTEM</b>																											
Adrenal Cortex Adenoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 1	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	M	+	+	+	+	+	44	
Pituitary Gland Pars Distalis, Adenoma Pars Distalis, Adenoma, Multiple	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 12 1	
Thyroid Gland C-cell, Adenoma C-cell, Carcinoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49 13 2	
<b>GENERAL BODY SYSTEM</b>																											
NONE																											
<b>GENITAL SYSTEM</b>																											
Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 500mg/L female	DAY ON TEST																								* TOTALS
	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	
ANIMAL ID	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318

Ovary Paraovarian Tissue, Leiomyosarcoma, Metastatic, Vagina	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 1
Uterus Adenocarcinoma Leiomyosarcoma, Metastatic, Vagina Endometrium, Polyp Stromal	+	+	+	+	+	+	+	+	X	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 2 1 7
Vagina Leiomyosarcoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 1

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymph Node Renal, Leiomyosarcoma, Metastatic, Vagina																										1 1
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Lymph Node, Mesenteric Leiomyosarcoma, Metastatic, Vagina	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 1
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49

INTEGUMENTARY SYSTEM

Mammary Gland Adenocarcinoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 2
---------------------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---------

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 500mg/L female	DAY ON TEST																								* TOTALS		
	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730			
ANIMAL ID	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318	00318			
Adenoma																				X					3		
Fibroadenoma	X		X	X			X													X	X				15		
Fibroadenoma, Multiple									X					X	X							X			8		
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
<b>MUSCULOSKELETAL SYSTEM</b>																											
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Skeletal Muscle																									1		
Diaphragm, Leiomyosarcoma, Metastatic, Vagina																									1		
<b>NERVOUS SYSTEM</b>																											
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
<b>RESPIRATORY SYSTEM</b>																											
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49		
Adenocarcinoma, Metastatic, Uterus									X																1		
Leiomyosarcoma, Metastatic, Vagina																									1		
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49		
<b>SPECIAL SENSES SYSTEM</b>																											
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

DAY ON TEST	HARLAN SPRAGUE DAWLEY RATS FEMALE																								ANIMAL ID	females (cont...)		
	0200	0401	0403	0404	0507	0508	0509	0510	0511	0512	0513	0514	0515	0516	0517	0518	0519	0520	0521	0522	0523	0524	0525	0526			0527	0528
1000mg/L female	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	8	6	0	8	7	8	7	8	7	8	6	7	9	8	5	6	5	9	6	5	5	6	6	6	6	6	6	8
	0	3	0	1	5	9	0	8	2	7	7	8	7	8	6	2	3	7	6	8	8	9	6	8	8	9	6	6

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adrenal Medulla Pheochromocytoma Benign	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	X
Islets, Pancreatic Adenoma Carcinoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	M	+	+	+	
Pituitary Gland Pars Distalis, Adenoma Pars Distalis, Adenoma, Multiple	+	+	+	+	+	+	+	+	+	X	+	+	+	X	+	+	+	+	+	+	X	X	X	+	+	+	+	
Thyroid Gland Bilateral, C-cell, Adenoma C-cell, Adenoma C-cell, Carcinoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	X	+	+	+	+	X

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
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Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/F: 01/30/12 / 01/31/12

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 1000mg/L female	DAY ON TEST																								* TOTALS
	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	
ANIMAL ID	00387	00390	00395	00361	00364	00305	00307	00308	00309	00310	00311	00312	00313	00314	00315	00316	00317	00318	00319	00320	00321	00322	00323	00324	00325
Fibroadenoma		X		X				X			X								X				X		
Fibroadenoma, Multiple															X		X								
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>MUSCULOSKELETAL SYSTEM</b>																									
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>NERVOUS SYSTEM</b>																									
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Glioma Malignant																									I
<b>RESPIRATORY SYSTEM</b>																									
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>SPECIAL SENSES SYSTEM</b>																									
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>URINARY SYSTEM</b>																									
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lipoma																									X

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically



