

Experiment Number: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

F2_HSD Rats

NTP Study Number: C10472B

Lock Date: 08/29/2013

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: 03/08/2016

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Lab: BNW

Lab. BNW

DAY ON TEST		HARLAN SPRAGUE DAWLEY RATS MALE																				males (cont...)			
		07	07	07	05	07	06	07	06	07	07	05	06	06	05	05	04	07	07	07	07	03			
ANIMAL ID		22	22	22	00	33	04	70	77	22	30	33	42	72	48	88	88	80	29	29	29	29	40	males (cont...)	
		00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	males (cont...)	
Control		00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	males (cont...)	
		01	12	23	34	45	56	67	78	89	90	11	21	31	41	51	61	71	81	91	02	12	23	45	males (cont...)

Stomach, Forestomach Leukemia Mononuclear

Stomach, Glandular Leukemia Mononuclear

Tooth
Odontoma

**males
(cont...)**

CARDIOVASCULAR SYSTEM

Blood Vessel

Heart Leukemia Mononuclea

ENDOCRINE SYSTEM

Adrenal Cortex
Adenoma
Leukemia Mononuclear

- Adrenal Medulla
- Pheochromocytoma Benign
- Pheochromocytoma Malignant
- Bilateral, Pheochromocytoma Benign

Islets, Pancreatic Adenoma

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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Lab: BNW

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GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Coagulating Gland

Epididymis
Mesothelioma Malignant
Sarcoma

Preputial Gland

Prostate Leukemia Mononuclear

Seminal Vesicle

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Lab: BNW

Brain Glioma Malignant

Peripheral Nerve

Spinal Cord

RESPIRATORY SYSTEM

Larynx
Leukemia Granulocytic

Lung
Carcinoma, Metastatic, Lung
Leukemia Granulocytic
Leukemia Mononuclear

Nose
Leukemia Granulocytic

Trachea

SPECIAL SENSES SYSTEM

Eye
Iris, Leiomyoma

Harderian Gland

Zymbal's Gland

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Lab: BNW

Carcinoma

URINARY SYSTEM

Kidney

Leukemia Granulocytic Leukemia Mononuclear

Urinary Bladder

SYSTEMIC LESIONS

Multiple Organ

Leukemia Granulocytic
Leukemia Mononuclear
Mesothelioma Malignant

X

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SACN 10-00-00-52-6

CAS Number: 98-56-6

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Lab: BNW

ALIMENTARY SYSTEM

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Lab: BNW

HARLAN SPRAGUE DAWLEY RATS MALE Control	DAY ON TEST ANIMAL ID	* TOTALS																									
		0 7 3 0	0 6 6 3	0 5 8 9	0 6 6 1	0 5 9 0	0 4 8 5	0 7 2 9	0 6 1 8	0 7 2 9	0 5 3 3	0 7 3 1	0 6 3 0	0 7 3 0	0 7 2 3	0 7 2 9	0 5 1 6	0 4 9 3	0 5 8 4	0 5 2 9	0 7 2 7	0 5 9 7					
Parathyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Pituitary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Leukemia Mononuclear																											1
Pars Distalis, Adenoma		X																									11
Thyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Leukemia Mononuclear																											1
C-cell, Adenoma		X																									2
C-cell, Carcinoma																											1

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Coagulating Gland																												1
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Mesothelioma Malignant																												1
Sarcoma																												1
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Leukemia Mononuclear																												1
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		

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HEMATOPOIETIC SYSTEM

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	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 MALE Control	ANIMAL ID	7	6	5	6	5	4	7	6	7	5	7	7	7	6	7	7	7	7	7	7	5	4	5	7	5		
		3	6	8	6	9	8	2	1	2	3	2	2	2	3	3	2	3	3	2	3	1	6	9	8	4	2	
		0	3	9	1	0	5	9	8	2	9	3	6	2	9	2	9	1	0	0	0	0	6	3	4	5	7	7
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	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	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	0
Leukemia Mononuclear		X	X																									3
Spleen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Leukemia Granulocytic																												1
Leukemia Mononuclear																												3
Thymus		+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Leukemia Mononuclear					X																							2
INTEGUMENTARY SYSTEM																												
Mammary Gland		+	+	+	+	+	M	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43	
Fibroadenoma							X																					2
Skin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Keratoacanthoma																												2
Keratoacanthoma, Multiple																												1
Squamous Cell Papilloma																												1
Sebaceous Gland, Adenoma																												1
Subcutaneous Tissue, Fibrous Histiocytoma																												1
Subcutaneous Tissue, Hemangioma																												1
Subcutaneous Tissue, Lipoma																												1
MUSCULOSKELETAL SYSTEM																												
Bone		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Skeletal Muscle		+	+																									7
NERVOUS SYSTEM																												

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HARLAN SPRAGUE DAWLEY RATS 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	0		
Control	ANIMAL ID	7	6	5	6	5	4	7	6	7	5	7	7	7	6	7	7	7	7	7	7	5	4	5	7	5		
		3	6	8	6	9	8	2	1	2	3	2	2	2	3	2	3	3	3	3	2	3	1	9	8	2	3	
		0	3	9	1	0	5	9	8	2	9	8	9	3	6	2	9	9	1	0	0	0	1	6	3	7	7	
		6	7	8	9	0	1	2	3	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
Brain		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Glioma Malignant																												2
Peripheral Nerve		+		+																								7
Spinal Cord		+		+																								7
RESPIRATORY SYSTEM																												
Larynx		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Leukemia Granulocytic																												1
Lung		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Carcinoma, Metastatic, Lung																												1
Leukemia Granulocytic		X	X																									1
Leukemia Mononuclear																												3
Nose		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Leukemia Granulocytic																												1
Trachea		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
SPECIAL SENSES SYSTEM																												
Eye		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Iris, Leiomyoma																												1
Harderian Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Zymbal's Gland																												1

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HARLAN SPRAGUE DAWLEY RATS MALE	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	
Control	ANIMAL ID	7	6	5	6	5	4	7	6	7	5	7	7	7	6	7	7	7	7	7	7	5	4	5	7	5	
		3	6	8	6	9	8	2	1	2	3	2	2	2	3	3	3	3	3	3	2	1	9	8	2	3	
		0	3	9	1	0	5	9	8	9	3	6	2	9	1	0	3	0	0	0	6	1	3	4	2	7	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	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	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	
* TOTALS																											
Carcinoma																											
X																											
1																											

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Leukemia Granulocytic																											1
Leukemia Mononuclear																											3

Urinary Bladder

Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
-----------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Leukemia Granulocytic																											1
Leukemia Mononuclear																											3
Mesothelioma Malignant																											1

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HARLAN SPRAGUE DAWLEY RATS MALE 100 ppm	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
ANIMAL ID	7	7	5	7	7	7	6	7	7	7	5	3	7	3	6	7	7	6	6	0	7	7	7	5	6
	3	2	2	2	3	3	1	2	3	1	5	4	3	1	4	2	2	4	8	1	7	3	1	5	5
	0	9	5	9	0	0	8	9	0	0	8	7	0	8	0	2	9	0	3	7	0	5	5	5	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	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	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...)

ALIMENTARY SYSTEM

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

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Lab: BNW

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis

Preputial Gland

Prostate

Seminal Vesicle

Leukemia Mononuclear

Testes

Interstitial Cell Adenoma

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Lab: BNW

DAY ON TEST																												
	0 7	0 7	0 5	0 7	0 7	0 7	0 6	0 7	0 7	0 7	0 5	0 3	0 7	0 3	0 6	0 7	0 7	0 6	0 6	0 7	0 7	0 7	0 5	0 6	0 5	0 5	0 5	
HARLAN SPRAGUE DAWLEY RATS MALE 100 ppm	ANIMAL ID	0 0																										
		2 2																										
		0 1	0 1	0 2	0 2	0 3	0 3	0 4	0 5	0 6	0 7	0 8	0 9	0 0	0 1	0 2	0 3	0 4	0 5	0 6	0 7	0 8	0 9	0 0	0 1	0 2	0 3	0 4

Leukemia Mononuclear

X

Urinary Bladder

+ +

SYSTEMIC LESIONS

Multiple Organ
Leukemia Mononuclear

+ +

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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
MALE
100 ppm | 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 | |
| ANIMAL ID | 2 | 7 | 2 | 2 | 3 | 0 | 3 | 2 | 2 | 3 | 1 | 5 | 0 | 7 | 3 | 0 | 2 | 9 | 5 | 3 | 5 | 6 | 7 | 8 | 5 | 0 | 4 |
| | 9 | 0 | 9 | 4 | 0 | 6 | 0 | 9 | 9 | 1 | 5 | 0 | 7 | 3 | 0 | 0 | 2 | 9 | 5 | 3 | 5 | 6 | 7 | 8 | 9 | 5 | 4 |

* TOTALS

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Hepatocellular Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Acinus, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | 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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

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

+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| 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
MALE | 7 | 5 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 3 | 7 | 4 | 3 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | |
| 100 ppm | 2 | 7 | 2 | 2 | 3 | 0 | 3 | 2 | 2 | 3 | 1 | 5 | 0 | 7 | 3 | 0 | 7 | 8 | 0 | 9 | 5 | 6 | 7 | 8 | 5 | 7 |
| ANIMAL ID | 9 | 0 | 9 | 4 | 0 | 6 | 0 | 9 | 9 | 1 | 5 | 0 | 7 | 3 | 0 | 7 | 8 | 5 | 3 | 5 | 6 | 7 | 6 | 8 | 9 | 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 |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 2 | 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 | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| Iliac, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Renal, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Bronchial | + | + | M | M | M | + | + | M | + | M | + | M | M | M | + | + | M | M | + | + | M | M | + | M | 26 | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymph Node, Mediastinal | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | 49 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | M | M | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | M | + | + | + | 38 |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

* .. 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
MALE
100 ppm | DAY ON TEST
ANIMAL ID | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|
| | | 0
7
2
9 | 0
5
7
0 | 0
7
2
9 | 0
7
3
0 | 0
7
2
9 | 0
6
3
1 | 0
5
7
0 | 0
6
6
4 | 0
6
3
1 | 0
7
2
9 | 0
4
8
3 | 0
3
8
5 | 0
6
9
5 | 0
6
7
6 | 0
6
8
7 | 0
5
8
9 | 0
6
5
0 | 0
6
8
4 | 0
5
5
4 | 0
6
7
4 | 0
0
0
0 | 0
0
0
0 | 0
0
0
0 | 0
0
0
0 | 0
0
0
0 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Fibroadenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Sebaceous Gland, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Subcutaneous Tissue, Fibrous Histiocytoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Subcutaneous Tissue, Lipoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Hemangiosarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Glioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Peripheral Nerve | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| Spinal Cord | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | 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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

Time Report Requested: 11:15:09

First Dose M/E: 01/17/11 / 01/17/11

First Dose MN : 01/11/11 01/11/11

Lab: BNW

Schwannoma Malignant, Metastatic, Skeletal Muscle

x

1

RESPIRATORY SYSTEM

SPECIAL SENSES SYSTEM

URINARY 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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

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p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

Time Report Requested: 11:15:09

First Dose M/E: 01/17/11 / 01/17/11

Lab: BNW

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

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Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

HARLAN SPRAGUE DAWLEY RATS
MALE
300 ppm

ANIMAL ID

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

males
(cont...)

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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
MALE
300 ppm | 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 |
| ANIMAL ID | 4 | 7 | 7 | 6 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 7 | 6 | 6 | 5 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 7 | |
| | 6 | 2 | 2 | 6 | 7 | 3 | 3 | 3 | 9 | 3 | 1 | 2 | 3 | 9 | 8 | 1 | 2 | 9 | 7 | 7 | 9 | 7 | 7 | 8 | 1 | 1 |
| | 3 | 9 | 9 | 9 | 8 | 0 | 5 | 0 | 7 | 0 | 7 | 2 | 9 | 0 | 1 | 4 | 2 | 9 | 4 | 7 | 9 | 7 | 7 | 8 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 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 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |

males
(cont...)

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Endocardium, Schwannoma Malignant | X | | | | | | | | | | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex
Carcinoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adrenal Medulla
Pheochromocytoma Benign | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pheochromocytoma Malignant | X | X | X | | | | | | | | | | | | | | | | | | | | | | | |
| Bilateral, Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic
Adenoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pituitary Gland
Pars Distalis, Adenoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pars Distalis, Histiocytic Sarcoma | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland
Bilateral, C-cell, Adenoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C-cell, Carcinoma | 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| 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 |
| 4 | 7 | 7 | 6 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 7 |
| 6 | 2 | 2 | 6 | 7 | 3 | 3 | 3 | 9 | 3 | 1 | 2 | 3 | 9 | 8 | 1 | 2 | 7 | 9 | 7 | 7 | 7 | 9 | 0 | 1 | 9 |
| 3 | 9 | 9 | 9 | 8 | 0 | 5 | 0 | 7 | 0 | 7 | 9 | 0 | 1 | 3 | 4 | 2 | 9 | 4 | 7 | 7 | 7 | 9 | 8 | 1 | 7 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 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 | males
(cont...) |

Follicular Cell, Adenoma

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis

Mesothelioma Malignant

+ X

Preputial Gland

Carcinoma

+ X

Prostate

+ +

Seminal Vesicle

+ +

Testes

Interstitial Cell, Adenoma

+ X

HEMATOPOIETIC SYSTEM

Bone Marrow

+ +

Lymph Node

+ +

Lymph Node, Bronchial

+ + + M + + M M M + + M + + M M M + M + + M M

Lymph Node, Mandibular

+ +

* .. 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| 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 |
| HARLAN SPRAGUE DAWLEY RATS
MALE
300 ppm | 4 | 7 | 7 | 6 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 5 |
| | 6 | 2 | 2 | 6 | 7 | 3 | 3 | 3 | 9 | 3 | 1 | 2 | 3 | 9 | 8 | 1 | 2 | 9 | 7 | 7 | 9 | 7 | 1 | 9 |
| | 3 | 9 | 9 | 9 | 8 | 0 | 5 | 0 | 7 | 0 | 7 | 9 | 0 | 1 | 3 | 4 | 2 | 9 | 7 | 7 | 9 | 8 | 1 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 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 | 3 | 4 |

males
(cont...)

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Glioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | |
| Peripheral Nerve | | | | | | | + | | | | | | | | | | | | | | | | | | |
| Spinal Cord | | | | | | | + | | | | | | | | | | | | | | | | | | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pheochromocytoma Malignant, Metastatic,
Adrenal Medulla | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* .. 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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

Time Report Requested: 11:15:09

First Dose M/E: 01/17/11 / 01/17/11

Lab: BNW

| DAY ON TEST | | HARLAN SPRAGUE DAWLEY RATS
MALE | | | | | | | | | | | | | | | | | | | |
|-------------|---|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 300 ppm | | | | | | | | | | | | | | | | | | | |
| | | ANIMAL ID | | | | | | | | | | | | | | | | | | | |
| 0 | 0 | 0 | 7 | 0 | 6 | 6 | 7 | 3 | 3 | 5 | 0 | 7 | 0 | 7 | 7 | 3 | 1 | 2 | 9 | 0 | 1 |
| 4 | 7 | 7 | 2 | 2 | 6 | 6 | 7 | 3 | 3 | 5 | 0 | 7 | 0 | 7 | 7 | 3 | 0 | 1 | 2 | 9 | 1 |
| 6 | 2 | 2 | 9 | 9 | 8 | 0 | 5 | 5 | 0 | 7 | 0 | 7 | 1 | 2 | 9 | 3 | 4 | 2 | 9 | 7 | 4 |
| 3 | 9 | 9 | 9 | 8 | 0 | 5 | 5 | 0 | 7 | 0 | 7 | 1 | 2 | 9 | 3 | 4 | 2 | 9 | 7 | 4 | 7 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 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 |

Lipoma

Renal Tubule, Adenoma

X

X

Urinary Bladder
Urothelium, Papilloma

SYSTEMIC LESIONS

Multiple Organ

Histiocytic Sarcoma

Lymphoma Malignant

Mesothelioma Malignant

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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ALIMENTARY SYSTEM

* .. 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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

CAS Number: 98-56-6

Time Report Requested: 11:15:09

First Dose M/E: 01/17/11 / 01/17/11

First Dose M/F: 01/17/11/01/17/11

Lab: BNW

| DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
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| ANIMAL ID | 0
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CARDIOVASCULAR SYSTEM

ENDOCRINE 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

Follicular Cell, Adenoma

X

1

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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
MALE
300 ppm | DAY ON TEST
ANIMAL ID | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|---|----|---|
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3 | 0
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8 | 0
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2
6 | 0
5
2
9 | 0
7
2
9 | | | | |
| Lymph Node, Mediastinal | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 48 | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland
Fibroadenoma | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 | |
| | X | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Basal Cell Adenoma | X | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Keratoacanthoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Sebaceous Gland, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Subcutaneous Tissue, Hemangioma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Subcutaneous Tissue, Lipoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Subcutaneous Tissue, Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone
Osteosarcoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Skeletal Muscle | + | | | | | | | | | | | | | | | | | | | | | | | | 4 |

* .. 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
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NERVOUS SYSTEM

RESPIRATORY SYSTEM

SPECIAL SENSES SYSTEM

URINARY 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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

p-Chloro-a.a.a-trifluorotoluene

GAS Number: 98-56-6

CAS Number: 98-50-0

Time Report Requested: 11:15:09

First Dose M/E: 01/17/11 / 01/17/11

First Dose M/F: 01/1/11/01/1/11

Lab: BNW

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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| 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 | 5 | 7 | 6 | 4 | 6 | 5 | 4 | 5 | 7 | 6 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 4 | 7 | 6 | 6 | 5 | 4 | 6 | 5 | |
| 1000 ppm | 1 | 1 | 6 | 8 | 7 | 7 | 8 | 2 | 2 | 6 | 0 | 1 | 1 | 6 | 4 | 3 | 0 | 3 | 7 | 6 | 8 | 8 | 7 | 4 | 9 | 1 |
| ANIMAL ID | 6 | 5 | 8 | 6 | 2 | 3 | 6 | 8 | 7 | 1 | 4 | 6 | 8 | 5 | 0 | 3 | 7 | 3 | 6 | 8 | 8 | 9 | 6 | 9 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hepatocellular Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Schwannoma Malignant, Metastatic, Heart | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Acinus, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* .. 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
MALE
1000 ppm | DAY ON TEST
ANIMAL ID | males
(cont...) | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------------|--------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|---|---|---|
| | | 0
5
1
6 | 0
7
1
5 | 0
6
6
8 | 0
4
8
2 | 0
5
7
2 | 0
6
2
3 | 0
7
8
1 | 0
6
1
4 | 0
7
1
6 | 0
6
1
8 | 0
7
5
0 | 0
7
3
0 | 0
7
0
3 | 0
6
8
6 | 0
6
8
8 | 0
6
8
9 | 0
5
7
6 | 0
4
9
9 | 0
6
4
1 | 0
5
9
1 | | | | |
| Lymph Node | | + | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Bronchial | | + | + | M | M | + | M | M | + | + | M | M | M | M | + | + | M | + | + | + | M | + | M | M | + |
| Lymph Node, Mandibular
Leukemia Mononuclear | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mediastinal
Leukemia Mononuclear | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric
Leukemia Mononuclear | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen
Leukemia Mononuclear | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | M | M | + | + | + | + | + | + | M | M | + | + | + | + | + | + | + | + | + | + | + | + | M |
| Skin
Keratoacanthoma
Squamous Cell Papilloma | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. 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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

Time Report Requested: 11:15:09

First Dose M/E: 01/17/11 / 01/17/11

Lab: BNW

Pheochromocytoma Malignant, Metastatic Adrenal Medulla

URINARY SYSTEM

Kidney
Leukemia Mononuclear

Urinary Bladder

SYSTEMIC LESIONS

Multiple Organ Leukemia Mononuclear

* .. 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
MALE
1000 ppm | 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 | 5 | 6 | 5 | 6 | 4 | 4 | 7 | 6 | 7 | 5 | 4 | 6 | 7 | 5 | 6 | 5 | 4 | 7 | 5 | 6 | 5 | 0 | 7 | 5 | | |
| | | 1 | 3 | 1 | 6 | 5 | 8 | 3 | 2 | 1 | 3 | 7 | 2 | 2 | 2 | 4 | 5 | 4 | 9 | 2 | 9 | 5 | 4 | 7 | 9 | 0 | 6 | |
| | | 2 | 0 | 7 | 1 | 4 | 2 | 0 | 9 | 4 | 0 | 5 | 1 | 1 | 9 | 4 | 9 | 4 | 9 | 2 | 9 | 5 | 8 | 1 | 6 | 9 | 8 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 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 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 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 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hepatocellular Carcinoma | X | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Schwannoma Malignant, Metastatic, Heart | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Aacinus, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | X 1 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
MALE
1000 ppm | 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 | |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| CARDIOVASCULAR SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endocardium, Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pheochromocytoma Benign | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pheochromocytoma Malignant | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Bilateral, Pheochromocytoma Benign | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | | + | + | + | + | + | M | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | 46 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

Time Report Requested: 11:15:09

First Dose M/E: 01/17/11 / 01/17/11

First Dose MN : 01/11/11 01/11/11

Lab: BNW

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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
MALE
1000 ppm | 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 | 6 | 5 | 6 | 5 | 6 | 4 | 4 | 7 | 6 | 7 | 5 | 4 | 6 | 7 | 5 | 6 | 5 | 4 | 9 | 2 | 9 | 7 | 5 | 6 | 5 | 0 | |
| | 1 | 3 | 1 | 6 | 5 | 8 | 3 | 2 | 1 | 3 | 7 | 2 | 2 | 2 | 4 | 9 | 5 | 4 | 9 | 2 | 9 | 7 | 5 | 6 | 7 | 8 | |
| Lymph Node | 2 | 0 | 7 | 1 | 4 | 2 | 0 | 9 | 4 | 0 | 5 | 1 | 1 | 2 | 9 | 4 | 9 | 4 | 9 | 2 | 9 | 5 | 6 | 8 | 1 | 0 | |
| Lymph Node, Bronchial | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Lymph Node, Mandibular | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Leukemia Mononuclear | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| Lymph Node, Mediastinal | 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 | 5 | |
| Leukemia Mononuclear | 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 | | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Leukemia Mononuclear | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Leukemia Mononuclear | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | M | + | M | M | + | + | + | M | M | + | + | + | M | M | + | + | + | + | + | 37 | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Keratoacanthoma | | | | | | | | | | | X | | | | | | | | | | | | | | | | 3 |
| Squamous Cell Papilloma | | | | | | | | | | | X | | | | | | | | | | | | | | | | 1 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

p-Chloro- α - α -trifluorotoluene

CAS Number: 98-56-6

CAS Number: 90-00-0

Time Report Requested: 11:15:09

First Dose M/E: 01/17/11 / 01/17/11

First Dose MM : 01/1/11 / 01/1/11

Lab: BNW

Pheochromocytoma Malignant, Metastatic Adrenal Medulla

X

1

URINARY SYSTEM

Kidney
Leukemia Mononucle

Urinary Bladder

50

SYSTEMIC LESIONS

Multiple Organ
Leukemia Mononuclea

*** END OF MALE DATA ***

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

+ .. Tissue examined microscopically

X .. Lesion present

XII. Lesion present

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
|--------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|---|---|----------------------|
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| Control | ANIMAL ID | 0
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1 | | | | |
| Esophagus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Duodenum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Ileum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Jejunum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Liver | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hepatocellular Adenoma | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

CARDIOVASCULAR SYSTEM

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| | | DAY ON TEST | HARLAN SPRAGUE DAWLEY RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | | | Control | ANIMAL ID | | | | | |
|----------------------------|--|-------------|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|---------|-----------|---|---|--|--|--|
| | | | 0
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1
1 | 0
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9
6 | 0
7
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7
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2 | 0
7
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2 | | | | | | | | |
| Blood Vessel | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Heart | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Adrenal Medulla | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | | | |
| Islets, Pancreatic Adenoma | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Carcinoma | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Parathyroid Gland | | | + | M | + | + | + | + | + | + | + | + | + | + | + | M | M | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Pituitary Gland | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Pars Distalis, Adenoma | | | 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 | X | X | X | | | |
| Thyroid Gland | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| C-cell, Adenoma | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| GENERAL BODY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GENITAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Ovary | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |

* .. 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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

p-Chloro-a,a,a-trifluorotoluene

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-9

Time Report Requested: 11:15:09

Time Report Requested: 11:15:05

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | |
|--|--|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | HARLAN SPRAGUE DAWLEY RATS
FEMALE | | | | | | | | | | | | | | | | | | | |
| | | Control | | | | | | | | | | | | | | | | | | | |
| | | 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 |
| | | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
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HEMATOPOIETIC SYSTEM

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

± .. Tissue examined microscopically

X ... Lesion present

X .. Lesion present
I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK - Not examined microscopically

Experiment Number: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| DAY ON TEST
HARLAN SPRAGUE DAWLEY RATS
FEMALE
Control | | 0
7
3
2 | 0
7
3
1 | 0
5
5
6 | 0
3
7
3 | 0
5
9
9 | 0
7
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3
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6
4 | 0
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5
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4 | 0
5
3
6 | 0
7
2
1 | 0
5
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2 | 0
7
1
2 | 0
4
8
4 | 0
3
1
1 | 0
6
9
6 | 0
7
3
2 | 0
7
3
2 | females
(cont...) | |
|---|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|--|
| | | 0
0
1
0
1 | | |
| Larynx | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Basal Cell Carcinoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Renal Tubule, Adenoma | | X | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* .. 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
FEMALE | 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 | | |
| Control | ANIMAL ID | 4 | 7 | 7 | 7 | 5 | 7 | 7 | 5 | 7 | 4 | 7 | 5 | 3 | 5 | 6 | 5 | 7 | 5 | 3 | 7 | 4 | 0 | 7 | 7 | | |
| | | 5 | 1 | 3 | 3 | 9 | 3 | 3 | 2 | 3 | 5 | 3 | 3 | 0 | 5 | 4 | 3 | 3 | 2 | 3 | 4 | 2 | 4 | 0 | 1 | 1 | |
| | | 9 | 0 | 1 | 2 | 0 | 1 | 1 | 8 | 1 | 2 | 0 | 1 | 4 | 3 | 6 | 5 | 6 | 2 | 3 | 4 | 2 | 4 | 0 | 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 | 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 | 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 | |
| ALIMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Esophagus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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 | |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | X | 2 | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | + | 1 | |
| Pancreas | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Salivary Glands | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

CAS Number: 98-50-1

Time Report Requested: 11:15:09

First Dose M/E: 01/17/11 / 01/17/11

First Dose M/F: 01/17/11/01/17/11

Lab: BNW

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

† Tissue examined microscopically

X Lesion present

X .. Lesion present

M = Missing tissue

A - Autolysis precludes evaluation

BLANK Not examined microscopically

Experiment Number: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
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9 | 0
7
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0 | 0
7
3
1 | 0
5
3
0 | 0
7
2
1 | 0
5
2
8 | 0
5
3
1 | 0
5
3
2 | 0
5
4
0 | 0
5
3
9 | 0
5
3
6 | 0
5
6
6 | 0
5
3
2 | 0
5
3
4 | 0
5
3
2 | 0
5
7
4 | 0
5
3
1 | 0
5
7
1 | 0
5
3
1 | 0
5
7
1 | |
| Control | ANIMAL ID | 0
0
1
2
6 | 0
0
1
1
7 | 0
0
1
1
8 | 0
0
1
1
9 | 0
0
1
1
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0
1
1
1 | 0
0
1
1
2 | 0
0
1
1
3 | 0
0
1
1
4 | 0
0
1
1
5 | 0
0
1
1
6 | 0
0
1
1
7 | 0
0
1
1
8 | 0
0
1
1
9 | 0
0
1
1
0 | 0
0
1
1
1 | 0
0
1
1
2 | 0
0
1
1
3 | 0
0
1
1
4 | 0
0
1
1
5 | 0
0
1
1
6 |
| Granulosa Cell Tumor Benign | | X | | | | | | | | | | | | | | | X | | | | | 3 |
| Thecoma Benign | | | | | | | | | | | | | | | | | | | | | | 1 |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| Polyp Stromal | | | | | | | | | | | | | | | | | | | | | | 7 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| Vagina | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | 46 |
| Granular Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | | 1 |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | 1 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymph Node, Bronchial | M | M | M | + | + | + | + | + | + | + | M | + | M | M | + | + | + | M | + | M | + | 32 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Lymph Node, Mediastinal | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
FEMALE | 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 | | |
| Control | ANIMAL ID | 4 | 7 | 7 | 7 | 5 | 7 | 7 | 5 | 7 | 4 | 7 | 5 | 3 | 5 | 4 | 6 | 5 | 6 | 5 | 7 | 5 | 7 | 6 | 5 | 7 | 3 | |
| | | 5 | 1 | 3 | 3 | 9 | 3 | 3 | 2 | 3 | 5 | 3 | 3 | 0 | 5 | 4 | 6 | 3 | 6 | 2 | 3 | 4 | 2 | 4 | 0 | 1 | 1 | |
| | | 9 | 0 | 1 | 2 | 0 | 1 | 1 | 8 | 1 | 2 | 0 | 1 | 4 | 3 | 9 | 6 | 3 | 6 | 2 | 3 | 4 | 2 | 4 | 0 | 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 | 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 | 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 | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenocarcinoma | X | | | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| Adenoma | X | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Fibroadenoma | | X | X | | | | | | | | | | | | | | | | | | | | | | | | 17 |
| Fibroadenoma, Multiple | | | | X | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Basal Cell Carcinoma | | | | | | | | | | | | | | | | | X | | | | | | | | | | 1 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Liposarcoma | | | | | | | | | | | | | | | | | | X | | | | | | | | | 1 |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Glioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Cranial Nerve, Schwannoma Malignant | | | | | | | | | | | | | | | | | | X | | | | | | | | | 1 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Peripheral Nerve | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
|------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Spinal Cord | | | | | | | | | | | | | | | | | | | | | | | | | | | 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
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4
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| Control | ANIMAL ID | 0
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0
1
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2 | 0
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3 | 0
0
1
1
4 | 0
0
1
1
5 | |
| Larynx | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Basal Cell Carcinoma, Metastatic, Skin | | X | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Renal Tubule, Adenoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
100 ppm | 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 | |
| ANIMAL ID | 7 | 6 | 5 | 6 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 7 | 6 | 6 | 5 | 7 | | |
| | 3 | 7 | 3 | 4 | 1 | 9 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 8 | 2 | 1 | 3 | 2 | 3 | 2 | 3 | 2 | |
| | 1 | 4 | 4 | 6 | 2 | 8 | 1 | 4 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 8 | 2 | 1 | 3 | 2 | 3 | 2 | 3 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ALIMENTARY SYSTEM | females
(cont...) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | Cholangiocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | | X |
| | Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | X |
| | Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Schwannoma Malignant, Metastatic, Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | Acinus, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

Experiment Number: 10472 - 03

Test Type: CHRONIC

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p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

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First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
100 ppm | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|----------|
| | | 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 | * TOTALS |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cholangiocarcinoma | | | | | | | | | | | | | | | | | | | | | | 2 |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | | | | | 2 |
| Mesentery | | | | | | | | | | | | | | | + | | | | | | | 1 |
| Schwannoma Malignant, Metastatic, Skeletal Muscle | | | | | | | | | | | | | | | X | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Acinus, Adenoma | | | | | | | | | | | | | | | X | | | | | | | 1 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

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

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X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

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p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

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Lab: BNW

| 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
100 ppm | ANIMAL ID | 0 | 6 | 5 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 3 | 7 | 6 | 5 | 5 | 6 | 4 | 7 | 7 | 6 | 7 | 6 | 4 | 7 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 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 | |
| | | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 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 | |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | X | X | | | | | | | | 8 |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | X | | | | | | | 2 |
| Follicular Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Polyp Stromal | | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| Polyp Stromal, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Cervix, Polyp Stromal | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Vagina | + | + | M | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Granular Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node | | | + | | + | | | | | | | | | | | | | | | | | | | | | 6 |

* .. 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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

p-Chloro-a,a,a-trifluorotoluene

SAC N 100-08-5

Time Report Requested: 11:15:09

Time Report Requested: 11:15:09
First Run: ME - 01/17/11 / 01/17/11

First Dose

*** TOTALS**

INTEGUMENTARY 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| 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 | 0 |
| HARLAN SPRAGUE DAWLEY RATS | 0 | 6 | 5 | 7 | 0 | 7 | 6 | 7 | 5 | 7 | 3 | 7 | 6 | 5 | 5 | 6 | 4 | 0 | 7 | 7 | 6 | 0 | 7 | 6 | 6 | 4 | 0 |
| FEMALE | 6 | 4 | 1 | 3 | 3 | 3 | 9 | 3 | 5 | 3 | 9 | 3 | 7 | 8 | 3 | 4 | 7 | 5 | 9 | 2 | 1 | 0 | 2 | 3 | 4 | 5 | 3 |
| 100 ppm | 5 | 6 | 1 | 1 | 2 | 1 | 2 | 2 | 8 | 1 | 5 | 1 | 4 | 5 | 4 | 7 | 4 | 9 | 2 | 1 | 0 | 2 | 3 | 4 | 8 | 3 | 1 |
| 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 |
| | 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 | 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 | |

* TOTALS

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Skeletal Muscle | | | | | | | + | | | | | | | | | | | | | | | | | | | | 6 |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Glioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Granular Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Cranial Nerve, Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Peripheral Nerve | | | | | | | + | | | | | | | | | | | | | | | | | | | | 4 |
| Spinal Cord | | | | | | | + | | | | | | | | | | | | | | | | | | | | 4 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Cystic Keratinizing Epithelioma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| 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
FEMALE | 0 | 6 | 5 | 7 | 0 | 7 | 6 | 7 | 5 | 7 | 3 | 7 | 6 | 5 | 5 | 6 | 4 | 7 | 7 | 6 | 7 | 6 | 6 | 4 | 7 | 0 | |
| 100 ppm | 6 | 4 | 1 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 8 | 1 | 5 | 1 | 4 | 5 | 4 | 7 | 5 | 9 | 2 | 1 | 0 | 2 | 8 | 3 | 1 |
| ANIMAL ID | 5 | 6 | 1 | 1 | 2 | 1 | 2 | 2 | 8 | 1 | 5 | 1 | 4 | 5 | 4 | 7 | 5 | 9 | 2 | 1 | 0 | 2 | 8 | 3 | 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 | 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 | |
| | 2 | 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 | | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Zymbal's Gland
Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

* .. 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

**Clitoral Gland
Adenoma**

Ovary
Granulosa-Theca Tumor Benign
Yolk Sac Carcinoma

- Uterus
- Polyp Stromal
- Polyp Stromal, Multiple
- Sarcoma Stromal
- Yolk Sac Carcinoma, Metastatic, Ovary

Vagina
Paraganglioma
Schwannoma Malignant

HEMATOPOIETIC SYSTEM

Bone Marrow

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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

CAS Number: 98-50-0

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

First Dose MMF: 01/1/11/01/1/11

Lab: BNW

Eye

Schwannoma Malignant

Harderian Gland

Zymbal's Gland

URINARY SYSTEM

Kidney

Urinary Bladder

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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
300 ppm | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|----------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| ANIMAL ID | 0 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 6 | 6 | 6 | 3 | 7 | 7 | 6 | 7 | 4 | 4 | 7 | * TOTALS |
| | 2 | 2 | 1 | 2 | 2 | 4 | 7 | 1 | 3 | 1 | 1 | 5 | 6 | 5 | 1 | 2 | 4 | 0 | 1 | 8 | 7 | 2 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hemangioma | | | | | | | | | | | | | | | | | | | | | | 1 |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| Hepatocellular Carcinoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | | | | | | | | + | | | | | | | 1 |
| Yolk Sac Carcinoma, Metastatic, Ovary | | | | | | | | | | | | | | | X | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| 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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

p-Chloro-a.a.a-trifluorotoluene

SACN 1-66-52-6

CAS Number: 98-56-6

Time Report Requested: 11:15:09

Time Report Requested: 11:15:09
File #: M# 841711 / 841711

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

* .. 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

ANK .. Not examined microscopically

Experiment Number: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
300 ppm | DAY ON TEST
ANIMAL ID | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|---|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------|
| | | 0
7
0
2 | 0
7
3
2 | 0
7
3
2 | 0
5
6
4 | 0
7
1
7 | 0
7
3
1 | 0
6
3
1 | 0
6
6
6 | 0
3
9
5 | 0
7
3
1 | 0
6
4
0 | 0
7
1
1 | 0
4
5
8 | 0
4
7
7 | 0
5
2
2 | 0
7
3
1 | 0
7
3
1 | 0
7
3
2 | 0
7
3
1 | 0
7
3
2 | |
| Pancreatic, Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Bronchial
Leukemia Mononuclear | | + | + | + | M | + | M | M | M | + | M | M | + | + | M | + | M | + | M | M | M | 22 |
| | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mandibular
Leukemia Mononuclear | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mediastinal
Lymphoma Malignant | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mesenteric
Leukemia Mononuclear | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | | | | | | | | | | | | | | | | | | | | | | 1 |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | 1 |
| Yolk Sac Carcinoma, Metastatic, Ovary | | | | | | | | | | | | | | | | | | | | | | 1 |
| Thymus | | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | 3 |
| Fibroadenoma | | X | X | X | | X | | X | | X | X | X | X | X | X | X | X | X | X | X | X | 20 |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | 11 |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Subcutaneous Tissue, Hibernoma | | | | | | | | | | | | | | | | | | | | | | 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
300 ppm | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
| | | 0
7
0
2 | 0
7
3
2 | 0
7
3
2 | 0
5
6
4 | 0
7
1
7 | 0
7
3
1 | 0
6
3
1 | 0
6
6
6 | 0
3
9
5 | 0
7
3
1 | 0
6
4
2 | 0
7
3
0 | 0
4
5
1 | 0
5
7
8 | 0
4
5
7 | 0
7
3
2 | 0
7
3
1 | 0
7
3
2 | 0
7
3
1 | 0
7
3
2 | | |
| ANIMAL ID | 0
0
5
2
6 | 0
0
5
2
7 | 0
0
5
2
8 | 0
0
5
2
9 | 0
0
5
3
0 | 0
0
5
3
1 | 0
0
5
3
2 | 0
0
5
3
3 | 0
0
5
3
4 | 0
0
5
3
5 | 0
0
5
3
6 | 0
0
5
3
7 | 0
0
5
3
8 | 0
0
5
3
9 | 0
0
5
4
0 | 0
0
5
4
1 | 0
0
5
4
2 | 0
0
5
4
3 | 0
0
5
4
4 | 0
0
5
4
5 | 0
0
5
4
6 | 0
0
5
4
7 | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Schwannoma Malignant | | | | | | | | | | | | | | | X | | | | | | | | 1 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | | 1 |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymphoma Malignant | | | | X | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymphoma Malignant | | | | | X | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leiomyoma | | | | | | | | | | | | | | | | | X | | | | | | 1 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hemangiosarcoma | | | | | | | | | | | | | | | | | X | | | | | | 1 |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | X | X | X | | | 4 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Adenocarcinoma, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | 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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

* .. 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| HARLAN SPRAGUE DAWLEY RATS
FEMALE
1000 ppm | DAY ON TEST
ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|--|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|----|----------|----|
| | | 0
7
3
2 | 0
6
5
0 | 0
7
5
1 | 0
5
5
8 | 0
6
7
4 | 0
5
9
0 | 0
7
3
2 | 0
7
3
2 | 0
7
3
1 | 0
7
3
1 | 0
7
3
1 | 0
7
3
1 | 0
6
4
2 | 0
7
3
2 | 0
7
3
1 | 0
7
3
0 | 0
7
3
2 | 0
7
3
1 | 0
7
3
2 | 0
7
3
1 | 0
7
3
2 | 0
7
3
4 | | | | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Pars Distalis, Adenoma | | | | | | | X | | | X | | | | | | | | | | | | | | | | 5 | |
| Pars Intermedia, Adenoma | | | | | | | X | | | | | | | | | | | | | | | | | | | 2 | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Bilateral, C-cell, Adenoma | | | | | | | | | | | | | | X | | | | | | | | | | | | 3 | |
| C-cell, Adenoma | | | | | | | | | | | | | | X | X | | | | | | | | | | | 11 | |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| GENERAL BODY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GENITAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymphoma Malignant | | | | | | | X | | | | | | | | | | | | | | | | | | | | 1 |
| Ovary | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymphoma Malignant | | | | | | | X | | | | | | | | | | | | | | | | | | | | 1 |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenocarcinoma | | | | | | | | | | | | | | | X | | | | | | | | | | | | 5 |
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Polyp Stromal | | | | | | | | | | | | | | | X | | | | | | | | | | | | 10 |
| Polyp Stromal, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Vagina | | + | M | + | + | + | M | + | M | + | M | + | M | + | M | + | M | + | M | + | M | + | M | + | M | 38 | |

* .. 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|---|-----------|---|---|---|---|---|---|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------|--------|----------|---|
| | 0
7 | 0
6 | 0
7 | 0
5 | 0
6 | 0
5 | 0
7 | 0
6 | 0
7 | 0
7 | 0
7 | 0
7 | 0
5 | 0
7 | 0
6 | 0
7 | 0
7 | 0
5 | 0
7 | 0
7 | 0
7 | 0
6 | 0
7 | 0
7 | 0
6 | | |
| HARLAN SPRAGUE DAWLEY RATS
FEMALE
1000 ppm | ANIMAL ID | 0
3
2
0
0
7
2
2
6 | 0
5
3
1
0
0
7
7
7 | 0
5
5
8
4
0
7
7
7 | 0
7
9
0
0
0
7
3
3 | 0
3
2
0
0
0
7
3
3 | 0
9
1
1
0
0
7
7
7 | 0
9
9
9
0
0
7
7
7 | 0
2
2
1
5
6 | 0
3
2
3
5
6 | 0
4
3
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5
6 | 0
4
3
3
5
7 | 0
4
4
4
1
2 | 0
4
4
4
4
3 | 0
4
4
4
4
3 | 0
4
4
4
5
6 | 0
4
4
4
5
7 | 0
4
4
4
6
8 | 0
4
4
4
5
9 | 0
4
4
4
5
6 | 0
4
4
4
5
7 | 0
4
4
4
6
8 | 0
4
4
4
5
9 | | | | |
| Schwannoma Malignant | | X | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Axillary, Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Deep Cervical, Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Deep Cervical, Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreatic, Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Popliteal, Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Bronchial | | M | M | M | + | + | M | M | M | + | + | + | + | M | M | + | M | M | M | M | M | M | M | M | M | 20 | |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mediastinal | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Adenocarcinoma, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenocarcinoma, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| 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: 10472 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:15:09

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

| 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 | 5 | 5 | 6 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 6 | | |
| 1000 ppm | 3 | 5 | 3 | 5 | 7 | 9 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 9 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 4 | |
| ANIMAL ID | 2 | 0 | 1 | 8 | 4 | 0 | 2 | 0 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 9 | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 2 | 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 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 2 | 2 | 2 | 2 | 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 | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenocarcinoma, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Renal Tubule, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 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: 10472 - 03

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 05/16/2016

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

p-Chloro-a.a.a-trifluorotoluene

CAS Number: 98-56-6

Time Report Requested: 11:15:09

First Dose M/E: 01/17/11 / 01/17/11

Lab: BNW

*** 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