

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

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

Lab BAT

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum Adenocarcinoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cholangioma																	X					
Hepatocellular Adenoma																		X				
Leukemia Mononuclear																		X				
Lymphoma Malignant																			X			
Mesentery																						
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymphoma Malignant																						
Acinus, Adenocarcinoma																	X					
Acinus, Adenoma	X	X																X				
Acinus, Adenoma, Multiple																		X				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

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 MALE 0mg/L male	DAY ON TEST ANIMAL ID																									males (cont...)
		0 6 1 9	0 4 4 5	0 6 9 0	0 6 7 3	0 6 2 9	0 7 1 5	0 6 2 0	0 1 8 7	0 7 3 7	0 6 7 7	0 7 2 9	0 7 2 2	0 5 9 3	0 6 5 2	0 6 4 8	0 7 3 0	0 4 5 6	0 4 5 0							
Salivary Glands		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Glandular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
CARDIOVASCULAR SYSTEM																										
Blood Vessel		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ENDOCRINE SYSTEM																										
Adrenal Cortex Leukemia Mononuclear		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adrenal Medulla Ganglioneuroma Pheochromocytoma Benign Pheochromocytoma Malignant		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Islets, Pancreatic Adenoma Adenoma, Multiple Carcinoma		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Parathyroid Gland		+	+	+	+	+	M	+	+	M	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+
Pituitary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 MALE 0mg/L male		DAY ON TEST																									
			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	6	4	9	5	0	0	3	9	6	0	0	5	9	1	0	2	7	0	7	7	6	6	7	2	2	3	
1	4	9	7	2	4	3	1	2	9	0	0	5	8	3	0	7	7	6	6	7	2	2	2	3	2	0	
9	5	0	5	0	3	9	6	0	0	5	9	1	0	2	7	0	7	7	6	6	7	2	2	3	2	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	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	2	3	4	5	6	7	8	9	0	1	1	2	3	4	5	6	7	8	9	0	1	2	2	2	3	4	5

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis

Preputial Gland

Prostate

Seminal Vesicle Hemangiosarcoma

Testis Interstitial Cell, Adenoma

HEMATOPOIETIC SYSTEM

Bone Marrow

Lymph Node

- * .. Total animals with
- + .. Tissue examined
- X .. Lesion present
- | .. Insufficient tissue

* .. Total animals with tissue examined microscopically: Total animals with tumor

± .. Tissue examined microscopically

X - Lesion present

| Insufficient tissue

M .. Missing tissue

A.. Autolysis precludes evaluation

BLANK - Not examined microscopically

Experiment Number: 03038 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

Urinary Bladder

SYSTEMIC LESIONS

Multiple Organ
Leukemia Mononuclear
Lymphoma Malignant

males
(cont...)

* .. Total animals with tissue examined microscopically; Total animals with tumo

+ .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

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

Lab BAT

ALIMENTARY 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

HEMATOPOIETIC 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

I .. Insufficient tissue

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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	0
6	4	6	6	5	5	6	6	5	6	7	7	5	6	6	6	5	8	9	7	7	5	7	4	6	5	
6	9	3	5	7	0	3	1	5	5	3	3	6	3	8	5	8	8	9	2	2	7	3	8	8	2	5
1	3	2	2	1	1	9	4	1	4	0	0	8	6	5	9	8	9	9	2	9	4	0	2	5	7	
0mg/L male	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
		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
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	X	4	4	4	4	4	4	4	4	4	5
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

* TOTALS

Granular Cell Tumor Malignant

X

1

Peripheral Nerve

+

1

Spinal Cord

+

1

RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Alveolar/Bronchiolar Adenoma																											1
Alveolar/Bronchiolar Carcinoma																											X
Leukemia Mononuclear																											1

Nose

Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

Trachea

Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
---------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Zymbal's Gland Adenocarcinoma																											1

URINARY SYSTEM

Kidney Renal Tubule, Adenoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
																											2

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 03038 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

SYSTEMIC LESIONS

Multiple Organ Leukemia Mononuclear Lymphoma Malignant

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

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

Lab: BAT

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically: Total animals with tumor

± .. Tissue examined microscopically

X - Lesion present

A. II. Lesion present

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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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																									males (cont...)		
	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		
HARLAN SPRAGUE DAWLEY RATS MALE	6	6	7	7	3	7	5	4	6	6	6	7	7	7	7	5	7	6	7	6	5	4	7	6		males (cont...)	
250mg/L male	6	6	7	3	3	5	3	8	2	8	0	9	3	2	2	2	8	2	2	1	0	8	7	6	2	8	males (cont...)
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	males (cont...)
Pars Distalis, Carcinoma	X																									males (cont...)	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	males (cont...)	
C-cell, Adenoma																										males (cont...)	
C-cell, Carcinoma																										males (cont...)	

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis

Preputial Gland

Prostate

Schwannoma Malignant, Metastatic, Spinal Cord

Seminal Vesicle

Testis
Interstitial Cell, Adenoma

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

HEMATOPOIETIC SYSTEM

Bone Marrow

Carcinosarcoma, Metastatic, Zymbal's Gland

Lymph Node

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Case Number: 10210-10-A

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

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

Lab: BAT

Renal Tubule, Adenoma

x

Urinary Bladder

SYSTEMIC LESIONS

Multiple Organ

males
(cont...)

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

First Dose M/E: 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
HARLAN SPRAGUE DAWLEY RATS MALE	7	6	7	6	7	5	7	6	6	7	7	7	7	7	7	5	3	5	7	6
250mg/L male	3	7	2	9	2	5	2	7	7	2	9	3	3	3	0	4	5	5	3	8
	0	0	7	9	4	9	0	9	0	2	9	0	0	0	0	6	7	0	5	6
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	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	0
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

ALIMENTARY SYSTEM

* Total animals with tissue examined microscopically: Total animals with tumor

† Total animals with tissue examined

X Lesion present

X .. Lesion present

M - Missing tissue

A - Autolysis precludes evaluation

BLANK Not examined microscopically

Experiment Number: 03038 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

	DAY ON TEST	HARLAN SPRAGUE DAWLEY RATS MALE																				* TOTALS	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
250mg/L male	ANIMAL ID	7	6	7	6	7	5	7	6	6	7	7	7	7	5	3	5	5	7	6	1	* TOTALS	
		3	7	2	9	2	5	2	7	7	2	2	3	3	3	7	4	5	5	3	8	5	
		0	7	9	4	9	0	9	0	2	9	2	9	0	0	0	8	7	6	5	2	3	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
		7	7	7	7	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	0
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7
Stomach, Glandular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Tongue																							1
CARDIOVASCULAR SYSTEM																							
Blood Vessel		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Heart		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
ENDOCRINE SYSTEM																							
Adrenal Cortex		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adrenal Medulla		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Pheochromocytoma Benign																							8
Pheochromocytoma Malignant																							2
X		X																					
Islets, Pancreatic		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adenoma																							3
Adenoma, Multiple																							1
Carcinoma																							3
X		X																					
Parathyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	M	+	45
Adenoma																							1
X																							
Pituitary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Schwannoma Malignant, Metastatic, Peripheral																							1
Nerve																							
X																							
Pars Distalis, Adenoma		X																					5
X																							

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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																					* TOTALS
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HARLAN SPRAGUE DAWLEY RATS MALE 250mg/L male	7	6	7	6	7	5	7	6	6	7	7	7	7	7	7	5	3	5	7	6	0
	3	7	2	9	2	5	2	7	7	2	2	3	3	3	3	7	4	5	5	3	0
	0	7	9	4	9	0	9	0	2	9	9	0	0	0	0	6	8	5	6	2	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
	7	7	7	7	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	0
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6

Cranial Nerve, Schwannoma Malignant

X 1

Peripheral Nerve

+ 3

Spinal Cord
Schwannoma Malignant 1 1

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
--------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 03038 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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

ALIMENTARY 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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

Stomach, Forestomach

**Stomach, Glandular
Leukemia Mononuclear**

Tongue
Squamous Cell Papilloma

**males
(cont...)**

CARDIOVASCULAR SYSTEM

Blood Vessel

Heart Leukemia Mononuclear

ENDOCRINE SYSTEM

Adrenal Cortex Leukemia Mononuclear

Adrenal Medulla
Leukemia Mononuclear
Pheochromocytoma Be
Pheochromocytoma Ma
Bilateral, Pheochromoo

Islets, Pancreatic
Adenoma
Adenoma, Multiple
Carcinoma

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis

Penis

Preputial Gland

Prostate

Seminal Vesicle

Testis

Digitized by srujanika@gmail.com

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

DAY ON TEST																									males (cont...)			
	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			
HARLAN SPRAGUE DAWLEY RATS	6	7	6	7	7	7	4	7	7	7	5	5	7	7	7	7	6	6	6	7	6	7	7	6	7			
MALE	9	3	8	2	2	2	7	3	3	1	7	7	2	2	3	1	2	3	4	2	0	6	6	2	3	0		
500mg/L male	8	0	2	9	9	9	7	0	0	9	5	8	2	9	0	3	2	2	4	2	0	6	6	5	2	3	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	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	1		
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2		
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5			

HEMATOPOIETIC SYSTEMBone Marrow
Leukemia Mononuclear

+ X

Lymph Node
Mediastinal, Leukemia Mononuclear

+ X

Lymph Node, Mandibular
Carcinoma, Metastatic, Thyroid Gland
Leukemia Mononuclear

+ X

Lymph Node, Mesenteric
Leukemia Mononuclear

+ X

Spleen
Leukemia Mononuclear
Lymphoma Malignant

+ X

Thymus
Carcinoma, Metastatic, Thyroid Gland
Leukemia Mononuclear

+ X

INTEGUMENTARY SYSTEMMammary Gland
Fibroadenoma

+ +

Skin

+ +

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 |
| HARLAN SPRAGUE DAWLEY RATS
MALE | 6 | 7 | 6 | 7 | 7 | 7 | 4 | 7 | 7 | 7 | 5 | 5 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 6 | 7 |
| 500mg/L male | 9 | 3 | 8 | 2 | 2 | 2 | 7 | 3 | 3 | 1 | 7 | 7 | 2 | 2 | 3 | 1 | 2 | 3 | 4 | 3 | 6 | 6 | 2 | 3 | 7 |
| ANIMAL ID | 8 | 0 | 2 | 9 | 9 | 9 | 7 | 0 | 0 | 9 | 5 | 8 | 2 | 9 | 0 | 3 | 2 | 2 | 0 | 6 | 6 | 5 | 0 | 3 | 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 |
| | 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 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

males
(cont...)Subcutaneous Tissue, Carcinoma, Metastatic,
Thyroid Gland

X

Subcutaneous Tissue, Fibroma

X

Subcutaneous Tissue, Schwannoma Malignant

MUSCULOSKELETAL SYSTEM

Bone

+ +

NERVOUS SYSTEM

Brain

+ +

Leukemia Mononuclear

X

Cranial Nerve, Schwannoma Malignant

X

RESPIRATORY SYSTEM

Lung

+ +

Carcinoma, Metastatic, Thyroid Gland

X

Leukemia Mononuclear

Nose

+ +

Trachea

+ +

SPECIAL SENSES SYSTEM

Eye

+ +

Harderian Gland

+ +

Leukemia Mononuclear

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | |
| HARLAN SPRAGUE DAWLEY RATS | 6 | 7 | 6 | 7 | 7 | 7 | 4 | 7 | 7 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 7 |
| MALE | 9 | 3 | 8 | 2 | 2 | 2 | 7 | 3 | 3 | 1 | 7 | 7 | 2 | 9 | 2 | 3 | 2 | 4 | 3 | 6 | 2 |
| 500mg/L male | 8 | 0 | 2 | 9 | 9 | 7 | 0 | 0 | 9 | 5 | 8 | 9 | 2 | 9 | 0 | 3 | 2 | 2 | 0 | 5 | 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 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 |

Zymbal's Gland Adenoma

URINARY SYSTEM

Kidney
Leukemia Mononuclear
Nephroblastoma

Urinary Bladder Leukemia Mononuclear

SYSTEMIC LESIONS

Multiple Organ
Leukemia Mononuclear
Lymphoma Malignant

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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
MALE
500mg/L male | DAY ON TEST
ANIMAL ID | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------------|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 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 |
| | | 6 | 7 | 3 | 6 | 0 | 7 | 6 | 6 | 3 | 7 | 7 | 0 | 6 | 0 | 7 | 6 | 5 | 6 | 7 | 7 | 4 | 7 | 7 | 6 | 7 |
| | | 0 | 3 | 7 | 8 | 2 | 2 | 0 | 4 | 1 | 2 | 2 | 2 | 2 | 3 | 1 | 7 | 6 | 3 | 3 | 3 | 0 | 1 | 7 | 3 | 9 |
| | | 3 | 0 | 3 | 8 | 9 | 9 | 5 | 8 | 3 | 2 | 9 | 2 | 7 | 0 | 1 | 7 | 6 | 0 | 0 | 0 | 0 | 1 | 7 | 0 | 4 |
| | | 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 |
| | | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum
Leukemia Mononuclear | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Ileum | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymphoma Malignant | X | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Acinus, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| Acinus, Adenoma, Multiple | X | X | X | | X | X | X | | X | | | | | | | | | | | | | | | | 15 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

THE HAMMONTON VOLUNTEER FIRE DEPARTMENT

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

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

Lab: BAT

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS
MALE
500mg/L male | DAY ON TEST
ANIMAL ID | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------------|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Parathyroid Gland | | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | X | | | 2 |
| Pars Distalis, Adenoma | | X | X | | | | | | | | | | | | | | | | | | | | | | | 5 |
| Pars Distalis, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pars Intermedia, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | X | | | 5 |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | X | | | 4 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Penis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Testis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | 0 |
| HARLAN SPRAGUE DAWLEY RATS
MALE | 6 | 7 | 3 | 6 | 0 | 7 | 6 | 6 | 3 | 7 | 7 | 7 | 6 | 0 | 5 | 0 | 7 | 7 | 7 | 4 | 0 | 7 | 7 | 6 | 0 | 7 |
| 500mg/L male | 0 | 3 | 7 | 8 | 2 | 2 | 0 | 4 | 1 | 2 | 2 | 2 | 2 | 3 | 1 | 7 | 6 | 3 | 3 | 9 | 1 | 7 | 3 | 9 | 4 | 2 |
| ANIMAL ID | 3 | 0 | 3 | 8 | 9 | 9 | 5 | 8 | 3 | 2 | 2 | 9 | 7 | 0 | 1 | 7 | 6 | 3 | 0 | 0 | 1 | 7 | 3 | 0 | 4 | 9 |
| | 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 |
| | 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 | 1 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

* TOTALS

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | X | | | | | 2 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Mediastinal, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | X | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | X | | | | | 2 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | X | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Thymus | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | X | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibroadenoma | | | | | | | | | | | | | | | | | | | | | X | | | | | 1 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|
| | 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 | | |
| HARLAN SPRAGUE DAWLEY RATS
MALE | 6 | 7 | 3 | 6 | 7 | 0 | 6 | 6 | 3 | 7 | 7 | 0 | 6 | 0 | 5 | 0 | 6 | 0 | 7 | 0 | 7 | 0 | 4 | 0 | 7 | 0 | 6 | 0 |
| 500mg/L male | 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 | |
| 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 | |
| | 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 | 1 | 1 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | | |
| Subcutaneous Tissue, Carcinoma, Metastatic,
Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | X | | | | 1 | |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Subcutaneous Tissue, Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | X | | | | 2 | |
| Cranial Nerve, Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | X | | | | 1 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | X | | | | 2 | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | X | | | | 1 | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

Zymbal's Gland
Adenoma

$$\begin{array}{r} + \\ X \end{array}$$

URINARY SYSTEM

Kidney
Leukemia Mononuclear
Nephroblastoma

Urinary Bladder Leukemia Mononuclea

SYSTEMIC LESIONS

Multiple Organ Leukemia Mononuclear Lymphoma Malignant

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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
MALE | 1000mg/L male | ANIMAL ID | DAY ON TEST | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---------------|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | 6 | 6 | 3 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 6 |
| | | | 8 | 7 | 5 | 3 | 2 | 1 | 3 | 3 | 3 | 0 | 2 | 3 | 2 | 6 | 7 | 7 | 7 | 2 | 1 | 8 | 1 |
| | | | 2 | 2 | 3 | 1 | 0 | 9 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 2 | 9 | 3 | 0 | 0 | 1 | 3 |
| | | | 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 | 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 |
| | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically: Total animals with tumor

± .. Tissue examined microscopically

X - Lesion present

| Insufficient tissue

M .. Missing tissue

A.. Autolysis precludes evaluation

BLANK - Not examined microscopically

Experiment Number: 03038 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis

Preputial Gland

Prostate
Lymphoma Malignant

Seminal Vesicle
Lymphoma Malignant

Testis

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

Lymphoma Malignant

HEMATOPOIETIC SYSTEM

Bone Marrow

Lymphoma Malignant

Lymph Node

Lymph Node, Mandibular Lymphoma Malignant

Lymph Node, Mesenteric Lymphoma Malignant

Spleen Lymphoma Malignant

Thymus Lymphoma Malignant

INTEGUMENTARY

INTEGUMENTARY SYSTEM

Mammary Gland Adenocarcinoma

Skin
Basal Cell Carcinoma
Keratoacanthoma
Subcutaneous Tissue

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 03038 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

| DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------------------|------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 0
6
8
2 | 0
3
5
3 | 0
7
3
1 | 0
7
2
9 | 0
6
3
7 | 0
7
3
0 | 0
7
3
0 | 0
6
0
2 | 0
7
3
0 | 0
7
2
9 | 0
6
7 | 0
7
9 | 0
7
2
9 | 0
7
3
0 | 0
7
2
9 | 0
7
2
9 | 0
6
1 | 0
7
2 | 0
5
8 | 0
6
1 | 0
7
2 | | | | |
| HARLAN SPRAGUE DAWLEY RATS
MALE | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1000mg/L male | ANIMAL ID | | 0
0
1
5
1 | 0
0
1
5
5 | 0
0
1
5
5 | 0
0
1
5
6 | 0
0
1
5
7 | 0
0
1
5
8 | 0
0
1
6
9 | 0
0
1
6
0 | 0
0
1
6
1 | 0
0
1
6
2 | 0
0
1
6
3 | 0
0
1
6
4 | 0
0
1
6
5 | 0
0
1
6
6 | 0
0
1
6
7 | 0
0
1
6
8 | 0
0
1
6
9 | 0
0
1
7
0 | 0
0
1
7
1 | 0
0
1
7
2 | 0
0
1
7
3 | 0
0
1
7
4 | 0
0
1
7
5 |
| | | | 0
0
1
5
1 | 0
0
1
5
5 | 0
0
1
5
5 | 0
0
1
5
6 | 0
0
1
5
7 | 0
0
1
5
8 | 0
0
1
6
9 | 0
0
1
6
0 | 0
0
1
6
1 | 0
0
1
6
2 | 0
0
1
6
3 | 0
0
1
6
4 | 0
0
1
6
5 | 0
0
1
6
6 | 0
0
1
6
7 | 0
0
1
6
8 | 0
0
1
6
9 | 0
0
1
7
0 | 0
0
1
7
1 | 0
0
1
7
2 | 0
0
1
7
3 | 0
0
1
7
4 | 0
0
1
7
5 |

URINARY SYSTEM

Kidney
Lymphoma Malignant
Oncocytoma Benign
Renal Tubule, Adenoma

Urinary Bladder

SYSTEMIC LESIONS

Multiple Organ Lymphoma Malignant

* .. Total animals with tissue examined microscopically; Total animals with tumo

+ .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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
MALE
1000mg/L male | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 5 | 3 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 0 | 7 | 5 | 6 | 4 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | * TOTALS |
| | 8 | 2 | 1 | 2 | 6 | 3 | 3 | 2 | 2 | 7 | 0 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 9 | 2 | 3 | 9 | 5 | 8 | |
| 0 | 8 | 9 | 6 | 9 | 6 | 0 | 0 | 9 | 9 | 9 | 4 | 0 | 0 | 6 | 6 | 6 | 0 | 0 | 9 | 0 | 7 | 7 | 6 | 6 | 6 | * TOTALS |
| | 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 | 1 | * TOTALS |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | |
| 6 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Colon
Lymphoma Malignant | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | X | 1 | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Ileum
Lymphoma Malignant | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | X | 1 | |
| Intestine Small, Jejunum
Lymphoma Malignant | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | X | 1 | |
| Liver
Hepatocellular Adenoma
Lymphoma Malignant | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Mesentery
Pheochromocytoma Malignant, Metastatic,
Adrenal Medulla | | | | | | | | | | | | | | | | | | | | | | | | | | X | 2 |
| Pancreas
Lymphoma Malignant
Acinus, Adenocarcinoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | X | 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | 0 |
| HARLAN SPRAGUE DAWLEY RATS
MALE | 5 | 3 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 0 | 7 | 5 | 6 | 4 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 |
| 1000mg/L male | 8 | 2 | 1 | 2 | 6 | 3 | 3 | 2 | 2 | 7 | 0 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 9 | 2 | 3 | 9 | 5 | 2 | 5 |
| ANIMAL ID | 8 | 9 | 6 | 9 | 6 | 0 | 0 | 9 | 9 | 9 | 4 | 0 | 0 | 6 | 6 | 6 | 0 | 0 | 9 | 0 | 7 | 2 | 9 | 7 | 2 | 5 |
| | 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 |
| | 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 | 2 |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acinus, Adenocarcinoma, Multiple | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 1 |
| Acinus, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| Acinus, Adenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | 11 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| CARDIOVASCULAR SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| X | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | | 8 |
| Pheochromocytoma Complex | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| X | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| 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

Experiment Number: 03038 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

HEMATOPOIETIC SYSTEM

INTEGUMENTARY 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | 0 |
| 5 | 3 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 0 | 7 | 5 | 6 | 4 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | |
| 8 | 2 | 1 | 2 | 6 | 3 | 3 | 2 | 2 | 7 | 0 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 9 | 0 | 7 | 3 | 9 | 5 | 8 | |
| 8 | 9 | 6 | 9 | 6 | 0 | 0 | 9 | 9 | 9 | 4 | 0 | 0 | 6 | 6 | 6 | 0 | 0 | 9 | 2 | 9 | 0 | 7 | 6 | 5 | 5 | |
| 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 | 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 | 2 |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

* TOTALS

URINARY SYSTEM

Kidney
Lymphoma Malignant
Oncocytoma Benign
Renal Tubule, Adenoma

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | X | | | | | | | | | | | | | | | | | | X | 2 |

Urinary Bladder

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

SYSTEMIC LESIONS

Multiple Organ
Lymphoma Malignant

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | X | | | | | | | | | | | | | | | | | | X | 2 |

*** END OF MALE DATA ***

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

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

URINARY SYSTEM

Kidney

Urinary Bladder

SYSTEMIC LESIONS

Multiple Organ

Lymphoma Malignant

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
0mg/L female | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|---|----|---|
| | | 0
7
3
2 | 0
7
3
2 | 0
5
6
7 | 0
7
3
0 | 0
6
0
6 | 0
7
1
9 | 0
7
3
1 | 0
7
3
1 | 0
6
1
0 | 0
6
1
2 | 0
5
2
3 | 0
7
3
1 | 0
6
7
6 | 0
5
0
4 | 0
7
9
0 | 0
4
3
0 | * TOTALS | | | | | | | | | |
| ANIMAL ID | 0
0
2
2
2
6 | 0
0
2
2
2
7 | 0
0
2
2
2
8 | 0
0
2
2
2
9 | 0
0
2
2
3
0 | 0
0
2
2
3
1 | 0
0
2
2
3
2 | 0
0
2
2
3
3 | 0
0
2
2
3
4 | 0
0
2
2
3
5 | 0
0
2
2
3
6 | 0
0
2
2
3
7 | 0
0
2
2
3
8 | 0
0
2
2
3
9 | 0
0
2
2
4
0 | 0
0
2
2
4
1 | 0
0
2
2
4
2 | 0
0
2
2
4
3 | 0
0
2
2
4
4 | 0
0
2
2
4
5 | 0
0
2
2
4
6 | 0
0
2
2
4
7 | 0
0
2
2
4
8 | 0
0
2
2
4
9 | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Mesentery | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Granulosa Cell Tumor Malignant, Metastatic,
Ovary | X | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Granulosa Cell Tumor Malignant, Metastatic,
Ovary | X | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

| | DAY ON TEST | HARLAN SPRAGUE DAWLEY RATS FEMALE 0mg/L female | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|------------------------------|-------------|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|---|---|---|----------|---|
| | | 0
7
3
2 | 0
7
3
2 | 0
5
6
7 | 0
7
3
0 | 0
6
0
6 | 0
7
1
0 | 0
7
3
1 | 0
7
3
1 | 0
6
1
0 | 0
6
1
2 | 0
5
2
3 | 0
7
3
1 | 0
6
7
6 | 0
5
0
4 | 0
7
9
0 | 0
4
3
0 | | | | | | | | | | | |
| | ANIMAL ID | 0
0
2
2
2
6 | 0
0
2
2
2
7 | 0
0
2
2
3
0 | 0
0
2
2
3
1 | 0
0
2
2
3
2 | 0
0
2
2
3
3 | 0
0
2
2
3
4 | 0
0
2
2
3
5 | 0
0
2
2
3
6 | 0
0
2
2
3
7 | 0
0
2
2
3
8 | 0
0
2
2
3
9 | 0
0
2
2
3
0 | 0
0
2
2
3
1 | 0
0
2
2
3
2 | 0
0
2
2
3
3 | 0
0
2
2
3
4 | 0
0
2
2
3
5 | 0
0
2
2
3
6 | 0
0
2
2
3
7 | 0
0
2
2
3
8 | 0
0
2
2
3
9 | | | | | |
| Salivary Glands | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| CARDIOVASCULAR SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | X | | | | | | | | | | 2 |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma | | X | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Parathyroid Gland | | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pars Distalis, Adenoma | | | | X | | | X | | X | | X | | X | | X | | X | | X | | X | | X | | X | | 16 | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Granulosa Cell Tumor Malignant | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Granulosa-Theca Tumor Malignant | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | | | | X | X | | | | | | | | | | | | | | | | | | 3 |
| Granulosa Cell Tumor Malignant, Metastatic,
Ovary | | | | X | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Cervix, Sarcoma Stromal | | | | | | | | | | | | | | | | | | | X | | | | 1 |
| Cervix, Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | X | | | | 1 |
| Cervix, Endometrium, Polyp Stromal | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Endometrium, Polyp Stromal | | | | | | | | | | | | | | | X | | | | | | | | 3 |
| Endometrium, Polyp Stromal, Multiple | | | | | | | | | | | | | | | | X | | | | | | | 1 |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | ANIMAL ID | DAY ON TEST | | | | | | | | | | | | | | | | | | * TOTALS | | | | | | | | | |
|--|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
| | | 0
7
3
2 | 0
7
3
2 | 0
7
3
2 | 0
5
6
7 | 0
3
0 | 0
7
6
0 | 0
7
3
0 | 0
6
1
9 | 0
7
1
1 | 0
7
3
1 | 0
6
1
0 | 0
6
2
1 | 0
5
2
3 | 0
7
3
1 | 0
6
7
6 | 0
5
4
0 | 0
7
3
0 | 0
4
9
0 | | | | | | | | | | |
| | | 0
0
2
2
6 | 0
0
2
2
7 | 0
0
2
2
8 | 0
0
2
2
9 | 0
0
2
3
0 | 0
0
2
3
1 | 0
0
2
3
2 | 0
0
2
3
2 | 0
0
2
3
3 | 0
0
2
3
3 | 0
0
2
3
4 | 0
0
2
3
5 | 0
0
2
3
6 | 0
0
2
3
7 | 0
0
2
3
8 | 0
0
2
3
9 | 0
0
2
4
0 | 0
0
2
4
1 | 0
0
2
4
2 | 0
0
2
4
3 | 0
0
2
4
4 | 0
0
2
4
5 | 0
0
2
4
6 | 0
0
2
4
7 | 0
0
2
4
8 | 0
0
2
4
9 | 0
0
2
5
0 | * TOTALS |

URINARY SYSTEM

Kidney

Urinary Bladder

SYSTEMIC LESIONS

Multiple Organ

Lymphoma Malignant

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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

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

Lab: BAT

| DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 0
7
3
1 | 0
7
3
1 | 0
7
3
1 | 0
5
5
6 | 0
7
0
4 | 0
3
0
0 | 0
6
3
8 | 0
6
3
0 | 0
7
3
2 | 0
7
3
2 | 0
7
3
2 | 0
7
3
1 | 0
6
8
6 | 0
7
3
0 | 0
4
0
3 | 0
7
3
0 | 0
6
3
8 | 0
7
0
1 | 0
7
3
2 | 0
7
3
2 | 0
7
3
2 | | | |
| HARLAN SPRAGUE DAWLEY RATS FEMALE 250mg/L female | | | | | | | | | | | | | | | | | | | | ANIMAL ID | | | | |
| 0
0
2
5
1 | 0
0
2
5
2 | 0
0
2
5
3 | 0
0
2
5
4 | 0
0
2
5
5 | 0
0
2
5
6 | 0
0
2
5
7 | 0
0
2
5
8 | 0
0
2
5
9 | 0
0
2
6
0 | 0
0
2
6
1 | 0
0
2
6
2 | 0
0
2
6
3 | 0
0
2
6
4 | 0
0
2
6
5 | 0
0
2
6
6 | 0
0
2
6
7 | 0
0
2
6
8 | 0
0
2
6
9 | 0
0
2
7
0 | 0
0
2
7
1 | 0
0
2
7
2 | 0
0
2
7
3 | 0
0
2
7
4 | 0
0
2
7
5 |

ALIMENTARY SYSTEM

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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

Spleen
Lymphoma Malignant

Thymus

INTEGUMENTARY SYSTEM

Mammary Gland
Adenocarcinoma
Fibroadenoma
Fibroadenoma, Multiple

Skin
Subcutaneous Tissue, Fibroma
Subcutaneous Tissue, Schwannoma Malignant

MUSCULOSKELETAL SYSTEM

NERVOUS SYSTEM

Brain
Schwannoma Malignant, Metastatic, Peripheral Nerve

Peripheral Nerve
Trigeminal, Schwannoma Malignant

RESPIRATORY 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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
7
3
1 | 0
7
3
1 | 0
7
3
1 | 0
5
5
6 | 0
7
0
4 | 0
3
0
8 | 0
6
3
0 | 0
6
3
2 | 0
7
3
2 | 0
7
3
2 | 0
7
0
1 | 0
6
8
6 | 0
7
3
0 | 0
4
3
0 | 0
7
3
8 | 0
6
3
1 | 0
7
3
2 | 0
7
3
2 | 0
7
3
2 | 0
7
3
2 | | |
| HARLAN SPRAGUE DAWLEY RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | |
| 250mg/L female | 0
0
2
5
1 | 0
0
2
5
2 | 0
0
2
5
3 | 0
0
2
5
4 | 0
0
2
5
5 | 0
0
2
5
6 | 0
0
2
5
7 | 0
0
2
5
8 | 0
0
2
5
9 | 0
0
2
6
0 | 0
0
2
6
1 | 0
0
2
6
2 | 0
0
2
6
3 | 0
0
2
6
4 | 0
0
2
6
5 | 0
0
2
6
6 | 0
0
2
6
7 | 0
0
2
6
8 | 0
0
2
6
9 | 0
0
2
7
0 | 0
0
2
7
1 | 0
0
2
7
2 |
| ANIMAL ID | 0
0
2
5
1 | 0
0
2
5
2 | 0
0
2
5
3 | 0
0
2
5
4 | 0
0
2
5
5 | 0
0
2
5
6 | 0
0
2
5
7 | 0
0
2
5
8 | 0
0
2
5
9 | 0
0
2
6
0 | 0
0
2
6
1 | 0
0
2
6
2 | 0
0
2
6
3 | 0
0
2
6
4 | 0
0
2
6
5 | 0
0
2
6
6 | 0
0
2
6
7 | 0
0
2
6
8 | 0
0
2
6
9 | 0
0
2
7
0 | 0
0
2
7
1 | 0
0
2
7
2 |

Lymphoma Malignant

X X

females
(cont...)

* .. Total animals with tissue examined microscopically; Total animals with tumo

+ .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Sodium Tungstate Dihydrate

CAS Number: 10213-10-2

Date Report Requested: 06/26/2019

Time Report Requested: 10:13:17

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

Lab: BAT

| DAY ON TEST | | | | | | | | | | | | | | | | | | | | |
|-------------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | HARLAN SPRAGUE DAWLEY RATS
FEMALE
250mg/L female | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | | | | | | | | | | | | | | | | | | | | |
| | 07730 | 06320 | 03920 | 03700 | 07300 | 07301 | 06311 | 07191 | 07311 | 07311 | 06521 | 05391 | 07212 | 07322 | 07322 | 07322 | 07320 | 07300 | 07300 | 07300 |
| 002276 | 002277 | 002278 | 002279 | 002280 | 002281 | 002282 | 002283 | 002284 | 002285 | 002286 | 002287 | 002288 | 002289 | 002290 | 002291 | 002292 | 002293 | 002294 | 002295 | 002296 |
| 007767 | 007780 | 007781 | 007782 | 007783 | 007784 | 007785 | 007786 | 007787 | 007788 | 007789 | 007790 | 007791 | 007792 | 007793 | 007794 | 007795 | 007796 | 007797 | 007798 | 007799 |

ALIMENTARY SYSTEM

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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|--|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|----|
| | | 0
7
3
0 | 0
6
2
0 | 0
3
9
2 | 0
7
3
0 | 0
6
4
5 | 0
7
1
1 | 0
7
3
1 | 0
6
5
9 | 0
7
3
2 | 0
7
2
1 | 0
7
3
2 | | | |
| HARLAN SPRAGUE DAWLEY RATS
FEMALE
250mg/L female | ANIMAL ID | 0
0
2
7
6 | 0
0
2
7
7 | 0
0
2
7
8 | 0
0
2
8
9 | 0
0
2
8
0 | 0
0
2
8
1 | 0
0
2
8
2 | 0
0
2
8
3 | 0
0
2
8
4 | 0
0
2
8
5 | 0
0
2
8
6 | 0
0
2
8
7 | 0
0
2
8
8 | 0
0
2
8
9 | 0
0
2
9
0 | 0
0
2
9
1 | 0
0
2
9
2 | 0
0
2
9
3 | 0
0
2
9
4 | 0
0
2
9
5 | 0
0
2
9
6 | 0
0
2
9
7 | 0
0
2
9
8 | 0
0
2
9
9 | | |
| | | 0
0
2
7
6 | 0
0
2
7
7 | 0
0
2
7
8 | 0
0
2
8
9 | 0
0
2
8
0 | 0
0
2
8
1 | 0
0
2
8
2 | 0
0
2
8
3 | 0
0
2
8
4 | 0
0
2
8
5 | 0
0
2
8
6 | 0
0
2
8
7 | 0
0
2
8
8 | 0
0
2
8
9 | 0
0
2
9
0 | 0
0
2
9
1 | 0
0
2
9
2 | 0
0
2
9
3 | 0
0
2
9
4 | 0
0
2
9
5 | 0
0
2
9
6 | 0
0
2
9
7 | 0
0
2
9
8 | 0
0
2
9
9 | | |
| Blood Vessel | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pars Distalis, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 9 |
| Pars Distalis, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Schwannoma Malignant, Metastatic, Peripheral Nerve | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Bilateral, C-cell, Adenoma | X | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| C-cell, Adenoma | X | | | | | | | | | | | | | | | | | | | | | | | | | | 11 |
| C-cell, Adenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

HEMATOPOIETIC 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

| | DAY ON TEST | HARLAN SPRAGUE DAWLEY RATS
FEMALE
250mg/L female | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|--|-------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|----|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | ANIMAL ID | 7 | 6 | 3 | 7 | 3 | 3 | 3 | 4 | 3 | 1 | 9 | 1 | 9 | 1 | 9 | 1 | 9 | 1 | 9 | 1 | 9 | | |
| | | 3 | 2 | 9 | 3 | 3 | 3 | 3 | 4 | 3 | 1 | 9 | 1 | 9 | 1 | 9 | 1 | 9 | 1 | 9 | 1 | 9 | | |
| | | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 5 | 1 | 9 | 1 | 9 | 1 | 9 | 1 | 9 | 1 | 9 | 1 | 9 | | |
| | | 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 | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | | |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | | |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Lymphoma Malignant | | | X | | | | | | | | | | | | | | | | | | | | 3 | |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Fibroadenoma | | | X | X | | | | X | X | | | | | | | | | X | X | X | X | X | 26 | |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Subcutaneous Tissue, Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Schwannoma Malignant, Metastatic, Peripheral Nerve | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Peripheral Nerve | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Trigeminal, Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| RESPIRATORY 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

*** TOTALS**

SPECIAL SENSES SYSTEM

URINARY SYSTEM

SYSTEMIC LESIONS

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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

Lymphoma Malignant

1

x

4

* .. Total animals with tissue examined microscopically; Total animals with tumo

+ .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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

ALIMENTARY SYSTEM

* .. Total animals with tissue examined microscopically: Total animals with tumor

± .. Tissue examined microscopically

X - Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK - Not examined microscopically

Experiment Number: 03038 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|--|
| | 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 | | |
| HARLAN SPRAGUE DAWLEY RATS
FEMALE
500mg/L female | 7 | 7 | 4 | 7 | 6 | 5 | 2 | 7 | 2 | 5 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 5 | 7 | 5 | 7 | 1 | 3 | 2 | 7 | 4 | |
| | 3 | 3 | 6 | 3 | 5 | 8 | 7 | 3 | 1 | 8 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 9 | 3 | 2 | 1 | 9 | 2 | 3 | 2 | 5 | |
| | 1 | 1 | 3 | 1 | 1 | 8 | 0 | 0 | 6 | 8 | 3 | 0 | 0 | 0 | 0 | 2 | 9 | 0 | 2 | 9 | 1 | 9 | 2 | 3 | 2 | 6 | |
| | 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 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 5 | |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | X | | | | | | | | | | | | | | | | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fibroadenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diaphragm, Leiomyosarcoma, Metastatic,
Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| RESPIRATORY 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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
500mg/L female | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|--|
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | females
(cont...) | |
| | 7 | 7 | 4 | 7 | 6 | 5 | 2 | 7 | 7 | 2 | 5 | 7 | 7 | 7 | 7 | 0 | 5 | 7 | 5 | 7 | 5 | | |
| | 3 | 3 | 6 | 3 | 5 | 8 | 7 | 3 | 1 | 8 | 8 | 3 | 3 | 3 | 3 | 0 | 2 | 9 | 3 | 9 | 3 | | |
| | 1 | 1 | 1 | 3 | 1 | 8 | 0 | 0 | 6 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 9 | 2 | 0 | 9 | 2 | | |
| | 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 | | |

Lymphoma Malignant

**females
(cont...)**

* .. Total animals with tissue examined microscopically; Total animals with tumo

+ .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | 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 | |
| ANIMAL ID | 5 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 6 | 5 | 7 | 7 | 7 | 6 | 7 | 3 | 3 | 3 | 7 | 3 | |
| | 9 | 3 | 3 | 3 | 4 | 3 | 3 | 0 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 0 | 7 | 8 | 3 | 1 | 0 | 7 | 3 | 0 | 5 | 0 | 7 | 3 |
| | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 6 | 1 | 2 | 2 | 2 | 2 | 2 | 0 | 6 | 5 | 1 | 1 | 0 | 7 | 3 | 0 | 5 | 0 | 7 | 3 |
| | 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 | 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 | 3 |
| | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 |

* TOTALS

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Esophagus | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| 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 | |
| Cholangioma | | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Salivary Glands | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| 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

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

GENERAL BODY 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

NONE

GENITAL SYSTEM

HEMATOPOIETIC SYSTEM

* .. Total animals with tissue examined microscopically: Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

.. Autolysis precludes evaluation

X., Lesion present

BLANK .. Not examined microscopically

I. Insufficient tissue

Experiment Number: 03038 - 03

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|---|-----------------------|-----------------------|-----------------------|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------|
| | 0
5
9
2 | 0
7
3
2 | 0
7
3
2 | 0
6
4
2 | 0
7
3
1 | 0
5
0
1 | 0
7
3
0 | 0
7
3
2 | 0
7
3
2 | 0
7
3
2 | 0
4
2
0 | 0
6
7
6 | 0
5
8
5 | 0
7
3
1 | 0
7
3
0 | 0
7
3
0 | 0
7
6
5 | 0
7
3
0 | 0
7
3
0 | 0
7
3
0 | |
| ANIMAL ID | 0
0
3
2
6 | 0
0
3
2
7 | 0
0
3
2
8 | 0
0
3
2
9 | 0
0
3
0 | 0
0
3
3 | 0
0
3
3 | 0
0
3
4 | 0
0
3
5 | 0
0
3
6 | 0
0
3
7 | 0
0
3
8 | 0
0
3
9 | 0
0
3
0 | 0
0
3
1 | 0
0
3
2 | 0
0
3
3 | 0
0
3
4 | 0
0
3
5 | 0
0
3
6 | * TOTALS |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | 1 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | X | | | | X | | | | | | | | | | | 2 |
| Thymus | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | | | | | | X | | | | | | | | | | | | | | | 2 |
| Adenoma | | | | | | | X | | | | | | | | | | | | | | 3 |
| Fibroadenoma | | | | | | | | X | | | X | | | | | | | | | | 15 |
| Fibroadenoma, Multiple | | | | | | | | | X | | | X | | | | | | | | | 8 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | 1 |
| Diaphragm, Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | 1 |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | |
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| RESPIRATORY 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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
ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|--|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----|----------|---|
| | | 0
5
9
2 | 0
7
3
2 | 0
7
3
2 | 0
6
4
2 | 0
7
3
1 | 0
5
0
1 | 0
7
1
0 | 0
7
3
2 | 0
7
3
2 | 0
7
3
2 | 0
4
2
0 | 0
6
7
6 | 0
5
8
5 | 0
7
3
1 | 0
7
3
0 | 0
7
3
0 | 0
7
6
5 | 0
7
3
0 | 0
7
6
5 | 0
7
3
0 | 0
7
6
5 | 0
7
3
0 | 0
7
3
0 | | | |
| Lung | | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Adenocarcinoma, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Trachea | | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | + | 1 |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leiomyosarcoma, Metastatic, Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | X | 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 5 | 7 | 7 | 7 | 6 | 7 | 7 | 5 | 0 | 7 | 7 | 3 | 3 | 2 | 2 | 2 | 0 | 6 | 5 | 7 | |
| | | 9 | 3 | 3 | 3 | 4 | 3 | 3 | 0 | 1 | 6 | 1 | 3 | 2 | 2 | 2 | 2 | 0 | 7 | 3 | 3 | 0 |
| | | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 6 | 1 | 2 | 2 | 2 | 2 | 2 | 0 | 7 | 3 | 5 | 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 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

Lymphoma Malignant

X

1

*** TOTALS**

* .. Total animals with tissue examined microscopically; Total animals with tumo

+ .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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

ALIMENTARY 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | | | |
|---|-------------|-----------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------------------|----|---|--|
| | | 07 | 06 | 07 | 07 | 07 | 06 | 07 | 07 | 06 | 04 | 07 | 07 | 06 | 07 | 07 | 05 | 07 | 07 | 07 | 05 | 07 | 07 | 05 | 07 | 07 | | | |
| | ANIMAL ID | 32 | 89 | 42 | 32 | 08 | 00 | 40 | 01 | 13 | 13 | 11 | 13 | 16 | 16 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | | |
| Lymph Node, Mandibular Lymphoma Malignant | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Lymph Node, Mesenteric Lymphoma Malignant | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Spleen Lymphoma Malignant | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Thymus Lymphoma Malignant | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland Adenocarcinoma | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Adenoma | | X | | X | | X | | X | | X | | X | | X | | X | | X | | X | | X | | X | | X | | | |
| Fibroadenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain Glioma Malignant | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | 0
7
3
1 | 0
6
2
4 | 0
7
3
1 | 0
4
7
8 | 0
7
0
0 | 0
7
3
2 | 0
7
3
2 | 0
7
3
0 | 0
6
5
8 | 0
7
3
2 | 0
7
3
2 | 0
7
3
2 | 0
7
3
2 | 0
6
5
8 | 0
7
3
2 | | | |
| ANIMAL ID | 0
0
3
7
6 | 0
0
3
7
7 | 0
0
3
7
8 | 0
0
3
8 | 0
0
3
9 | 0
0
3
0 | 0
0
3
1 | 0
0
3
2 | 0
0
3
3 | 0
0
3
4 | 0
0
3
5 | 0
0
3
6 | 0
0
3
7 | 0
0
3
8 | 0
0
3
9 | 0
0
3
0 | 0
0
3
1 | 0
0
3
2 | 0
0
3
3 | 0
0
3
4 | 0
0
3
5 | 0
0
3
6 | 0
0
3
7 | 0
0
3
8 | 0
0
3
9 | * TOTALS | |
| | 0
0
3
3
7 | 0
0
3
3
8 | 0
0
3
3
9 | 0
0
3
4
0 | 0
0
3
4
1 | 0
0
3
4
2 | 0
0
3
4
3 | 0
0
3
4
4 | 0
0
3
4
5 | 0
0
3
4
6 | 0
0
3
4
7 | 0
0
3
4
8 | 0
0
3
4
9 | 0
0
3
5
0 | 0
0
3
5
1 | 0
0
3
5
2 | 0
0
3
5
3 | 0
0
3
5
4 | 0
0
3
5
5 | 0
0
3
5
6 | 0
0
3
5
7 | 0
0
3
5
8 | 0
0
3
5
9 | 0
0
3
6
0 | 0
0
3
6
1 | 0
0
3
6
2 | 0
0
3
6
3 |
| | 0
0
3
3
7 | 0
0
3
3
8 | 0
0
3
3
9 | 0
0
3
4
0 | 0
0
3
4
1 | 0
0
3
4
2 | 0
0
3
4
3 | 0
0
3
4
4 | 0
0
3
4
5 | 0
0
3
4
6 | 0
0
3
4
7 | 0
0
3
4
8 | 0
0
3
4
9 | 0
0
3
5
0 | 0
0
3
5
1 | 0
0
3
5
2 | 0
0
3
5
3 | 0
0
3
5
4 | 0
0
3
5
5 | 0
0
3
5
6 | 0
0
3
5
7 | 0
0
3
5
8 | 0
0
3
5
9 | 0
0
3
6
0 | 0
0
3
6
1 | 0
0
3
6
2 | 0
0
3
6
3 |
| | 0
0
3
3
7 | 0
0
3
3
8 | 0
0
3
3
9 | 0
0
3
4
0 | 0
0
3
4
1 | 0
0
3
4
2 | 0
0
3
4
3 | 0
0
3
4
4 | 0
0
3
4
5 | 0
0
3
4
6 | 0
0
3
4
7 | 0
0
3
4
8 | 0
0
3
4
9 | 0
0
3
5
0 | 0
0
3
5
1 | 0
0
3
5
2 | 0
0
3
5
3 | 0
0
3
5
4 | 0
0
3
5
5 | 0
0
3
5
6 | 0
0
3
5
7 | 0
0
3
5
8 | 0
0
3
5
9 | 0
0
3
6
0 | 0
0
3
6
1 | 0
0
3
6
2 | 0
0
3
6
3 |
| | 0
0
3
3
7 | 0
0
3
3
8 | 0
0
3
3
9 | 0
0
3
4
0 | 0
0
3
4
1 | 0
0
3
4
2 | 0
0
3
4
3 | 0
0
3
4
4 | 0
0
3
4
5 | 0
0
3
4
6 | 0
0
3
4
7 | 0
0
3
4
8 | 0
0
3
4
9 | 0
0
3
5
0 | 0
0
3
5
1 | 0
0
3
5
2 | 0
0
3
5
3 | 0
0
3
5
4 | 0
0
3
5
5 | 0
0
3
5
6 | 0
0
3
5
7 | 0
0
3
5
8 | 0
0
3
5
9 | 0
0
3
6
0 | 0
0
3
6
1 | 0
0
3
6
2 | 0
0
3
6
3 |
| | 0
0
3
3
7 | 0
0
3
3
8 | 0
0
3
3
9 | 0
0
3
4
0 | 0
0
3
4
1 | 0
0
3
4
2 | 0
0
3
4
3 | 0
0
3
4
4 | 0
0
3
4
5 | 0
0
3
4
6 | 0
0
3
4
7 | 0
0
3
4
8 | 0
0
3
4
9 | 0
0
3
5
0 | 0
0
3
5
1 | 0
0
3
5
2 | 0
0
3
5
3 | 0
0
3
5
4 | 0
0
3
5
5 | 0
0
3
5
6 | 0
0
3
5
7 | 0
0
3
5
8 | 0
0
3
5
9 | 0
0
3
6
0 | 0
0
3
6
1 | 0
0
3
6
2 | 0
0
3
6
3 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cholangioma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Mesentery | + | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| 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

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 03038 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/26/2019

Test Type: CHRONIC

Sodium Tungstate Dihydrate

Time Report Requested: 10:13:17

Route: DOSED WATER

CAS Number: 10213-10-2

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

Species/Strain: RATS/HSD

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
1000mg/L female | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|---|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|----------|---|
| | | 0
7
3
1 | 0
6
2
4 | 0
7
3
1 | 0
4
7
8 | 0
7
3
2 | 0
7
3
2 | 0
7
3
0 | 0
6
5
8 | 0
7
3
0 | 0
7
3
2 | 0
7
3
2 | 0
7
3
2 | 0
7
3
0 | 0
6
5
8 | 0
7
3
2 | 0
6
5
8 | 0
7
3
2 | 0
6
5
8 | 0
7
3
2 | 0
6
5
8 | 0
7
3
2 | 0
6
5
8 | | | | |
| ANIMAL ID | | 0
0
3
7
6 | 0
0
3
7
7 | 0
0
3
3
8 | 0
0
3
3
0 | 0
0
3
3
1 | 0
0
3
3
2 | 0
0
3
3
2 | 0
0
3
3
0 | 0
0
3
3
2 | | | |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| CARDIOVASCULAR SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Parathyroid Gland | | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | M | + | + | + | 44 | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pars Distalis, Adenoma | | | | X | | | | | | | | | | | | | | | X | | | | | | | | 9 |
| Pars Distalis, Adenoma, Multiple | | | | | | | | | | | | | | | | | | | | X | | | | | | | 1 |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Bilateral, C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| X .. Lesion present | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|
| | 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 | |
| HARLAN SPRAGUE DAWLEY RATS
FEMALE | 7 | 6 | 7 | 7 | 2 | 4 | 7 | 7 | 7 | 7 | 7 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 5 | 7 | 4 |
| 1000mg/L female | 3 | 2 | 3 | 3 | 0 | 7 | 3 | 3 | 3 | 3 | 3 | 5 | 1 | 3 | 3 | 2 | 8 | 2 | 2 | 3 | 2 | 3 | 2 | 4 | 8 | 3 |
| ANIMAL ID | 1 | 4 | 1 | 1 | 0 | 8 | 2 | 2 | 2 | 2 | 0 | 2 | 8 | 0 | 2 | 2 | 8 | 2 | 2 | 3 | 2 | 2 | 4 | 8 | 3 | 4 |
| | 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 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 0 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | X | | X | | X | | X | | 2 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | X | | | | | | | | 5 |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | X | | | | | | | | 2 |
| Endometrium, Polyp Stromal | | | | | | | | | | | | | | | | | | X | | | | | | | | 7 |
| Endometrium, Polyp Stromal, Multiple | | | | | | | | | | | | | | | | | | | X | | | | | | | 1 |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Axillary, Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Bronchial, Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lumbar, Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
| | | 0
7
3
1 | 0
6
2
4 | 0
7
3
1 | 0
7
0
0 | 0
4
7
8 | 0
7
3
2 | 0
7
3
2 | 0
7
3
0 | 0
6
5
8 | 0
7
3
2 | 0
7
3
2 | 0
7
3
2 | 0
7
3
2 | 0
6
5
8 | 0
7
3
2 | 0
6
5
8 | 0
7
3
4 | 0
7
3
4 | 0
7
3
4 | | |
| ANIMAL ID | 0
0
3
7
6 | 0
0
3
7
7 | 0
0
3
3
8 | 0
0
3
3
0 | 0
0
3
3
1 | 0
0
3
3
2 | 0
0
3
3
3 | 0
0
3
3
4 | 0
0
3
3
5 | 0
0
3
3
6 | 0
0
3
3
7 | 0
0
3
3
8 | 0
0
3
3
9 | 0
0
3
3
0 | 0
0
3
3
1 | 0
0
3
3
2 | 0
0
3
3
3 | 0
0
3
3
4 | 0
0
3
3
5 | 0
0
3
3
6 | 0
0
3
3
7 | |
| Lymph Node, Mandibular
Lymphoma Malignant | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
2 |
| Lymph Node, Mesenteric
Lymphoma Malignant | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
2 |
| Spleen
Lymphoma Malignant | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
3 |
| Thymus
Lymphoma Malignant | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
1 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland
Adenocarcinoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
2 |
| Adenoma | | | X | X | | | | | | | | | | | | | | | | | | 2 |
| Fibroadenoma | | | | | X | | | | | | | | | | | | | | | | | 2 |
| Fibroadenoma, Multiple | | | | | | X | | | | | | | | | | | | | | | | 15
3 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
3 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Brain
Glioma Malignant | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
1 |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: DOSED WATER

Species/Strain: RATS/HSD

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

RESPIRATORY SYSTEM

SPECIAL SENSES SYSTEM

URINARY SYSTEM

SYSTEMIC LESIONS

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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

*** END OF REPORT ***

* .. 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