



National Toxicology Program
Department of Health and Human Services

NTP Historical Controls Report

By Route and Vehicle

Harlan Sprague-Dawley RATS

October 2022

REPORT DESCRIPTION

This report shows the tumor rates of control group animals from selected studies. The studies used are shown on the Study Summary page.

This report is broken up into sections based on the route and vehicle used to deliver the chemical. The Table of Contents on Page 3 shows the different Route/Vehicle combinations. To see the data from all routes and vehicles combined into one set, you must run the "All Routes" report.

The individual tumor rates shown on the data pages of the report relate to the Study Summary page as follows: the tumor rates are shown in the same order as the Study Summary page, except that they are grouped horizontally in sets of three, with the males in the first set of three and the females in the second set. For example if the study summary showed the studies like this:

Male

M1
M2
M3
M4
M5

Female

F1
F2
F3
F4
F5

the data would be shown as:

Male			Female		
M1	M2	M3	F1	F2	F3
M4	M5		F4	F5	

Directly beneath the individual tumor rates on the data pages are the overall totals for that tumor/site combination. This includes the total tumors/animals, the overall mean (in parentheses), the mean of the study means, and the standard deviation of the study means.

Studies with no control animals of a particular gender are listed on the summary page with the Number of Animals shown as zero and the Start Date and Length of Study shown as "N/A". On the data pages there are blank spaces where tumor rates for these studies would normally be found, so that the male and female rates for the remaining studies can be easily compared.

Table of Contents

Route	Vehicle	Page Number
INHALATION	AIR	4
ORAL	FEED	37
PERINATAL AND POSTNATAL	FEED	70
PERINATAL AND POSTNATAL	WATER	109
PERINATAL AND POSTNATAL GAVAGE	METHYLCELLULOSE	142
Whole Body Exposure	AIR	175

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION

Vehicle: AIR

Page: 4

Report Date: 10/05/2022

Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
Male							
Battelle Northwest	051047203	01/17/11	729	50(5)	25(661)	609.4	p-Chloro-a,a,a-trifluorotoluene
Female							
Battelle Northwest	051047203	01/17/11	731	50(5)	22(626)	377.3	p-Chloro-a,a,a-trifluorotoluene

NOTE: The text on page 2 ("Report Description") describes how the studies listed here are displayed on the data pages that follow.

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

Page: 5
 Report Date: 10/05/2022

		Male			Female		
#All Organs:							
Benign Tumors							
		30/50 (60%)			39/50 (78%)		
Overall Incidence	Total	30/50 (60%)	Mean 60%	SD 0%	Total	39/50 (78%)	Mean 78% SD 0%
.....							
#All Organs:							
Malignant Tumors							
		12/50 (24%)			11/50 (22%)		
Overall Incidence	Total	12/50 (24%)	Mean 24%	SD 0%	Total	11/50 (22%)	Mean 22% SD 0%
.....							
#All Organs:							
Malignant and Benign Tumors							
		37/50 (74%)			41/50 (82%)		
Overall Incidence	Total	37/50 (74%)	Mean 74%	SD 0%	Total	41/50 (82%)	Mean 82% SD 0%
.....							
#All Organs:							
Hemangioma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma or Hemangioma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male			Female		
#All Organs:							
Histiocytic Sarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#All Organs:							
Leukemia: Granulocytic							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#All Organs:							
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated							
		3/50	(6%)		0/50	(0%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#All Organs:							
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#All Organs:							
Malignant Schwannoma							
		0/50	(0%)		2/50	(4%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50 (4%)
						Mean 4%	SD 0%
.....							
#All Organs:							
Mesothelioma: Benign, Malignant, NOS							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

Page: 7
 Report Date: 10/05/2022

		Male			Female		
#All Organs:							
Mesothelioma: Malignant							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Osteosarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#All Organs:							
Osteosarcoma or Osteoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Adrenal Cortex:							
Adenoma							
		3/50	(6%)		0/50	(0%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Adrenal Cortex:							
Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Adrenal Medulla:							
Ganglioneuroma							
		0/50	(0%)		0/49	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male			Female		
*Adrenal Medulla:							
Pheochromocytoma Benign							
		12/50 (24%)			0/49 (0%)		
Overall Incidence	Total	12/50 (24%)	Mean 24%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma Complex							
		0/50 (0%)			0/49 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma Malignant							
		2/50 (4%)			0/49 (0%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma: Benign, Complex, Malignant, NOS							
		14/50 (28%)			0/49 (0%)		
Overall Incidence	Total	14/50 (28%)	Mean 28%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....							
#Bone:							
Osteosarcoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Bone:							
Osteosarcoma or Osteoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female				
*Brain:										
Glioma Malignant										
			2/50	(4%)			1/50	(2%)		
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	1/50	(2%)	Mean 2%	SD 0%
.....										
*Brain:										
Granular Cell Tumor Benign										
			0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0%	SD 0%
.....										
*Brain:										
Granular Cell Tumor Malignant										
			0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0%	SD 0%
.....										
*Brain:										
Meningioma Benign										
			0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0%	SD 0%
.....										
*Brain:										
Meningioma Malignant										
			0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0%	SD 0%
.....										
*Brain:										
Meningioma: Benign, Malignant, NOS										
			0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Brain:							
 Oligodendroglioma Malignant							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Oligodendroglioma, Glioma, or Astrocytoma							
		2/50	(4%)			1/50	(2%)
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%
.....							
*Brain:							
 Schwannoma Malignant							
		0/50	(0%)			1/50	(2%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%
.....							
*Clitoral/Preputial Gland:							
 Adenoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Clitoral/Preputial Gland:							
 Carcinoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Clitoral/Preputial Gland:							
 Carcinoma or Adenoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Clitoral/Preputial Gland:							
Squamous Cell Carcinoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Clitoral/Preputial Gland:							
Squamous Cell Papilloma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Epididymis:							
Sarcoma							
		1/50	(2%)				
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%		
.....							
#Eye:							
Leiomyoma							
		1/50	(2%)			0/50	(0%)
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Heart:							
Schwannoma Malignant							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
#Intestine Large: Cecum:							
Leiomyosarcoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
#Intestine Large: Cecum:							
Liposarcoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

#Intestine Large: Colon/Rectum:							
Granular Cell Tumor Benign							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

#Intestine Large: Colon/Rectum:							
Leiomyoma							
		1/50	(2%)			0/50	(0%)
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

#Intestine Small: Jejunum:							
Carcinoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

#Intestine Small: Jejunum:							
Leiomyosarcoma							
		1/50	(2%)			0/50	(0%)
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

#Intestine Small: Site Unspecified:							
Carcinoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
#Intestine Small: Site Unspecified:							
Carcinoma or Adenoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Site Unspecified:							
Leiomyosarcoma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Islets, Pancreatic:							
Adenoma							
		8/50 (16%)			1/50 (2%)		
Overall Incidence	Total	8/50 (16%)	Mean 16%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
*Islets, Pancreatic:							
Carcinoma							
		0/50 (0%)			1/50 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
*Islets, Pancreatic:							
Carcinoma or Adenoma							
		8/50 (16%)			2/50 (4%)		
Overall Incidence	Total	8/50 (16%)	Mean 16%	SD 0%	Total	2/50 (4%)	Mean 4% SD 0%
.....							
*Kidney: Pelvis and Transitional Epithelium:							
Papilloma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Kidney: Renal Tubule: Adenoma									
		0/50	(0%)			1/50	(2%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
*Kidney: Renal Tubule: Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Carcinoma or Adenoma									
		0/50	(0%)			1/50	(2%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
*Kidney: Renal Tubule: Hemangioma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Lipoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Liposarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Kidney: Renal Tubule:							
 Oncocytoma Benign							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Kidney: Renal Tubule:							
 Polyp Adenomatous							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Lacrimal Gland:							
 Carcinoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Liver:							
 Cholangioma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Liver:							
 Hemangioma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Liver:							
 Hepatocellular Adenoma							
		0/50	(0%)			2/50	(4%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50 (4%)
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Male					Female				
*Liver:									
Hepatocellular Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatoblastoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatocellular Adenoma									
		0/50	(0%)			2/50	(4%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50	(4%)	Mean 4% SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma									
		0/50	(0%)			2/50	(4%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50	(4%)	Mean 4% SD 0%
.....									
*Lung:									
Alveolar/Bronchiolar Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

Page: 17
 Report Date: 10/05/2022

	Male				Female			
*Lung:								
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Mammary Gland:								
Adenolipoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Mammary Gland:								
Adenoma								
		0/50 (0%)			4/50 (8%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	4/50 (8%)	Mean 8%	SD 0%
.....								
#Mammary Gland:								
Carcinoma								
		0/50 (0%)			5/50 (10%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	5/50 (10%)	Mean 10%	SD 0%
.....								
#Mammary Gland:								
Carcinoma or Adenoma								
		0/50 (0%)			9/50 (18%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	9/50 (18%)	Mean 18%	SD 0%
.....								
#Mammary Gland:								
Fibroadenoma								
		2/50 (4%)			20/50 (40%)			
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	20/50 (40%)	Mean 40%	SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male			Female		
#Mammary Gland:							
Fibroma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Mammary Gland:							
Fibroma, Fibroadenoma or Adenoma							
		2/50	(4%)		23/50	(46%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	23/50 (46%)
						Mean 46%	SD 0%
.....							
#Mammary Gland:							
Fibroma, Fibroadenoma, Carcinoma, or Adenoma							
		2/50	(4%)		27/50	(54%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	27/50 (54%)
						Mean 54%	SD 0%
.....							
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):							
Squamous Cell Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):							
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Oral Mucosa:							
Squamous Cell Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male			Female
*Ovary:				
Cystadenoma				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Granulosa Cell Tumor Benign				
		3/50	(6%)	
Overall Incidence	Total	3/50	(6%)	Mean 6% SD 0%
.....				
*Ovary:				
Granulosa Cell Tumor Malignant				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Granulosa Cell Tumor: Benign, Malignant, NOS				
		3/50	(6%)	
Overall Incidence	Total	3/50	(6%)	Mean 6% SD 0%
.....				
*Ovary:				
Granulosa-Theca Tumor Benign				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Granulosa-Theca Tumor Malignant				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

				Male					Female
*Ovary:									
Luteoma									
				0/50	(0%)				
Overall Incidence		Total	0/50	(0%)	Mean	0%	SD	0%	
.....									
*Ovary:									
Schwannoma Malignant									
				0/50	(0%)				
Overall Incidence		Total	0/50	(0%)	Mean	0%	SD	0%	
.....									
*Ovary:									
Sertoli Cell Tumor Benign									
				0/50	(0%)				
Overall Incidence		Total	0/50	(0%)	Mean	0%	SD	0%	
.....									
*Ovary:									
Thecoma Benign									
				1/50	(2%)				
Overall Incidence		Total	1/50	(2%)	Mean	2%	SD	0%	
.....									
*Pancreas:									
Adenoma									
		Total	0/50	(0%)	Mean	0%	SD	0%	
Overall Incidence		Total	0/50	(0%)	Mean	0%	SD	0%	
.....									
*Pancreas:									
Carcinoma									
		Total	0/50	(0%)	Mean	0%	SD	0%	
Overall Incidence		Total	0/50	(0%)	Mean	0%	SD	0%	
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Pancreas:							
Carcinoma or Adenoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Parathyroid Gland:							
Adenoma							
		0/48	(0%)			0/45	(0%)
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/45 (0%)
.....							
#Peripheral Nerve:							
Paranglioma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Peripheral Nerve:							
Schwannoma Malignant							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Peripheral Nerve:							
Schwannoma: Benign, Malignant, NOS							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Adenoma							
		11/50	(22%)			18/50	(36%)
Overall Incidence	Total	11/50	(22%)	Mean 22%	SD 0%	Total	18/50 (36%)
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Pituitary Gland: Pars Distalis or Unspecified Site:							
 Carcinoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Pituitary Gland: Pars Distalis or Unspecified Site:							
 Carcinoma or Adenoma							
		11/50	(22%)			18/50	(36%)
Overall Incidence	Total	11/50	(22%)	Mean 22%	SD 0%	Total	18/50 (36%)
							Mean 36%
							SD 0%
.....							
*Pituitary Gland: Pars Intermedia:							
 Adenoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Pituitary Gland: Pars Intermedia:							
 Carcinoma or Adenoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Pituitary Gland: Pars Nervosa:							
 Schwannoma Malignant							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Prostate:							
 Adenoma							
		0/50	(0%)				
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%		
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

Page: 23
 Report Date: 10/05/2022

		Male				Female			
*Prostate:									
Carcinoma or Adenoma									
			0/50	(0%)					
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
*Salivary Glands:									
Schwannoma Malignant									
			0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0%
							SD 0%		
.....									
#Seminal Vesicle:									
Hemangiosarcoma									
			0/50	(0%)					
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
#Skeletal Muscle:									
Hemangioma									
			0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0%
							SD 0%		
.....									
#Skeletal Muscle:									
Hemangiosarcoma									
			0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0%
							SD 0%		
.....									
#Skeletal Muscle:									
Liposarcoma									
			0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2%
							SD 0%		

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male				Female			
#Skeletal Muscle:									
Sarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Adenoma or Basosquamous Tumor Benign									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Carcinoma									
		0/50	(0%)			1/50	(2%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
#Skin:									
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)									
		0/50	(0%)			1/50	(2%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
							Mean 2%	SD 0%
#Skin:								
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma								
		4/50	(8%)			1/50	(2%)	
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	1/50	(2%)
							Mean 2%	SD 0%
#Skin:								
Fibroma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
#Skin:								
Fibrosarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Hemangioma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Hemangiopericytoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Keratoacanthoma								
		3/50	(6%)			0/50	(0%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Lipoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Liposarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

Page: 27
 Report Date: 10/05/2022

	Male				Female			
#Skin:								
Malignant Fibrous Histiocytoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Neurofibrosarcoma or Schwannoma (malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Osteosarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Pilomatrixoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Sarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Schwannoma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Squamous Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Squamous Cell Papilloma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Squamous Cell Papilloma or Papilloma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma								
		4/50	(8%)			0/50	(0%)	
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	0/50	(0%)

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

Page: 29
 Report Date: 10/05/2022

		Male			Female		
#Skin:							
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma							
		4/50 (8%)			0/50 (0%)		
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Skin:							
Trichoepithelioma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Skin: Sebaceous Gland:							
Adenoma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Skin: Sebaceous Gland:							
Carcinoma or Adenoma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Spleen:							
Hemangiosarcoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Stomach, Forestomach:							
Sarcoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

Page: 30
 Report Date: 10/05/2022

	Male				Female			
#Stomach, Forestomach:								
Squamous Cell Carcinoma or Papilloma Squamous								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Stomach, Forestomach:								
Squamous Cell Papilloma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Testis:								
Adenoma								
		0/50	(0%)					
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%			
.....								
*Thymus:								
Thymoma Benign								
		0/48	(0%)			0/50	(0%)	
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Thymus:								
Thymoma Malignant								
		0/48	(0%)			0/50	(0%)	
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Thymus:								
Thymoma: Benign, Malignant, NOS								
		0/48	(0%)			0/50	(0%)	
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male			Female		
*Thyroid Gland: C-Cell: Adenoma							
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	2/50 (4%)	Mean 4% SD 0%
.....							
*Thyroid Gland: C-Cell: Carcinoma							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Thyroid Gland: C-Cell: Carcinoma or Adenoma							
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	2/50 (4%)	Mean 4% SD 0%
.....							
*Thyroid Gland: Follicular Cell: Adenoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Thyroid Gland: Follicular Cell: Carcinoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

Page: 32
 Report Date: 10/05/2022

		Male			Female		
#Tissue NOS:							
Schwannoma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Tongue:							
Squamous Cell Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Tongue:							
Squamous Cell Carcinoma or Papilloma Squamous							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Tooth:							
Odontoma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Urinary Bladder:							
Leiomyosarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
#Uterus:							
Adenocarcinoma							
					1/50	(2%)	
Overall Incidence					Total	1/50 (2%)	Mean 2%
							SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: INHALATION
Vehicle: AIR

Page: 33
 Report Date: 10/05/2022

	Male			Female
#Uterus:				
Adenocarcinoma or Adenoma				
		1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2% SD 0%
.....				
#Uterus:				
Adenoma				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
#Uterus:				
Adenoma, Adenocarcinoma, Sq Cell Carcinoma, or Sq Cell Papilloma				
		2/50	(4%)	
Overall Incidence	Total	2/50	(4%)	Mean 4% SD 0%
.....				
#Uterus:				
Deciduoma Benign				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
#Uterus:				
Granular Cell Tumor Benign				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
#Uterus:				
Hemangioma				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

	Male	Female		
#Uterus:				
Polyp Stromal				
Overall Incidence	Total	7/50 (14%)	Mean 14%	SD 0%
.....				
#Uterus:				
Sarcoma				
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Sarcoma Stromal				
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Sarcoma Stromal or Polyp Stromal				
Overall Incidence	Total	7/50 (14%)	Mean 14%	SD 0%
.....				
#Uterus:				
Schwannoma Malignant				
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Sq Cell Carcinoma or Papilloma Squamous				
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male			Female
#Uterus:				
Squamous Cell Carcinoma				
		1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2% SD 0%
.....				
#Uterus:				
Squamous Cell Papilloma				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
#Vagina:				
Granular Cell Tumor Benign				
		1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2% SD 0%
.....				
#Vagina:				
Polyp				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
#Vagina:				
Sarcoma				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
#Vagina:				
Schwannoma Malignant				
		1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Male					Female				
#Zymbal's Gland: Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Zymbal's Gland: Carcinoma									
		1/50	(2%)			0/50	(0%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Zymbal's Gland: Carcinoma or Adenoma									
		1/50	(2%)			0/50	(0%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: ORAL

Vehicle: FEED

Page: 37

Report Date: 10/05/2022

Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
Male							
Battelle Columbus Laboratory	051018801	02/17/11	733	50(2)	32(675)	525.8	Di(2-ethylhexyl) Phthalate
Female							
Battelle Columbus Laboratory	051018801	02/18/11	736	50(4)	33(691)	329.5	Di(2-ethylhexyl) Phthalate

NOTE: The text on page 2 ("Report Description") describes how the studies listed here are displayed on the data pages that follow.

		Male			Female		
#All Organs:							
Benign Tumors							
		27/50 (54%)			37/50 (74%)		
Overall Incidence	Total	27/50 (54%)	Mean 54%	SD 0%	Total	37/50 (74%)	Mean 74% SD 0%
.....							
#All Organs:							
Malignant Tumors							
		13/50 (26%)			16/50 (32%)		
Overall Incidence	Total	13/50 (26%)	Mean 26%	SD 0%	Total	16/50 (32%)	Mean 32% SD 0%
.....							
#All Organs:							
Malignant and Benign Tumors							
		32/50 (64%)			41/50 (82%)		
Overall Incidence	Total	32/50 (64%)	Mean 64%	SD 0%	Total	41/50 (82%)	Mean 82% SD 0%
.....							
#All Organs:							
Hemangioma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma or Hemangioma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
#All Organs:							
Histiocytic Sarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
#All Organs:							
Leukemia: Granulocytic							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
#All Organs:							
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
#All Organs:							
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type							
		2/50	(4%)		1/50	(2%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
#All Organs:							
Malignant Schwannoma							
		3/50	(6%)		1/50	(2%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
#All Organs:							
Mesothelioma: Benign, Malignant, NOS							
		2/50	(4%)		0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
#All Organs:							
Mesothelioma: Malignant							
		2/50	(4%)		0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
#All Organs:							
Osteosarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
#All Organs:							
Osteosarcoma or Osteoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
*Adrenal Cortex:							
Adenoma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
*Adrenal Cortex:							
Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
*Adrenal Medulla:							
Ganglioneuroma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Adrenal Medulla:							
Pheochromocytoma Benign							
		4/50 (8%)			1/50 (2%)		
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma Complex							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma Malignant							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma: Benign, Complex, Malignant, NOS							
		5/50 (10%)			1/50 (2%)		
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
#Bone:							
Osteosarcoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Bone:							
Osteosarcoma or Osteoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Brain:							
 Glioma Malignant							
		4/50	(8%)		0/50	(0%)	
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Granular Cell Tumor Benign							
		3/50	(6%)		2/50	(4%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	2/50 (4%)
							Mean 4%
							SD 0%
.....							
*Brain:							
 Granular Cell Tumor Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Meningioma Benign							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Meningioma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
*Brain:							
 Meningioma: Benign, Malignant, NOS							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Brain:							
 Oligodendroglioma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Brain:							
 Oligodendroglioma, Glioma, or Astrocytoma							
		4/50	(8%)		0/50	(0%)	
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Brain:							
 Schwannoma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
*Clitoral/Preputial Gland:							
 Adenoma							
		0/49	(0%)		0/49	(0%)	
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)
						Mean 0%	SD 0%
.....							
*Clitoral/Preputial Gland:							
 Carcinoma							
		1/49	(2%)		0/49	(0%)	
Overall Incidence	Total	1/49	(2.04%)	Mean 2.04%	SD 0%	Total	0/49 (0%)
						Mean 0%	SD 0%
.....							
*Clitoral/Preputial Gland:							
 Carcinoma or Adenoma							
		1/49	(2%)		0/49	(0%)	
Overall Incidence	Total	1/49	(2.04%)	Mean 2.04%	SD 0%	Total	0/49 (0%)
						Mean 0%	SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Clitoral/Preputial Gland:									
Squamous Cell Carcinoma									
		0/49	(0%)			0/49	(0%)		
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/49	(0%)	Mean 0% SD 0%
.....									
*Clitoral/Preputial Gland:									
Squamous Cell Papilloma									
		0/49	(0%)			1/49	(2%)		
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	1/49	(2.04%)	Mean 2.04% SD 0%
.....									
*Epididymis:									
Sarcoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
#Eye:									
Leiomyoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Heart:									
Schwannoma Malignant									
		3/50	(6%)			1/50	(2%)		
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
#Intestine Large: Cecum:									
Leiomyosarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
#Intestine Large: Cecum:							
Liposarcoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Large: Colon/Rectum:							
Granular Cell Tumor Benign							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Large: Colon/Rectum:							
Leiomyoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Jejunum:							
Carcinoma							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Jejunum:							
Leiomyosarcoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Site Unspecified:							
Carcinoma							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
#Intestine Small: Site Unspecified:							
Carcinoma or Adenoma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Site Unspecified:							
Leiomyosarcoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Islets, Pancreatic:							
Adenoma							
		3/49 (6%)			1/50 (2%)		
Overall Incidence	Total	3/49 (6.12%)	Mean 6.12%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
*Islets, Pancreatic:							
Carcinoma							
		0/49 (0%)			0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Islets, Pancreatic:							
Carcinoma or Adenoma							
		3/49 (6%)			1/50 (2%)		
Overall Incidence	Total	3/49 (6.12%)	Mean 6.12%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
*Kidney: Pelvis and Transitional Epithelium:							
Papilloma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Kidney: Renal Tubule: Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Carcinoma or Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Hemangioma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Lipoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Liposarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Kidney: Renal Tubule: Oncocytoma Benign									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Polyp Adenomatous									
		1/50	(2%)			0/50	(0%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Lacrimal Gland: Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Liver: Cholangioma									
		0/50	(0%)			1/50	(2%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
*Liver: Hemangioma									
		1/50	(2%)			0/50	(0%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Liver: Hepatocellular Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Liver:							
Hepatocellular Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Liver:							
Hepatocellular Carcinoma or Hepatoblastoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Liver:							
Hepatocellular Carcinoma or Hepatocellular Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Liver:							
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Lung:							
Alveolar/Bronchiolar Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Lung:							
Alveolar/Bronchiolar Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
*Lung:								
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Mammary Gland:								
Adenolipoma								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Mammary Gland:								
Adenoma								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Mammary Gland:								
Carcinoma								
		0/50 (0%)				8/50 (16%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	8/50 (16%)	Mean 16%	SD 0%
.....								
#Mammary Gland:								
Carcinoma or Adenoma								
		0/50 (0%)				8/50 (16%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	8/50 (16%)	Mean 16%	SD 0%
.....								
#Mammary Gland:								
Fibroadenoma								
		0/50 (0%)				25/50 (50%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	25/50 (50%)	Mean 50%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
#Mammary Gland:							
Fibroma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Mammary Gland:							
Fibroma, Fibroadenoma or Adenoma							
		0/50	(0%)		25/50	(50%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	25/50 (50%)
.....							
#Mammary Gland:							
Fibroma, Fibroadenoma, Carcinoma, or Adenoma							
		0/50	(0%)		29/50	(58%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	29/50 (58%)
.....							
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):							
Squamous Cell Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):							
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Oral Mucosa:							
Squamous Cell Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male		Female	
*Ovary:				
Cystadenoma				
			0/50 (0%)	
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				
*Ovary:				
Granulosa Cell Tumor Benign				
			1/50 (2%)	
Overall Incidence		Total	1/50 (2%)	Mean 2% SD 0%
.....				
*Ovary:				
Granulosa Cell Tumor Malignant				
			0/50 (0%)	
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				
*Ovary:				
Granulosa Cell Tumor: Benign, Malignant, NOS				
			1/50 (2%)	
Overall Incidence		Total	1/50 (2%)	Mean 2% SD 0%
.....				
*Ovary:				
Granulosa-Theca Tumor Benign				
			0/50 (0%)	
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				
*Ovary:				
Granulosa-Theca Tumor Malignant				
			0/50 (0%)	
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Male					Female			
*Ovary:								
Luteoma								
					1/50	(2%)		
Overall Incidence					Total	1/50 (2%)	Mean 2%	SD 0%
.....								
*Ovary:								
Schwannoma Malignant								
					0/50	(0%)		
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Ovary:								
Sertoli Cell Tumor Benign								
					0/50	(0%)		
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Ovary:								
Thecoma Benign								
					0/50	(0%)		
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Adenoma								
					1/49	(2%)		
Overall Incidence					Total	1/49 (2.04%)	Mean 2.04%	SD 0%
					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Carcinoma								
					0/49	(0%)		
Overall Incidence					Total	0/49 (0%)	Mean 0%	SD 0%
					Total	0/50 (0%)	Mean 0%	SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female				
*Pancreas:									
Carcinoma or Adenoma									
		1/49	(2%)			0/50	(0%)		
Overall Incidence	Total	1/49	(2.04%)	Mean 2.04%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Parathyroid Gland:									
Adenoma									
		0/43	(0%)			0/42	(0%)		
Overall Incidence	Total	0/43	(0%)	Mean 0%	SD 0%	Total	0/42 (0%)	Mean 0%	SD 0%
.....									
#Peripheral Nerve:									
Paranglioma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
#Peripheral Nerve:									
Schwannoma Malignant									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
#Peripheral Nerve:									
Schwannoma: Benign, Malignant, NOS									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Adenoma									
		3/50	(6%)			13/49	(27%)		
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	13/49 (26.53%)	Mean 26.53%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Male					Female			
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Carcinoma								
		0/50	(0%)			0/49	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Carcinoma or Adenoma								
		3/50	(6%)			13/49	(27%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	13/49 (26.53%)	Mean 26.53% SD 0%
.....								
*Pituitary Gland: Pars Intermedia:								
Adenoma								
		1/50	(2%)			0/49	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....								
*Pituitary Gland: Pars Intermedia:								
Carcinoma or Adenoma								
		1/50	(2%)			0/49	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....								
*Pituitary Gland: Pars Nervosa:								
Schwannoma Malignant								
		0/50	(0%)			0/49	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....								
*Prostate:								
Adenoma								
		1/50	(2%)					
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%			

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

Page: 56
 Report Date: 10/05/2022

		Male				Female			
*Prostate:									
Carcinoma or Adenoma									
		1/50	(2%)						
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%				
.....									
*Salivary Glands:									
Schwannoma Malignant									
		0/50	(0%)			0/49	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49	(0%)	Mean 0% SD 0%
.....									
#Seminal Vesicle:									
Hemangiosarcoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
#Skeletal Muscle:									
Hemangioma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skeletal Muscle:									
Hemangiosarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skeletal Muscle:									
Liposarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male				Female			
#Skeletal Muscle:									
Sarcoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Adenoma or Basosquamous Tumor Benign									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma								
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Fibroma								
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma								
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
#Skin:								
Fibrosarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
							Mean 2%	SD 0%
.....								
#Skin:								
Hemangioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Hemangiopericytoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Keratoacanthoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Lipoma								
		3/50	(6%)			0/50	(0%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
#Skin:								
Liposarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Malignant Fibrous Histiocytoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Neurofibrosarcoma or Schwannoma (malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Osteosarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Pilomatrixoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Sarcoma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
#Skin:							
Schwannoma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Squamous Cell Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Squamous Cell Papilloma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Squamous Cell Papilloma or Papilloma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma								
		1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Trichoepithelioma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin: Sebaceous Gland:								
Adenoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin: Sebaceous Gland:								
Carcinoma or Adenoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Spleen:								
Hemangiosarcoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Stomach, Forestomach:								
Sarcoma								
		0/50 (0%)			0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Stomach, Forestomach:								
Squamous Cell Carcinoma or Papilloma Squamous								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Stomach, Forestomach:								
Squamous Cell Papilloma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Testis:								
Adenoma								
		7/50	(14%)					
Overall Incidence	Total	7/50	(14%)	Mean 14%	SD 0%			
.....								
*Thymus:								
Thymoma Benign								
		0/48	(0%)			0/49	(0%)	
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/49	(0%)
.....								
*Thymus:								
Thymoma Malignant								
		0/48	(0%)			0/49	(0%)	
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/49	(0%)
.....								
*Thymus:								
Thymoma: Benign, Malignant, NOS								
		0/48	(0%)			0/49	(0%)	
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/49	(0%)

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Thyroid Gland: C-Cell: Adenoma							
		13/50 (26%)			12/50 (24%)		
Overall Incidence	Total	13/50 (26%)	Mean 26%	SD 0%	Total	12/50 (24%)	Mean 24% SD 0%
.....							
*Thyroid Gland: C-Cell: Carcinoma							
		2/50 (4%)			2/50 (4%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	2/50 (4%)	Mean 4% SD 0%
.....							
*Thyroid Gland: C-Cell: Carcinoma or Adenoma							
		14/50 (28%)			14/50 (28%)		
Overall Incidence	Total	14/50 (28%)	Mean 28%	SD 0%	Total	14/50 (28%)	Mean 28% SD 0%
.....							
*Thyroid Gland: Follicular Cell: Adenoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Thyroid Gland: Follicular Cell: Carcinoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma							
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
#Tissue NOS:							
Schwannoma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Tongue:							
Squamous Cell Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Tongue:							
Squamous Cell Carcinoma or Papilloma Squamous							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Tooth:							
Odontoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Urinary Bladder:							
Leiomyosarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Uterus:							
Adenocarcinoma							
					2/50	(4%)	
Overall Incidence					Total	2/50 (4%)	Mean 4%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male		Female	
#Uterus:				
Adenocarcinoma or Adenoma				
Overall Incidence		Total	2/50 (4%)	Mean 4% SD 0%
.....				
#Uterus:				
Adenoma				
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				
#Uterus:				
Adenoma, Adenocarcinoma, Sq Cell Carcinoma, or Sq Cell Papilloma				
Overall Incidence		Total	2/50 (4%)	Mean 4% SD 0%
.....				
#Uterus:				
Deciduoma Benign				
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				
#Uterus:				
Granular Cell Tumor Benign				
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				
#Uterus:				
Hemangioma				
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System
Tumor Incidence for Selected Control Animal Groups

Route: ORAL

Vehicle: FEED

Page: 67

Report Date: 10/05/2022

	Male		Female	
#Uterus: Polyp Stromal				
Overall Incidence		Total	5/50 (10%)	Mean 10% SD 0%
.....				
#Uterus: Sarcoma				
Overall Incidence		Total	1/50 (2%)	Mean 2% SD 0%
.....				
#Uterus: Sarcoma Stromal				
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				
#Uterus: Sarcoma Stromal or Polyp Stromal				
Overall Incidence		Total	5/50 (10%)	Mean 10% SD 0%
.....				
#Uterus: Schwannoma Malignant				
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%
.....				
#Uterus: Sq Cell Carcinoma or Papilloma Squamous				
Overall Incidence		Total	0/50 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: ORAL
 Vehicle: FEED

Page: 68
 Report Date: 10/05/2022

	Male		Female	
#Uterus:				
Squamous Cell Carcinoma				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
#Uterus:				
Squamous Cell Papilloma				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
#Vagina:				
Granular Cell Tumor Benign				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
#Vagina:				
Polyp				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
#Vagina:				
Sarcoma				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				
#Vagina:				
Schwannoma Malignant				
		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0% SD 0%
.....				

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: ORAL

Vehicle: FEED

Page: 69

Report Date: 10/05/2022

Male					Female				
#Zymbal's Gland: Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Zymbal's Gland: Carcinoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Zymbal's Gland: Carcinoma or Adenoma									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: PERINATAL AND POSTNATAL

Vehicle: FEED

Page: 70

Report Date: 10/05/2022

Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
Male							
Battelle Columbus Laboratory	051018802	06/27/11	729	50(2)	25(648)	593.4	Di(2-ethylhexyl) Phthalate
Battelle Columbus Laboratory	051098701	08/30/10	729	49(2)	27(672)	628.3	Dibutyl Phthalate
Battelle Columbus Laboratory	051026001	11/08/10	729	50(2)	30(706)	615.3	2-Hydroxy-4-methoxybenzophenone
Battelle Columbus Laboratory	052071203	12/12/11	729	50(2)	25(652)	589.0	Tris(Chloropropyl)phosphate
Female							
Battelle Columbus Laboratory	051018802	06/28/11	732	50(4)	31(684)	376.1	Di(2-ethylhexyl) Phthalate
Battelle Columbus Laboratory	051098701	08/31/10	730	50(4)	29(668)	397.3	Dibutyl Phthalate
Battelle Columbus Laboratory	051026001	11/09/10	730	50(4)	30(657)	379.6	2-Hydroxy-4-methoxybenzophenone
Battelle Columbus Laboratory	052071203	12/13/11	731	50(4)	22(629)	380.1	Tris(Chloropropyl)phosphate

NOTE: The text on page 2 ("Report Description") describes how the studies listed here are displayed on the data pages that follow.

		Male				Female			
#All Organs:									
Benign Tumors									
		28/50 (56%)	35/49 (71%)	38/50 (76%)		41/50 (82%)	40/50 (80%)	41/50 (82%)	
		25/50 (50%)				41/50 (82%)			
Overall Incidence	Total	126/199 (63.32%)	Mean 63.36%	SD 12.35%	Total	163/200 (81.5%)	Mean 81.5%	SD 1%	
.....									
#All Organs:									
Malignant Tumors									
		15/50 (30%)	14/49 (29%)	11/50 (22%)		14/50 (28%)	13/50 (26%)	15/50 (30%)	
		9/50 (18%)				10/50 (20%)			
Overall Incidence	Total	49/199 (24.62%)	Mean 24.64%	SD 5.63%	Total	52/200 (26%)	Mean 26%	SD 4.32%	
.....									
#All Organs:									
Malignant and Benign Tumors									
		36/50 (72%)	41/49 (84%)	42/50 (84%)		44/50 (88%)	44/50 (88%)	47/50 (94%)	
		30/50 (60%)				46/50 (92%)			
Overall Incidence	Total	149/199 (74.87%)	Mean 74.92%	SD 11.4%	Total	181/200 (90.5%)	Mean 90.5%	SD 3%	
.....									
#All Organs:									
Hemangioma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
#All Organs:									
Hemangiosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#All Organs:									
Hemangiosarcoma or Hemangioma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		2/50 (4%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	3/200 (1.5%)	Mean 1.5%	SD 1.91%	
.....									
#All Organs:									
Histiocytic Sarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#All Organs:									
Leukemia: Granulocytic									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#All Organs:									
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				2/50 (4%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	3/200 (1.5%)	Mean 1.5%	SD 1.91%	
.....									
#All Organs:									
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)	
		2/50 (4%)				0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.51%	SD 1.92%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#All Organs:									
Malignant Schwannoma									
		6/50 (12%)	3/49 (6%)	1/50 (2%)		3/50 (6%)	2/50 (4%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	10/199 (5.03%)	Mean 5.03%	SD 5.3%	Total	5/200 (2.5%)	Mean 2.5%	SD 3%	
.....									
#All Organs:									
Mesothelioma: Benign, Malignant, NOS									
		1/50 (2%)	1/49 (2%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	4/199 (2.01%)	Mean 2.01%	SD 0.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#All Organs:									
Mesothelioma: Malignant									
		1/50 (2%)	1/49 (2%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	4/199 (2.01%)	Mean 2.01%	SD 0.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#All Organs:									
Osteosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#All Organs:									
Osteosarcoma or Osteoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Adrenal Cortex:									
Adenoma									
		0/50 (0%)	0/49 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	3/50 (6%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.5%	SD 3%	Total	3/200 (1.5%)	Mean 1.5%	SD 3%	
.....									
*Adrenal Cortex:									
Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Adrenal Medulla:									
Ganglioneuroma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Adrenal Medulla:									
Pheochromocytoma Benign									
		5/50 (10%)	7/49 (14%)	9/50 (18%)		0/50 (0%)	0/50 (0%)	3/50 (6%)	
		6/50 (12%)				0/50 (0%)			
Overall Incidence	Total	27/199 (13.57%)	Mean 13.57%	SD 3.43%	Total	3/200 (1.5%)	Mean 1.5%	SD 3%	
.....									
*Adrenal Medulla:									
Pheochromocytoma Complex									
		1/50 (2%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Adrenal Medulla:									
Pheochromocytoma Malignant									
		0/50 (0%)	1/49 (2%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	2/50 (4%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	4/199 (2.01%)	Mean 2.01%	SD 2.83%	Total	2/200 (1%)	Mean 1%	SD 2%	
.....									
*Adrenal Medulla:									
Pheochromocytoma: Benign, Complex, Malignant, NOS									
		6/50 (12%)	8/49 (16%)	12/50 (24%)		0/50 (0%)	0/50 (0%)	5/50 (10%)	
		6/50 (12%)				0/50 (0%)			
Overall Incidence	Total	32/199 (16.08%)	Mean 16.08%	SD 5.66%	Total	5/200 (2.5%)	Mean 2.5%	SD 5%	
.....									
#Bone:									
Osteosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Bone:									
Osteosarcoma or Osteoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Brain:									
Glioma Malignant									
		0/50 (0%)	2/49 (4%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.02%	SD 2.04%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Brain:									
Granular Cell Tumor Benign									
		0/50 (0%)	0/49 (0%)	2/50 (4%)		1/50 (2%)	0/50 (0%)	1/50 (2%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.5%	SD 1.91%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
*Brain:									
Granular Cell Tumor Malignant									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Brain:									
Meningioma Benign									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Brain:									
Meningioma Malignant									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Brain:									
Meningioma: Benign, Malignant, NOS									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Brain:									
Oligodendroglioma Malignant									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Brain:									
Oligodendroglioma, Glioma, or Astrocytoma									
		0/50 (0%)	2/49 (4%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.02%	SD 2.04%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Brain:									
Schwannoma Malignant									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Clitoral/Preputial Gland:									
Adenoma									
		0/50 (0%)	1/49 (2%)	0/49 (0%)		0/50 (0%)	0/49 (0%)	0/48 (0%)	
		0/50 (0%)				0/46 (0%)			
Overall Incidence	Total	1/198 (0.51%)	Mean 0.51%	SD 1.02%	Total	0/193 (0%)	Mean 0%	SD 0%	
.....									
*Clitoral/Preputial Gland:									
Carcinoma									
		0/50 (0%)	0/49 (0%)	1/49 (2%)		0/50 (0%)	0/49 (0%)	0/48 (0%)	
		0/50 (0%)				0/46 (0%)			
Overall Incidence	Total	1/198 (0.51%)	Mean 0.51%	SD 1.02%	Total	0/193 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Clitoral/Preputial Gland: Carcinoma or Adenoma									
		0/50 (0%)	1/49 (2%)	1/49 (2%)		0/50 (0%)	0/49 (0%)	0/48 (0%)	
		0/50 (0%)				0/46 (0%)			
Overall Incidence	Total	2/198 (1.01%)	Mean 1.02%	SD 1.18%	Total	0/193 (0%)	Mean 0%	SD 0%	
.....									
*Clitoral/Preputial Gland: Squamous Cell Carcinoma									
		0/50 (0%)	1/49 (2%)	0/49 (0%)		0/50 (0%)	0/49 (0%)	0/48 (0%)	
		1/50 (2%)				0/46 (0%)			
Overall Incidence	Total	2/198 (1.01%)	Mean 1.01%	SD 1.17%	Total	0/193 (0%)	Mean 0%	SD 0%	
.....									
*Clitoral/Preputial Gland: Squamous Cell Papilloma									
		1/50 (2%)	0/49 (0%)	0/49 (0%)		0/50 (0%)	0/49 (0%)	0/48 (0%)	
		0/50 (0%)				0/46 (0%)			
Overall Incidence	Total	1/198 (0.51%)	Mean 0.5%	SD 1%	Total	0/193 (0%)	Mean 0%	SD 0%	
.....									
*Epididymis: Sarcoma									
		0/49 (0%)	0/49 (0%)	0/50 (0%)					
		0/50 (0%)							
Overall Incidence	Total	0/198 (0%)	Mean 0%	SD 0%					
.....									
#Eye: Leiomyoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Heart:									
Schwannoma Malignant									
		2/50 (4%)	2/49 (4%)	1/50 (2%)		0/49 (0%)	0/50 (0%)	0/49 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	5/199 (2.51%)	Mean 2.52%	SD 1.94%	Total	0/198 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Large: Cecum:									
Leiomyosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Large: Cecum:									
Liposarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Intestine Large: Colon/Rectum:									
Granular Cell Tumor Benign									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Large: Colon/Rectum:									
Leiomyoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Intestine Small: Jejunum: Carcinoma									
		2/50 (4%)	0/49 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.5%	SD 1.91%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Small: Jejunum: Leiomyosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Small: Site Unspecified: Carcinoma									
		2/50 (4%)	0/49 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.5%	SD 1.91%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Small: Site Unspecified: Carcinoma or Adenoma									
		2/50 (4%)	0/49 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.5%	SD 1.91%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Small: Site Unspecified: Leiomyosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

Page: 81
 Report Date: 10/05/2022

		Male				Female			
*Islets, Pancreatic:									
Adenoma									
		2/50 (4%)	4/49 (8%)	3/50 (6%)		3/49 (6%)	1/50 (2%)	0/50 (0%)	
		4/50 (8%)				0/49 (0%)			
Overall Incidence	Total	13/199 (6.53%)	Mean 6.54%	SD 1.96%	Total	4/198 (2.02%)	Mean 2.03%	SD 2.89%	
.....									
*Islets, Pancreatic:									
Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	1/50 (2%)	
		0/50 (0%)				0/49 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/198 (0.51%)	Mean 0.5%	SD 1%	
.....									
*Islets, Pancreatic:									
Carcinoma or Adenoma									
		2/50 (4%)	4/49 (8%)	3/50 (6%)		3/49 (6%)	1/50 (2%)	1/50 (2%)	
		4/50 (8%)				0/49 (0%)			
Overall Incidence	Total	13/199 (6.53%)	Mean 6.54%	SD 1.96%	Total	5/198 (2.53%)	Mean 2.53%	SD 2.57%	
.....									
*Kidney: Pelvis and Transitional Epithelium:									
Papilloma									
		0/50 (0%)	0/49 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule:									
Adenoma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Kidney: Renal Tubule: Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Carcinoma or Adenoma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Hemangioma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Lipoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Liposarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Kidney: Renal Tubule: Oncocytoma Benign									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Polyp Adenomatous									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Lacrimal Gland: Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Liver: Cholangioma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	
.....									
*Liver: Hemangioma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Liver:									
Hepatocellular Adenoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	
.....									
*Liver:									
Hepatocellular Carcinoma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatoblastoma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatocellular Adenoma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.51%	SD 1.01%	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	
.....									
*Liver:									
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.51%	SD 1.01%	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

Page: 85
 Report Date: 10/05/2022

		Male				Female			
*Lung:									
Alveolar/Bronchiolar Adenoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/49 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/198 (0%)	Mean 0%	SD 0%	
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma									
		0/50 (0%)	0/49 (0%)	1/50 (2%)		0/49 (0%)	0/50 (0%)	0/49 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1%	SD 1.15%	Total	0/198 (0%)	Mean 0%	SD 0%	
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma									
		0/50 (0%)	1/49 (2%)	1/50 (2%)		0/49 (0%)	0/50 (0%)	0/49 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.51%	SD 1.01%	Total	0/198 (0%)	Mean 0%	SD 0%	
.....									
#Mammary Gland:									
Adenolipoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Mammary Gland:									
Adenoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Mammary Gland:									
Carcinoma									
		1/50 (2%)	0/49 (0%)	2/50 (4%)		1/50 (2%)	4/50 (8%)	7/50 (14%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.5%	SD 1.91%	Total	13/200 (6.5%)	Mean 6.5%	SD 5.74%	
.....									
#Mammary Gland:									
Carcinoma or Adenoma									
		1/50 (2%)	0/49 (0%)	2/50 (4%)		2/50 (4%)	4/50 (8%)	7/50 (14%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.5%	SD 1.91%	Total	14/200 (7%)	Mean 7%	SD 5.29%	
.....									
#Mammary Gland:									
Fibroadenoma									
		2/50 (4%)	1/49 (2%)	2/50 (4%)		28/50 (56%)	33/50 (66%)	32/50 (64%)	
		2/50 (4%)				29/50 (58%)			
Overall Incidence	Total	7/199 (3.52%)	Mean 3.51%	SD 0.98%	Total	122/200 (61%)	Mean 61%	SD 4.76%	
.....									
#Mammary Gland:									
Fibroma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Mammary Gland:									
Fibroma, Fibroadenoma or Adenoma									
		2/50 (4%)	1/49 (2%)	2/50 (4%)		29/50 (58%)	33/50 (66%)	32/50 (64%)	
		2/50 (4%)				29/50 (58%)			
Overall Incidence	Total	7/199 (3.52%)	Mean 3.51%	SD 0.98%	Total	123/200 (61.5%)	Mean 61.5%	SD 4.12%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Mammary Gland:									
Fibroma, Fibroadenoma, Carcinoma, or Adenoma									
		3/50 (6%)	1/49 (2%)	3/50 (6%)		30/50 (60%)	35/50 (70%)	36/50 (72%)	
		2/50 (4%)				30/50 (60%)			
Overall Incidence	Total	9/199 (4.52%)	Mean 4.51%	SD 1.9%	Total	131/200 (65.5%)	Mean 65.5%	SD 6.4%	
.....									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Squamous Cell Carcinoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Oral Mucosa:									
Squamous Cell Carcinoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Ovary:									
Cystadenoma									
						0/50 (0%)	0/50 (0%)	0/50 (0%)	
						0/50 (0%)			
Overall Incidence	Total				Total	0/200 (0%)	Mean 0%	SD 0%	
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male	Female
*Ovary:		
Granulosa Cell Tumor Benign		
	1/50 (2%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
Overall Incidence	Total 1/200 (0.5%)	Mean 0.5% SD 1%
.....		
*Ovary:		
Granulosa Cell Tumor Malignant		
	1/50 (2%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
Overall Incidence	Total 1/200 (0.5%)	Mean 0.5% SD 1%
.....		
*Ovary:		
Granulosa Cell Tumor: Benign, Malignant, NOS		
	2/50 (4%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
Overall Incidence	Total 2/200 (1%)	Mean 1% SD 2%
.....		
*Ovary:		
Granulosa-Theca Tumor Benign		
	0/50 (0%)	0/50 (0%)
	1/50 (2%)	0/50 (0%)
Overall Incidence	Total 1/200 (0.5%)	Mean 0.5% SD 1%
.....		
*Ovary:		
Granulosa-Theca Tumor Malignant		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
Overall Incidence	Total 0/200 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

					Male						Female	
*Ovary:												
Luteoma												
						0/50	(0%)	0/50	(0%)	0/50	(0%)	
						0/50	(0%)					
Overall Incidence					Total	0/200	(0%)	Mean	0%	SD	0%	
.....												
*Ovary:												
Schwannoma Malignant												
						0/50	(0%)	1/50	(2%)	0/50	(0%)	
						0/50	(0%)					
Overall Incidence					Total	1/200	(0.5%)	Mean	0.5%	SD	1%	
.....												
*Ovary:												
Sertoli Cell Tumor Benign												
						0/50	(0%)	0/50	(0%)	0/50	(0%)	
						0/50	(0%)					
Overall Incidence					Total	0/200	(0%)	Mean	0%	SD	0%	
.....												
*Ovary:												
Thecoma Benign												
						0/50	(0%)	0/50	(0%)	0/50	(0%)	
						0/50	(0%)					
Overall Incidence					Total	0/200	(0%)	Mean	0%	SD	0%	
.....												
*Pancreas:												
Adenoma												
						10/50	(20%)	4/49	(8%)	5/50	(10%)	
						9/50	(18%)			0/49	(0%)	
Overall Incidence					Total	28/199	(14.07%)	Mean	14.04%	SD	5.83%	
								Total	0/198	(0%)	Mean	0%
											SD	0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Pancreas:									
Carcinoma									
		0/50 (0%)	2/49 (4%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/49 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.02%	SD 2.04%	Total	0/198 (0%)	Mean 0%	SD 0%	
.....									
*Pancreas:									
Carcinoma or Adenoma									
		10/50 (20%)	6/49 (12%)	5/50 (10%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		9/50 (18%)				0/49 (0%)			
Overall Incidence	Total	30/199 (15.08%)	Mean 15.06%	SD 4.71%	Total	0/198 (0%)	Mean 0%	SD 0%	
.....									
*Parathyroid Gland:									
Adenoma									
		0/42 (0%)	0/48 (0%)	0/49 (0%)		0/42 (0%)	0/45 (0%)	1/41 (2%)	
		0/49 (0%)				0/44 (0%)			
Overall Incidence	Total	0/188 (0%)	Mean 0%	SD 0%	Total	1/172 (0.58%)	Mean 0.61%	SD 1.22%	
.....									
#Peripheral Nerve:									
Paraganglioma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Peripheral Nerve:									
Schwannoma Malignant									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Peripheral Nerve:									
Schwannoma: Benign, Malignant, NOS									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Adenoma									
		4/50 (8%)	15/48 (31%)	14/50 (28%)		15/49 (31%)	12/50 (24%)	19/50 (38%)	
		7/50 (14%)				11/50 (22%)			
Overall Incidence	Total	40/198 (20.2%)	Mean 20.31%	SD 11.11%	Total	57/199 (28.64%)	Mean 28.65%	SD 7.24%	
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Carcinoma									
		0/50 (0%)	0/48 (0%)	0/50 (0%)		1/49 (2%)	1/50 (2%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/198 (0%)	Mean 0%	SD 0%	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Carcinoma or Adenoma									
		4/50 (8%)	15/48 (31%)	14/50 (28%)		16/49 (33%)	13/50 (26%)	19/50 (38%)	
		7/50 (14%)				11/50 (22%)			
Overall Incidence	Total	40/198 (20.2%)	Mean 20.31%	SD 11.11%	Total	59/199 (29.65%)	Mean 29.66%	SD 7.08%	
.....									
*Pituitary Gland: Pars Intermedia:									
Adenoma									
		0/50 (0%)	0/48 (0%)	2/50 (4%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/198 (1.01%)	Mean 1%	SD 2%	Total	0/199 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Pituitary Gland: Pars Intermedia:									
 Carcinoma or Adenoma									
		0/50 (0%)	0/48 (0%)	2/50 (4%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/198 (1.01%)	Mean 1%	SD 2%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Pituitary Gland: Pars Nervosa:									
 Schwannoma Malignant									
		0/50 (0%)	0/48 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/198 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Prostate:									
 Adenoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)					
		0/50 (0%)							
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%					
.....									
*Prostate:									
 Carcinoma or Adenoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)					
		0/50 (0%)							
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%					
.....									
*Salivary Glands:									
 Schwannoma Malignant									
		2/50 (4%)	0/49 (0%)	0/50 (0%)		0/49 (0%)	0/49 (0%)	0/49 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1%	SD 2%	Total	0/197 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Seminal Vesicle:									
Hemangiosarcoma									
		0/50	(0%)	0/49	(0%)	0/50	(0%)		
		0/50	(0%)						
Overall Incidence	Total	0/199	(0%)	Mean 0%		SD 0%			
.....									
#Skeletal Muscle:									
Hemangioma									
		0/50	(0%)	0/49	(0%)	0/50	(0%)	1/50	(2%)
		0/50	(0%)					0/50	(0%)
								0/50	(0%)
Overall Incidence	Total	0/199	(0%)	Mean 0%		SD 0%	Total	1/200	(0.5%)
								Mean 0.5%	SD 1%
.....									
#Skeletal Muscle:									
Hemangiosarcoma									
		0/50	(0%)	0/49	(0%)	0/50	(0%)	0/50	(0%)
		0/50	(0%)					0/50	(0%)
								0/50	(0%)
Overall Incidence	Total	0/199	(0%)	Mean 0%		SD 0%	Total	0/200	(0%)
								Mean 0%	SD 0%
.....									
#Skeletal Muscle:									
Liposarcoma									
		0/50	(0%)	0/49	(0%)	0/50	(0%)	0/50	(0%)
		0/50	(0%)					0/50	(0%)
								0/50	(0%)
Overall Incidence	Total	0/199	(0%)	Mean 0%		SD 0%	Total	0/200	(0%)
								Mean 0%	SD 0%
.....									
#Skeletal Muscle:									
Sarcoma									
		1/50	(2%)	0/49	(0%)	0/50	(0%)	0/50	(0%)
		0/50	(0%)					0/50	(0%)
								0/50	(0%)
Overall Incidence	Total	1/199	(0.5%)	Mean 0.5%		SD 1%	Total	0/200	(0%)
								Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Skin:									
Basal Cell Adenoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal Cell Adenoma or Basosquamous Tumor Benign									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal Cell Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male					Female				
#Skin:										
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma										
		1/50 (2%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)				
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%		Total	0/200 (0%)	Mean 0%	SD 0%	
.....										
#Skin:										
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma										
		4/50 (8%)	9/49 (18%)	4/50 (8%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
		3/50 (6%)				0/50 (0%)				
Overall Incidence	Total	20/199 (10.05%)	Mean 10.09%	SD 5.6%		Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....										
#Skin:										
Fibroma										
		3/50 (6%)	3/49 (6%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
		4/50 (8%)				1/50 (2%)				
Overall Incidence	Total	13/199 (6.53%)	Mean 6.53%	SD 0.98%		Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....										
#Skin:										
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma										
		3/50 (6%)	4/49 (8%)	3/50 (6%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	
		4/50 (8%)				2/50 (4%)				
Overall Incidence	Total	14/199 (7.04%)	Mean 7.04%	SD 1.2%		Total	4/200 (2%)	Mean 2%	SD 1.63%	
.....										
#Skin:										
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma										
		3/50 (6%)	4/49 (8%)	3/50 (6%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	
		4/50 (8%)				2/50 (4%)				
Overall Incidence	Total	14/199 (7.04%)	Mean 7.04%	SD 1.2%		Total	4/200 (2%)	Mean 2%	SD 1.63%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Skin:									
Fibrosarcoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
#Skin:									
Fibrosarcoma, Sarcoma, Myxosarcoma, or Malignant Fibrous Histiocytoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	3/200 (1.5%)	Mean 1.5%	SD 1%	
.....									
#Skin:									
Hemangioma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Hemangiopericytoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Keratoacanthoma									
		2/50 (4%)	8/49 (16%)	2/50 (4%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		2/50 (4%)				0/50 (0%)			
Overall Incidence	Total	14/199 (7.04%)	Mean 7.08%	SD 6.16%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Skin:									
Lipoma									
		0/50 (0%)	0/49 (0%)	2/50 (4%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1%	SD 2%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Liposarcoma									
		1/50 (2%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Malignant Fibrous Histiocytoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Neurofibrosarcoma or Schwannoma (malignant or NOS)									
		2/50 (4%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1%	SD 2%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
#Skin:									
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)									
		2/50 (4%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1%	SD 2%	Total	2/200 (1%)	Mean 1%	SD 1.15%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Skin:									
Osteosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Pilomatrixoma									
		0/50 (0%)	3/49 (6%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.53%	SD 3.06%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Sarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Schwannoma Malignant									
		2/50 (4%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1%	SD 2%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
#Skin:									
Squamous Cell Carcinoma									
		1/50 (2%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female							
#Skin:													
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma													
		1/50	(2%)	0/49	(0%)	0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
		0/50	(0%)					0/50	(0%)				
Overall Incidence	Total	1/199 (0.5%)		Mean 0.5%		SD 1%		Total 1/200 (0.5%)		Mean 0.5%		SD 1%	
.....													
#Skin:													
Squamous Cell Papilloma													
		0/50	(0%)	0/49	(0%)	2/50	(4%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
		1/50	(2%)					0/50	(0%)				
Overall Incidence	Total	3/199 (1.51%)		Mean 1.5%		SD 1.91%		Total 0/200 (0%)		Mean 0%		SD 0%	
.....													
#Skin:													
Squamous Cell Papilloma or Papilloma													
		0/50	(0%)	0/49	(0%)	2/50	(4%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
		1/50	(2%)					0/50	(0%)				
Overall Incidence	Total	3/199 (1.51%)		Mean 1.5%		SD 1.91%		Total 0/200 (0%)		Mean 0%		SD 0%	
.....													
#Skin:													
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma													
		3/50	(6%)	8/49	(16%)	4/50	(8%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
		3/50	(6%)					0/50	(0%)				
Overall Incidence	Total	18/199 (9.05%)		Mean 9.08%		SD 4.92%		Total 1/200 (0.5%)		Mean 0.5%		SD 1%	
.....													
#Skin:													
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma													
		2/50	(4%)	8/49	(16%)	4/50	(8%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
		3/50	(6%)					0/50	(0%)				
Overall Incidence	Total	17/199 (8.54%)		Mean 8.58%		SD 5.42%		Total 0/200 (0%)		Mean 0%		SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Skin:									
Trichoepithelioma									
		1/50 (2%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin: Sebaceous Gland:									
Adenoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin: Sebaceous Gland:									
Carcinoma or Adenoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Spleen:									
Hemangiosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/49 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/198 (0.51%)	Mean 0.51%	SD 1.02%	
.....									
#Stomach, Forestomach:									
Sarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Stomach, Forestomach:									
Squamous Cell Carcinoma or Papilloma Squamous									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Stomach, Forestomach:									
Squamous Cell Papilloma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Testis:									
Adenoma									
		3/49 (6%)	2/49 (4%)	1/50 (2%)					
		0/50 (0%)							
Overall Incidence	Total	6/198 (3.03%)	Mean 3.05%	SD 2.64%					
.....									
*Thymus:									
Thymoma Benign									
		0/47 (0%)	0/48 (0%)	0/46 (0%)		0/46 (0%)	0/49 (0%)	0/49 (0%)	
		0/49 (0%)				0/50 (0%)			
Overall Incidence	Total	0/190 (0%)	Mean 0%	SD 0%	Total	0/194 (0%)	Mean 0%	SD 0%	
.....									
*Thymus:									
Thymoma Malignant									
		0/47 (0%)	0/48 (0%)	0/46 (0%)		0/46 (0%)	0/49 (0%)	0/49 (0%)	
		0/49 (0%)				0/50 (0%)			
Overall Incidence	Total	0/190 (0%)	Mean 0%	SD 0%	Total	0/194 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Thymus:							
Thymoma: Benign, Malignant, NOS							
		0/47 (0%)	0/48 (0%)	0/46 (0%)	0/46 (0%)	0/49 (0%)	0/49 (0%)
		0/49 (0%)			0/50 (0%)		
Overall Incidence	Total	0/190 (0%)	Mean 0%	SD 0%	Total	0/194 (0%)	Mean 0% SD 0%
.....							
*Thyroid Gland: C-Cell:							
Adenoma							
		10/50 (20%)	8/49 (16%)	7/50 (14%)	8/49 (16%)	12/50 (24%)	5/50 (10%)
		9/50 (18%)			10/50 (20%)		
Overall Incidence	Total	34/199 (17.09%)	Mean 17.08%	SD 2.54%	Total	35/199 (17.59%)	Mean 17.58% SD 5.95%
.....							
*Thyroid Gland: C-Cell:							
Carcinoma							
		1/50 (2%)	1/49 (2%)	1/50 (2%)	0/49 (0%)	1/50 (2%)	1/50 (2%)
		0/50 (0%)			2/50 (4%)		
Overall Incidence	Total	3/199 (1.51%)	Mean 1.51%	SD 1.01%	Total	4/199 (2.01%)	Mean 2% SD 1.63%
.....							
*Thyroid Gland: C-Cell:							
Carcinoma or Adenoma							
		10/50 (20%)	8/49 (16%)	8/50 (16%)	8/49 (16%)	13/50 (26%)	6/50 (12%)
		9/50 (18%)			12/50 (24%)		
Overall Incidence	Total	35/199 (17.59%)	Mean 17.58%	SD 1.83%	Total	39/199 (19.6%)	Mean 19.58% SD 6.55%
.....							
*Thyroid Gland: Follicular Cell:							
Adenoma							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)			1/50 (2%)		
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	1/199 (0.5%)	Mean 0.5% SD 1%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Thyroid Gland: Follicular Cell: Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	
#Tissue NOS: Schwannoma Malignant									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
#Tongue: Squamous Cell Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
#Tongue: Squamous Cell Carcinoma or Papilloma Squamous									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Tooth:									
Odontoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Urinary Bladder:									
Leiomyosarcoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/49 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
#Uterus:									
Adenocarcinoma									
						3/50 (6%)		5/50 (10%)	
						3/50 (6%)			
Overall Incidence	Total				Total	11/150 (7.33%)	Mean 7.33%	SD 2.31%	
.....									
#Uterus:									
Adenocarcinoma or Adenoma									
						3/50 (6%)		5/50 (10%)	
						3/50 (6%)			
Overall Incidence	Total				Total	11/150 (7.33%)	Mean 7.33%	SD 2.31%	
.....									
#Uterus:									
Adenoma									
						0/50 (0%)		0/50 (0%)	
						0/50 (0%)			
Overall Incidence	Total				Total	0/150 (0%)	Mean 0%	SD 0%	
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

Page: 105

Report Date: 10/05/2022

	Male	Female
#Uterus:		
Adenoma, Adenocarcinoma, Sq Cell Carcinoma, or Sq Cell Papilloma		
	3/50 (6%)	5/50 (10%)
	3/50 (6%)	
Overall Incidence	Total 11/150 (7.33%)	Mean 7.33% SD 2.31%
.....		
#Uterus:		
Deciduoma Benign		
	1/50 (2%)	0/50 (0%)
	0/50 (0%)	
Overall Incidence	Total 1/150 (0.67%)	Mean 0.67% SD 1.15%
.....		
#Uterus:		
Granular Cell Tumor Benign		
	1/50 (2%)	0/50 (0%)
	0/50 (0%)	
Overall Incidence	Total 1/150 (0.67%)	Mean 0.67% SD 1.15%
.....		
#Uterus:		
Hemangioma		
	0/50 (0%)	0/50 (0%)
	1/50 (2%)	
Overall Incidence	Total 1/150 (0.67%)	Mean 0.67% SD 1.15%
.....		
#Uterus:		
Polyp Stromal		
	8/50 (16%)	8/50 (16%)
	5/50 (10%)	
Overall Incidence	Total 21/150 (14%)	Mean 14% SD 3.46%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male	Female
#Uterus: Sarcoma		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	
Overall Incidence	Total 0/150 (0%)	Mean 0% SD 0%
#Uterus: Sarcoma Stromal		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	
Overall Incidence	Total 0/150 (0%)	Mean 0% SD 0%
#Uterus: Sarcoma Stromal or Polyp Stromal		
	8/50 (16%)	8/50 (16%)
	5/50 (10%)	
Overall Incidence	Total 21/150 (14%)	Mean 14% SD 3.46%
#Uterus: Schwannoma Malignant		
	1/50 (2%)	0/50 (0%)
	0/50 (0%)	
Overall Incidence	Total 1/150 (0.67%)	Mean 0.67% SD 1.15%
#Uterus: Sq Cell Carcinoma or Papilloma Squamous		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	
Overall Incidence	Total 0/150 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male			Female		
#Uterus: Squamous Cell Carcinoma						
		0/50 (0%)		0/50 (0%)		
		0/50 (0%)				
Overall Incidence	Total	0/150 (0%)		Mean 0%		SD 0%
.....						
#Uterus: Squamous Cell Papilloma						
		0/50 (0%)		0/50 (0%)		
		0/50 (0%)				
Overall Incidence	Total	0/150 (0%)		Mean 0%		SD 0%
.....						
#Vagina: Granular Cell Tumor Benign						
		0/50 (0%)		0/50 (0%)		0/50 (0%)
		0/50 (0%)				
Overall Incidence	Total	0/200 (0%)		Mean 0%		SD 0%
.....						
#Vagina: Polyp						
		0/50 (0%)		0/50 (0%)		0/50 (0%)
		0/50 (0%)				
Overall Incidence	Total	0/200 (0%)		Mean 0%		SD 0%
.....						
#Vagina: Sarcoma						
		0/50 (0%)		0/50 (0%)		0/50 (0%)
		1/50 (2%)				
Overall Incidence	Total	1/200 (0.5%)		Mean 0.5%		SD 1%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: FEED

Page: 108
 Report Date: 10/05/2022

		Male				Female			
#Vagina:									
Schwannoma Malignant									
						1/50 (2%)	0/50 (0%)	0/50 (0%)	
						0/50 (0%)			
Overall Incidence					Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Zymbal's Gland:									
Adenoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Zymbal's Gland:									
Carcinoma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Zymbal's Gland:									
Carcinoma or Adenoma									
		1/50 (2%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/199 (1.01%)	Mean 1.01%	SD 1.17%	Total	0/200 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: PERINATAL AND POSTNATAL

Vehicle: WATER

Page: 109

Report Date: 10/05/2022

Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
Male							
Battelle Columbus Laboratory	050303803	01/30/12	729	50(2)	12(621)	610.8	Sodium Tungstate Dihydrate
Batelle Columbus	051105403	07/05/15	732	50(2)	16(650)	657.1	Sulfolane
Female							
Battelle Columbus Laboratory	050303803	01/31/12	730	50(5)	30(667)	393.3	Sodium Tungstate Dihydrate
Batelle Columbus	051105403	07/05/15	734	50(4)	21(670)	438.1	Sulfolane

NOTE: The text on page 2 ("Report Description") describes how the studies listed here are displayed on the data pages that follow.

		Male			Female		
#All Organs:							
Benign Tumors							
		29/50 (58%)	29/50 (58%)		39/50 (78%)	43/50 (86%)	
Overall Incidence	Total	58/100 (58%)	Mean 58%	SD 0%	Total	82/100 (82%)	Mean 82% SD 5.66%
.....							
#All Organs:							
Malignant Tumors							
		14/50 (28%)	8/50 (16%)		17/50 (34%)	15/50 (30%)	
Overall Incidence	Total	22/100 (22%)	Mean 22%	SD 8.49%	Total	32/100 (32%)	Mean 32% SD 2.83%
.....							
#All Organs:							
Malignant and Benign Tumors							
		36/50 (72%)	32/50 (64%)		47/50 (94%)	45/50 (90%)	
Overall Incidence	Total	68/100 (68%)	Mean 68%	SD 5.66%	Total	92/100 (92%)	Mean 92% SD 2.83%
.....							
#All Organs:							
Hemangioma							
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma							
		1/50 (2%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 0%	Total	0/100 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma or Hemangioma							
		1/50 (2%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 0%	Total	0/100 (0%)	Mean 0% SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female					
#All Organs:											
Histiocytic Sarcoma											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#All Organs:											
Leukemia: Granulocytic											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#All Organs:											
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#All Organs:											
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type											
		1/50	(2%)	0/50	(0%)			2/50	(4%)	2/50	(4%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	4/100	(4%)	Mean 4%	SD 0%	
.....											
#All Organs:											
Malignant Schwannoma											
		1/50	(2%)	0/50	(0%)			2/50	(4%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	2/100	(2%)	Mean 2%	SD 2.83%	
.....											
#All Organs:											
Mesothelioma: Benign, Malignant, NOS											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#All Organs:									
Mesothelioma: Malignant									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#All Organs:									
Osteosarcoma									
		0/50	(0%)	0/50	(0%)	1/50	(2%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%
									SD 1.41%
.....									
#All Organs:									
Osteosarcoma or Osteoma									
		0/50	(0%)	0/50	(0%)	1/50	(2%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%
									SD 1.41%
.....									
*Adrenal Cortex:									
Adenoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									
*Adrenal Cortex:									
Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									
*Adrenal Medulla:									
Ganglioneuroma									
		1/50	(2%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Adrenal Medulla:									
Pheochromocytoma Benign									
		10/50 (20%)	10/50 (20%)		1/50 (2%)	1/49 (2%)			
Overall Incidence	Total	20/100 (20%)	Mean 20%	SD 0%	Total	2/99 (2.02%)	Mean 2.02%	SD 0.03%	
.....									
*Adrenal Medulla:									
Pheochromocytoma Complex									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/49 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0%	SD 0%	
.....									
*Adrenal Medulla:									
Pheochromocytoma Malignant									
		2/50 (4%)	0/50 (0%)		1/50 (2%)	1/49 (2%)			
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 2.83%	Total	2/99 (2.02%)	Mean 2.02%	SD 0.03%	
.....									
*Adrenal Medulla:									
Pheochromocytoma: Benign, Complex, Malignant, NOS									
		12/50 (24%)	10/50 (20%)		2/50 (4%)	2/49 (4%)			
Overall Incidence	Total	22/100 (22%)	Mean 22%	SD 2.83%	Total	4/99 (4.04%)	Mean 4.04%	SD 0.06%	
.....									
#Bone:									
Osteosarcoma									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Bone:									
Osteosarcoma or Osteoma									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female					
*Brain:											
 Glioma Malignant											
		2/50	(4%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
 Granular Cell Tumor Benign											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
 Granular Cell Tumor Malignant											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
 Meningioma Benign											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
 Meningioma Malignant											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
 Meningioma: Benign, Malignant, NOS											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female					
*Brain:											
Oligodendroglioma Malignant											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
Oligodendroglioma, Glioma, or Astrocytoma											
		2/50	(4%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
Schwannoma Malignant											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Clitoral/Preputial Gland:											
Adenoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/48	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/98	(0%)	Mean 0%	SD 0%	
.....											
*Clitoral/Preputial Gland:											
Adenocarcinoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/48	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/98	(0%)	Mean 0%	SD 0%	
.....											
*Clitoral/Preputial Gland:											
Adenoma or Adenocarcinoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/48	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/98	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Clitoral/Preputial Gland:									
Squamous Cell Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/48	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/98	(0%)	Mean 0%
									SD 0%
.....									
*Clitoral/Preputial Gland:									
Squamous Cell Papilloma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/48	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/98	(0%)	Mean 0%
									SD 0%
.....									
*Epididymis:									
Sarcoma									
		0/50	(0%)	0/50	(0%)				
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%				
.....									
#Eye:									
Leiomyoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
*Heart:									
Schwannoma Malignant									
		0/50	(0%)	0/50	(0%)	2/50	(4%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	2/99	(2.02%)	Mean 2%
									SD 2.83%
.....									
#Intestine Large: Cecum:									
Leiomyosarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%
									SD 1.41%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

Page: 117
 Report Date: 10/05/2022

		Male				Female					
#Intestine Large: Cecum:											
Liposarcoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Large: Colon/Rectum:											
Granular Cell Tumor Benign											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Large: Colon/Rectum:											
Leiomyoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Jejunum:											
Adenocarcinoma											
		1/50	(2%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Jejunum:											
Leiomyosarcoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Any Site:											
Adenocarcinoma											
		1/50	(2%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male				Female					
#Intestine Small: Any Site:											
Adenoma or Adenocarcinoma											
		1/50	(2%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Any Site:											
Leiomyosarcoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Islets, Pancreatic:											
Adenoma											
		2/50	(4%)	3/50	(6%)			1/50	(2%)	0/48	(0%)
Overall Incidence	Total	5/100	(5%)	Mean 5%	SD 1.41%	Total	1/98	(1.02%)	Mean 1%	SD 1.41%	
.....											
*Islets, Pancreatic:											
Carcinoma											
		1/50	(2%)	0/50	(0%)			1/50	(2%)	0/48	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	1/98	(1.02%)	Mean 1%	SD 1.41%	
.....											
*Islets, Pancreatic:											
Carcinoma or Adenoma											
		3/50	(6%)	3/50	(6%)			2/50	(4%)	0/48	(0%)
Overall Incidence	Total	6/100	(6%)	Mean 6%	SD 0%	Total	2/98	(2.04%)	Mean 2%	SD 2.83%	
.....											
*Kidney: Pelvis and Transitional Epithelium:											
Papilloma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Kidney: Renal Tubule: Adenoma									
		2/50	(4%)	1/50	(2%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	0/99	(0%)	Mean 0%
									SD 0%
*Kidney: Renal Tubule: Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
*Kidney: Renal Tubule: Carcinoma or Adenoma									
		2/50	(4%)	1/50	(2%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	0/99	(0%)	Mean 0%
									SD 0%
*Kidney: Renal Tubule: Hemangioma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
*Kidney: Renal Tubule: Lipoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
*Kidney: Renal Tubule: Liposarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

Page: 120
 Report Date: 10/05/2022

		Male				Female			
*Kidney: Renal Tubule: Oncocytoma Benign									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/49 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Polyp Adenomatous									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/49 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0%	SD 0%	
.....									
#Lacrimal Gland: Carcinoma									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
*Liver: Cholangioma									
		1/50 (2%)	0/50 (0%)		0/50 (0%)	0/49 (0%)			
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	0/99 (0%)	Mean 0%	SD 0%	
.....									
*Liver: Hemangioma									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/49 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0%	SD 0%	
.....									
*Liver: Hepatocellular Adenoma									
		1/50 (2%)	0/50 (0%)		1/50 (2%)	0/49 (0%)			
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	1/99 (1.01%)	Mean 1%	SD 1.41%	

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male				Female			
*Liver:									
Hepatocellular Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatoblastoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatocellular Adenoma									
		1/50	(2%)	0/50	(0%)	1/50	(2%)	0/49	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	1/99	(1.01%)	Mean 1%
									SD 1.41%
.....									
*Liver:									
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma									
		1/50	(2%)	0/50	(0%)	1/50	(2%)	0/49	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	1/99	(1.01%)	Mean 1%
									SD 1.41%
.....									
*Lung:									
Alveolar/Bronchiolar Adenoma									
		1/50	(2%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma									
		1/50	(2%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

Page: 122
 Report Date: 10/05/2022

		Male				Female			
*Lung:									
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma									
		2/50 (4%)	0/50 (0%)			0/50 (0%)	0/49 (0%)		
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 2.83%	Total	0/99 (0%)	Mean 0%	SD 0%	
.....									
#Mammary Gland: Adenolipoma									
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Mammary Gland: Adenoma									
		0/50 (0%)	0/50 (0%)			3/50 (6%)	1/50 (2%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	4/100 (4%)	Mean 4%	SD 2.83%	
.....									
#Mammary Gland: Adenocarcinoma									
		0/50 (0%)	0/50 (0%)			2/50 (4%)	1/50 (2%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	3/100 (3%)	Mean 3%	SD 1.41%	
.....									
#Mammary Gland: Adenoma or Adenocarcinoma									
		0/50 (0%)	0/50 (0%)			5/50 (10%)	2/50 (4%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	7/100 (7%)	Mean 7%	SD 4.24%	
.....									
#Mammary Gland: Fibroadenoma									
		0/50 (0%)	2/50 (4%)			30/50 (60%)	32/50 (64%)		
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 2.83%	Total	62/100 (62%)	Mean 62%	SD 2.83%	

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male				Female			
#Mammary Gland:									
Fibroma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%
SD 1.41%									
#Mammary Gland:									
Fibroma, Fibroadenoma or Adenoma									
		0/50	(0%)	2/50	(4%)	32/50	(64%)	33/50	(66%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	65/100	(65%)	Mean 65%
SD 1.41%									
#Mammary Gland:									
Fibroma, Fibroadenoma, Adenocarcinoma, or Adenoma									
		0/50	(0%)	2/50	(4%)	34/50	(68%)	33/50	(66%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	67/100	(67%)	Mean 67%
SD 1.41%									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Squamous Cell Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
SD 0%									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
SD 0%									
#Oral Mucosa:									
Squamous Cell Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
SD 0%									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System
Tumor Incidence for Selected Control Animal Groups
Route: PERINATAL AND POSTNATAL
Vehicle: WATER

Page: 124

Report Date: 10/05/2022

	Male			Female	
*Ovary: Cystadenoma					
		0/50 (0%)		0/48 (0%)	
Overall Incidence	Total	0/98 (0%)		Mean 0%	SD 0%
.....					
*Ovary: Granulosa Cell Tumor Benign					
		0/50 (0%)		0/48 (0%)	
Overall Incidence	Total	0/98 (0%)		Mean 0%	SD 0%
.....					
*Ovary: Granulosa Cell Tumor Malignant					
		1/50 (2%)		0/48 (0%)	
Overall Incidence	Total	1/98 (1.02%)		Mean 1%	SD 1.41%
.....					
*Ovary: Granulosa Cell Tumor: Benign, Malignant, NOS					
		1/50 (2%)		0/48 (0%)	
Overall Incidence	Total	1/98 (1.02%)		Mean 1%	SD 1.41%
.....					
*Ovary: Granulosa-Theca Tumor Benign					
		0/50 (0%)		0/48 (0%)	
Overall Incidence	Total	0/98 (0%)		Mean 0%	SD 0%
.....					
*Ovary: Granulosa-Theca Tumor Malignant					
		1/50 (2%)		0/48 (0%)	
Overall Incidence	Total	1/98 (1.02%)		Mean 1%	SD 1.41%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

Page: 125
 Report Date: 10/05/2022

Male					Female										
*Ovary:															
Luteoma															
					0/50	(0%)			0/48	(0%)					
Overall Incidence					Total	0/98	(0%)	Mean	0%	SD 0%					
.....															
*Ovary:															
Schwannoma Malignant															
					0/50	(0%)			0/48	(0%)					
Overall Incidence					Total	0/98	(0%)	Mean	0%	SD 0%					
.....															
*Ovary:															
Sertoli Cell Tumor Benign															
					0/50	(0%)			0/48	(0%)					
Overall Incidence					Total	0/98	(0%)	Mean	0%	SD 0%					
.....															
*Ovary:															
Thecoma Benign															
					0/50	(0%)			0/48	(0%)					
Overall Incidence					Total	0/98	(0%)	Mean	0%	SD 0%					
.....															
*Pancreas:															
Adenoma															
		14/50	(28%)	4/50	(8%)			0/50	(0%)	0/48	(0%)				
Overall Incidence		Total	18/100	(18%)	Mean	18%	SD	14.14%	Total	0/98	(0%)	Mean	0%	SD	0%
.....															
*Pancreas:															
Adenocarcinoma															
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/48	(0%)				
Overall Incidence		Total	1/100	(1%)	Mean	1%	SD	1.41%	Total	0/98	(0%)	Mean	0%	SD	0%
.....															
*: Denominator is number of animals with tissues examined microscopically															
#: Denominator is number of animals necropsied															

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

Page: 126
 Report Date: 10/05/2022

		Male				Female			
*Pancreas:									
Adenoma or Adenocarcinoma									
		14/50 (28%)	4/50 (8%)			0/50 (0%)	0/48 (0%)		
Overall Incidence	Total	18/100 (18%)	Mean 18%	SD 14.14%	Total	0/98 (0%)	Mean 0%	SD 0%	
.....									
*Parathyroid Gland:									
Adenoma									
		0/43 (0%)	0/44 (0%)			0/46 (0%)	1/43 (2%)		
Overall Incidence	Total	0/87 (0%)	Mean 0%	SD 0%	Total	1/89 (1.12%)	Mean 1.16%	SD 1.64%	
.....									
#Peripheral Nerve:									
Paraganglioma									
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Peripheral Nerve:									
Schwannoma Malignant									
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Peripheral Nerve:									
Schwannoma: Benign, Malignant, NOS									
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Adenoma									
		8/50 (16%)	9/50 (18%)			16/50 (32%)	14/50 (28%)		
Overall Incidence	Total	17/100 (17%)	Mean 17%	SD 1.41%	Total	30/100 (30%)	Mean 30%	SD 2.83%	

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male				Female					
*Pituitary Gland: Pars Distalis or Unspecified Site:											
Carcinoma											
		1/50	(2%)	0/50	(0%)			1/50	(2%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	1/100	(1%)	Mean 1%	SD 1.41%	
.....											
*Pituitary Gland: Pars Distalis or Unspecified Site:											
Carcinoma or Adenoma											
		9/50	(18%)	9/50	(18%)			17/50	(34%)	14/50	(28%)
Overall Incidence	Total	18/100	(18%)	Mean 18%	SD 0%	Total	31/100	(31%)	Mean 31%	SD 4.24%	
.....											
*Pituitary Gland: Pars Intermedia:											
Adenoma											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Pituitary Gland: Pars Intermedia:											
Carcinoma or Adenoma											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Pituitary Gland: Pars Nervosa:											
Schwannoma Malignant											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Prostate:											
Adenoma											
		0/50	(0%)	0/50	(0%)						
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%						

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

Page: 128
 Report Date: 10/05/2022

		Male				Female			
*Prostate:									
Adenoma or Adenocarcinoma									
		0/50	(0%)	0/50	(0%)				
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%				
.....									
*Salivary Glands:									
Schwannoma Malignant									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Seminal Vesicle:									
Hemangiosarcoma									
		1/50	(2%)	0/50	(0%)				
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%				
.....									
#Skeletal Muscle:									
Hemangioma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Skeletal Muscle:									
Hemangiosarcoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Skeletal Muscle:									
Liposarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male				Female			
#Skeletal Muscle:									
Sarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Adenoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Adenoma or Basosquamous Tumor Benign									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male					Female				
#Skin:										
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma										
Overall Incidence	Total	0/50 (0%)	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	0/50 (0%)	Mean 0%	SD 0%
		0/100 (0%)					0/100 (0%)			
#Skin:										
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma										
Overall Incidence	Total	1/50 (2%)	4/50 (8%)	Mean 5%	SD 4.24%	Total	0/50 (0%)	0/50 (0%)	Mean 0%	SD 0%
		5/100 (5%)					0/100 (0%)			
#Skin:										
Fibroma										
Overall Incidence	Total	3/50 (6%)	2/50 (4%)	Mean 5%	SD 1.41%	Total	1/50 (2%)	0/50 (0%)	Mean 1%	SD 1.41%
		5/100 (5%)					1/100 (1%)			
#Skin:										
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma										
Overall Incidence	Total	3/50 (6%)	3/50 (6%)	Mean 6%	SD 0%	Total	3/50 (6%)	1/50 (2%)	Mean 4%	SD 2.83%
		6/100 (6%)					4/100 (4%)			
#Skin:										
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma										
Overall Incidence	Total	3/50 (6%)	3/50 (6%)	Mean 6%	SD 0%	Total	2/50 (4%)	1/50 (2%)	Mean 3%	SD 1.41%
		6/100 (6%)					3/100 (3%)			
#Skin:										
Fibrosarcoma										
Overall Incidence	Total	0/50 (0%)	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	1/50 (2%)	Mean 2%	SD 0%
		0/100 (0%)					2/100 (2%)			

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

Page: 131
 Report Date: 10/05/2022

	Male					Female					
#Skin:											
Fibrosarcoma, Sarcoma, Myxosarcoma, or Malignant Fibrous Histiocytoma											
		0/50	(0%)	1/50	(2%)			1/50	(2%)	1/50	(2%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	2/100	(2%)	Mean 2%	SD 0%	
.....											
#Skin:											
Hemangioma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Skin:											
Hemangiopericytoma											
		0/50	(0%)	0/50	(0%)			1/50	(2%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%	SD 1.41%	
.....											
#Skin:											
Keratoacanthoma											
		1/50	(2%)	3/50	(6%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	4/100	(4%)	Mean 4%	SD 2.83%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Skin:											
Lipoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Skin:											
Liposarcoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male				Female			
#Skin:									
Malignant Fibrous Histiocytoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Neurofibrosarcoma or Schwannoma (malignant or NOS)									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Osteosarcoma									
		0/50	(0%)	0/50	(0%)	1/50	(2%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1% SD 1.41%
.....									
#Skin:									
Pilomatrixoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Sarcoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Skin:									
Schwannoma Malignant									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Skin:									
Squamous Cell Carcinoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Skin:									
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Skin:									
Squamous Cell Papilloma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Skin:									
Squamous Cell Papilloma or Papilloma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Skin:									
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma									
		1/50	(2%)	4/50	(8%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	5/100	(5%)	Mean 5%	SD 4.24%	0/100	(0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

Page: 134
 Report Date: 10/05/2022

	Male				Female			
#Skin:								
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma								
		1/50 (2%)	3/50 (6%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	4/100 (4%)	Mean 4%	SD 2.83%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Trichoepithelioma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin: Sebaceous Gland:								
Adenoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin: Sebaceous Gland:								
Carcinoma or Adenoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
*Spleen:								
Hemangiosarcoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/49 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0%	SD 0%
.....								
#Stomach, Forestomach:								
Sarcoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/49 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

Page: 135
 Report Date: 10/05/2022

	Male				Female			
#Stomach, Forestomach:								
Squamous Cell Carcinoma or Papilloma Squamous								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/49 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0%	SD 0%
.....								
#Stomach, Forestomach:								
Squamous Cell Papilloma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/49 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0%	SD 0%
.....								
*Testis:								
Adenoma								
		1/50 (2%)	0/50 (0%)					
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%				
.....								
*Thymus:								
Thymoma Benign								
		0/48 (0%)	0/48 (0%)		0/47 (0%)	0/43 (0%)		
Overall Incidence	Total	0/96 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Thymus:								
Thymoma Malignant								
		0/48 (0%)	0/48 (0%)		0/47 (0%)	0/43 (0%)		
Overall Incidence	Total	0/96 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Thymus:								
Thymoma: Benign, Malignant, NOS								
		0/48 (0%)	0/48 (0%)		0/47 (0%)	0/43 (0%)		
Overall Incidence	Total	0/96 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male				Female			
*Thyroid Gland: C-Cell: Adenoma									
		4/50 (8%)	8/50 (16%)		5/50 (10%)	6/50 (12%)			
Overall Incidence	Total	12/100 (12%)	Mean 12%	SD 5.66%	Total	11/100 (11%)	Mean 11%	SD 1.41%	
.....									
*Thyroid Gland: C-Cell: Carcinoma									
		0/50 (0%)	0/50 (0%)		2/50 (4%)	1/50 (2%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	3/100 (3%)	Mean 3%	SD 1.41%	
.....									
*Thyroid Gland: C-Cell: Carcinoma or Adenoma									
		4/50 (8%)	8/50 (16%)		7/50 (14%)	7/50 (14%)			
Overall Incidence	Total	12/100 (12%)	Mean 12%	SD 5.66%	Total	14/100 (14%)	Mean 14%	SD 0%	
.....									
*Thyroid Gland: Follicular Cell: Adenoma									
		0/50 (0%)	0/45 (0%)		0/50 (0%)	0/45 (0%)			
Overall Incidence	Total	0/95 (0%)	Mean 0%	SD 0%	Total	0/95 (0%)	Mean 0%	SD 0%	
.....									
*Thyroid Gland: Follicular Cell: Carcinoma									
		0/50 (0%)	0/45 (0%)		0/50 (0%)	0/45 (0%)			
Overall Incidence	Total	0/95 (0%)	Mean 0%	SD 0%	Total	0/95 (0%)	Mean 0%	SD 0%	
.....									
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma									
		0/50 (0%)	0/45 (0%)		0/50 (0%)	0/45 (0%)			
Overall Incidence	Total	0/95 (0%)	Mean 0%	SD 0%	Total	0/95 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Tissue NOS:									
Schwannoma Malignant									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Tongue:									
Squamous Cell Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Tongue:									
Squamous Cell Carcinoma or Papilloma Squamous									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Tooth:									
Odontoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
*Urinary Bladder:									
Leiomyosarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/46	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/96	(0%)	Mean 0% SD 0%
.....									
#Uterus:									
Adenocarcinoma									
						3/50	(6%)	5/49	(10%)
Overall Incidence						Total	8/99	(8.08%)	Mean 8.1% SD 2.97%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

Page: 138
 Report Date: 10/05/2022

	Male	Female
#Uterus:		
Adenocarcinoma or Adenoma		
Overall Incidence	Total 3/50 (6%) 8/99 (8.08%)	5/49 (10%) Mean 8.1% SD 2.97%
.....		
#Uterus:		
Adenoma		
Overall Incidence	Total 0/50 (0%) 0/99 (0%)	0/49 (0%) Mean 0% SD 0%
.....		
#Uterus:		
Adenoma, Adenocarcinoma, Sq Cell Carcinoma, or Sq Cell Papilloma		
Overall Incidence	Total 5/50 (10%) 12/99 (12.12%)	7/49 (14%) Mean 12.14% SD 3.03%
.....		
#Uterus:		
Deciduoma Benign		
Overall Incidence	Total 0/50 (0%) 0/99 (0%)	0/49 (0%) Mean 0% SD 0%
.....		
#Uterus:		
Granular Cell Tumor Benign		
Overall Incidence	Total 0/50 (0%) 1/99 (1.01%)	1/49 (2%) Mean 1.02% SD 1.44%
.....		
#Uterus:		
Hemangioma		
Overall Incidence	Total 0/50 (0%) 0/99 (0%)	0/49 (0%) Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
 Vehicle: WATER

Page: 139
 Report Date: 10/05/2022

	Male	Female
#Uterus: Polyp Stromal		
Overall Incidence	Total 5/50 (10%) 9/99 (9.09%)	4/49 (8%) Mean 9.08% SD 1.3%
#Uterus: Sarcoma		
Overall Incidence	Total 0/50 (0%) 0/99 (0%)	0/49 (0%) Mean 0% SD 0%
#Uterus: Sarcoma Stromal		
Overall Incidence	Total 1/50 (2%) 1/99 (1.01%)	0/49 (0%) Mean 1% SD 1.41%
#Uterus: Sarcoma Stromal or Polyp Stromal		
Overall Incidence	Total 6/50 (12%) 10/99 (10.1%)	4/49 (8%) Mean 10.08% SD 2.71%
#Uterus: Schwannoma Malignant		
Overall Incidence	Total 0/50 (0%) 1/99 (1.01%)	1/49 (2%) Mean 1.02% SD 1.44%
#Uterus: Sq Cell Carcinoma or Papilloma Squamous		
Overall Incidence	Total 2/50 (4%) 4/99 (4.04%)	2/49 (4%) Mean 4.04% SD 0.06%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System
Tumor Incidence for Selected Control Animal Groups
Route: PERINATAL AND POSTNATAL
Vehicle: WATER

Page: 140

Report Date: 10/05/2022

	Male			Female	
#Uterus: Squamous Cell Carcinoma					
		2/50 (4%)		2/49 (4%)	
Overall Incidence	Total	4/99 (4.04%)	Mean	4.04%	SD 0.06%
.....					
#Uterus: Squamous Cell Papilloma					
		0/50 (0%)		0/49 (0%)	
Overall Incidence	Total	0/99 (0%)	Mean	0%	SD 0%
.....					
#Vagina: Granular Cell Tumor Benign					
		0/50 (0%)		0/47 (0%)	
Overall Incidence	Total	0/97 (0%)	Mean	0%	SD 0%
.....					
#Vagina: Polyp					
		1/50 (2%)		0/47 (0%)	
Overall Incidence	Total	1/97 (1.03%)	Mean	1%	SD 1.41%
.....					
#Vagina: Sarcoma					
		0/50 (0%)		0/47 (0%)	
Overall Incidence	Total	0/97 (0%)	Mean	0%	SD 0%
.....					
#Vagina: Schwannoma Malignant					
		0/50 (0%)		0/47 (0%)	
Overall Incidence	Total	0/97 (0%)	Mean	0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: PERINATAL AND POSTNATAL

Vehicle: WATER

Page: 141

Report Date: 10/05/2022

		Male				Female				
#Zymbal's Gland: Adenoma										
		0/50	(0%)	1/50	(2%)		0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%
.....										
#Zymbal's Gland: Carcinoma										
		1/50	(2%)	2/50	(4%)		0/50	(0%)	0/50	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%
.....										
#Zymbal's Gland: Carcinoma or Adenoma										
		1/50	(2%)	3/50	(6%)		0/50	(0%)	0/50	(0%)
Overall Incidence	Total	4/100	(4%)	Mean 4%	SD 2.83%	Total	0/100	(0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: PERINATAL AND POSTNATAL GAVAGE

Vehicle: METHYLCELLULOSE

Page: 142

Report Date: 10/05/2022

Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
Male							
Battelle Columbus Laboratory	050005803	07/03/12	730	50(2)	15(656)	628.4	Black Cohosh
Battelle Columbus Laboratory	052032305	05/07/12	729	50(2)	29(669)	597.1	Resveratrol
Female							
Battelle Columbus Laboratory	050005803	07/02/12	729	50(5)	28(679)	426.6	Black Cohosh
Battelle Columbus Laboratory	052032305	05/08/12	730	50(5)	34(690)	394.3	Resveratrol

NOTE: The text on page 2 ("Report Description") describes how the studies listed here are displayed on the data pages that follow.

		Male			Female		
#All Organs:							
Benign Tumors							
		30/50 (60%)	33/50 (66%)		44/50 (88%)	43/50 (86%)	
Overall Incidence	Total	63/100 (63%)	Mean 63%	SD 4.24%	Total	87/100 (87%)	Mean 87%
							SD 1.41%
.....							
#All Organs:							
Malignant Tumors							
		10/50 (20%)	13/50 (26%)		7/50 (14%)	10/50 (20%)	
Overall Incidence	Total	23/100 (23%)	Mean 23%	SD 4.24%	Total	17/100 (17%)	Mean 17%
							SD 4.24%
.....							
#All Organs:							
Malignant and Benign Tumors							
		33/50 (66%)	39/50 (78%)		46/50 (92%)	45/50 (90%)	
Overall Incidence	Total	72/100 (72%)	Mean 72%	SD 8.49%	Total	91/100 (91%)	Mean 91%
							SD 1.41%
.....							
#All Organs:							
Hemangioma							
		0/50 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	1/100 (1%)	Mean 1%
							SD 1.41%
.....							
#All Organs:							
Hemangiosarcoma							
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%
							SD 0%
.....							
#All Organs:							
Hemangiosarcoma or Hemangioma							
		0/50 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	1/100 (1%)	Mean 1%
							SD 1.41%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female					
#All Organs:											
Histiocytic Sarcoma											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#All Organs:											
Leukemia: Granulocytic											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#All Organs:											
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%	SD 1.41%	
.....											
#All Organs:											
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	1/50	(2%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	1/100	(1%)	Mean 1%	SD 1.41%	
.....											
#All Organs:											
Malignant Schwannoma											
		0/50	(0%)	0/50	(0%)			1/50	(2%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	2/100	(2%)	Mean 2%	SD 0%	
.....											
#All Organs:											
Mesothelioma: Benign, Malignant, NOS											
		2/50	(4%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: PERINATAL AND POSTNATAL GAVAGE

Vehicle: METHYLCELLULOSE

		Male				Female			
#All Organs:									
Mesothelioma: Malignant									
		2/50	(4%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#All Organs:									
Osteosarcoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#All Organs:									
Osteosarcoma or Osteoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
*Adrenal Cortex:									
Adenoma									
		0/50	(0%)	0/50	(0%)	2/50	(4%)	3/50	(6%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	5/100	(5%)	Mean 5%
									SD 1.41%
.....									
*Adrenal Cortex:									
Carcinoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
*Adrenal Medulla:									
Ganglioneuroma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Adrenal Medulla:									
Pheochromocytoma Benign									
		14/50 (28%)	4/50 (8%)			3/50 (6%)	3/50 (6%)		
Overall Incidence	Total	18/100 (18%)	Mean 18%	SD 14.14%	Total	6/100 (6%)	Mean 6%	SD 0%	
.....									
*Adrenal Medulla:									
Pheochromocytoma Complex									
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
*Adrenal Medulla:									
Pheochromocytoma Malignant									
		0/50 (0%)	1/50 (2%)			0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
*Adrenal Medulla:									
Pheochromocytoma: Benign, Complex, Malignant, NOS									
		14/50 (28%)	5/50 (10%)			3/50 (6%)	3/50 (6%)		
Overall Incidence	Total	19/100 (19%)	Mean 19%	SD 12.73%	Total	6/100 (6%)	Mean 6%	SD 0%	
.....									
#Bone:									
Osteosarcoma									
		0/50 (0%)	1/50 (2%)			0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Bone:									
Osteosarcoma or Osteoma									
		0/50 (0%)	1/50 (2%)			0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female					
*Brain:											
 Glioma Malignant											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
 Granular Cell Tumor Benign											
		3/50	(6%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 4.24%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
 Granular Cell Tumor Malignant											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
 Meningioma Benign											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
 Meningioma Malignant											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
 Meningioma: Benign, Malignant, NOS											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: PERINATAL AND POSTNATAL GAVAGE

Vehicle: METHYLCELLULOSE

		Male				Female					
*Brain:											
Oligodendroglioma Malignant											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
Oligodendroglioma, Glioma, or Astrocytoma											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
Schwannoma Malignant											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Clitoral/Preputial Gland:											
Adenoma											
		0/50	(0%)	0/50	(0%)			0/49	(0%)	0/48	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/97	(0%)	Mean 0%	SD 0%	
.....											
*Clitoral/Preputial Gland:											
Carcinoma											
		0/50	(0%)	0/50	(0%)			0/49	(0%)	0/48	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/97	(0%)	Mean 0%	SD 0%	
.....											
*Clitoral/Preputial Gland:											
Carcinoma or Adenoma											
		0/50	(0%)	0/50	(0%)			0/49	(0%)	0/48	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/97	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Clitoral/Preputial Gland:									
Squamous Cell Carcinoma									
		0/50	(0%)	0/50	(0%)	1/49	(2%)	1/48	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	2/97	(2.06%)	Mean 2.06%	SD 0.03%
.....									
*Clitoral/Preputial Gland:									
Squamous Cell Papilloma									
		0/50	(0%)	1/50	(2%)	0/49	(0%)	0/48	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	0/97	(0%)	Mean 0%	SD 0%
.....									
*Epididymis:									
Sarcoma									
		0/50	(0%)	0/50	(0%)				
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%				
.....									
#Eye:									
Leiomyoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
*Heart:									
Schwannoma Malignant									
		0/50	(0%)	0/50	(0%)	1/50	(2%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	1/100	(1%)	Mean 1%	SD 1.41%
.....									
#Intestine Large: Cecum:									
Leiomyosarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female					
#Intestine Large: Cecum:											
Liposarcoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Large: Colon/Rectum:											
Granular Cell Tumor Benign											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Large: Colon/Rectum:											
Leiomyoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Jejunum:											
Carcinoma											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Jejunum:											
Leiomyosarcoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Site Unspecified:											
Carcinoma											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female					
#Intestine Small: Site Unspecified:											
Carcinoma or Adenoma											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Site Unspecified:											
Leiomyosarcoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Islets, Pancreatic:											
Adenoma											
		4/50	(8%)	2/50	(4%)			1/50	(2%)	2/50	(4%)
Overall Incidence	Total	6/100	(6%)	Mean 6%	SD 2.83%	Total	3/100	(3%)	Mean 3%	SD 1.41%	
.....											
*Islets, Pancreatic:											
Carcinoma											
		0/50	(0%)	3/50	(6%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 4.24%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Islets, Pancreatic:											
Carcinoma or Adenoma											
		4/50	(8%)	5/50	(10%)			1/50	(2%)	2/50	(4%)
Overall Incidence	Total	9/100	(9%)	Mean 9%	SD 1.41%	Total	3/100	(3%)	Mean 3%	SD 1.41%	
.....											
*Kidney: Pelvis and Transitional Epithelium:											
Papilloma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Kidney: Renal Tubule: Adenoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
*Kidney: Renal Tubule: Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
*Kidney: Renal Tubule: Carcinoma or Adenoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
*Kidney: Renal Tubule: Hemangioma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	1/100	(1%)	Mean 1%	SD 1.41%
.....									
*Kidney: Renal Tubule: Lipoma									
		1/50	(2%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	0/100	(0%)	Mean 0%	SD 0%
.....									
*Kidney: Renal Tubule: Liposarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female					
*Kidney: Renal Tubule:											
 Oncocytoma Benign											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Kidney: Renal Tubule:											
 Polyp Adenomatous											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Lacrimal Gland:											
 Carcinoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Liver:											
 Cholangioma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Liver:											
 Hemangioma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Liver:											
 Hepatocellular Adenoma											
		0/50	(0%)	0/50	(0%)			2/50	(4%)	2/50	(4%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	4/100	(4%)	Mean 4%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Liver:									
Hepatocellular Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatoblastoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatocellular Adenoma									
		0/50	(0%)	0/50	(0%)	2/50	(4%)	2/50	(4%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	4/100	(4%)	Mean 4% SD 0%
.....									
*Liver:									
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma									
		0/50	(0%)	0/50	(0%)	2/50	(4%)	2/50	(4%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	4/100	(4%)	Mean 4% SD 0%
.....									
*Lung:									
Alveolar/Bronchiolar Adenoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male					Female				
*Lung:										
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma										
		0/50	(0%)	1/50	(2%)		0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%
.....										
#Mammary Gland:										
Adenolipoma										
		0/50	(0%)	0/50	(0%)		0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%
.....										
#Mammary Gland:										
Adenoma										
		0/50	(0%)	0/50	(0%)		1/50	(2%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	2/100	(2%)	Mean 2%	SD 0%
.....										
#Mammary Gland:										
Carcinoma										
		0/50	(0%)	0/50	(0%)		3/50	(6%)	2/50	(4%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	5/100	(5%)	Mean 5%	SD 1.41%
.....										
#Mammary Gland:										
Carcinoma or Adenoma										
		0/50	(0%)	0/50	(0%)		4/50	(8%)	3/50	(6%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	7/100	(7%)	Mean 7%	SD 1.41%
.....										
#Mammary Gland:										
Fibroadenoma										
		3/50	(6%)	0/50	(0%)		29/50	(58%)	28/50	(56%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 4.24%	Total	57/100	(57%)	Mean 57%	SD 1.41%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Mammary Gland:									
Fibroma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Mammary Gland:									
Fibroma, Fibroadenoma or Adenoma									
		3/50	(6%)	0/50	(0%)	29/50	(58%)	28/50	(56%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 4.24%	Total	57/100	(57%)	Mean 57%
									SD 1.41%
.....									
#Mammary Gland:									
Fibroma, Fibroadenoma, Carcinoma, or Adenoma									
		3/50	(6%)	0/50	(0%)	30/50	(60%)	29/50	(58%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 4.24%	Total	59/100	(59%)	Mean 59%
									SD 1.41%
.....									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Squamous Cell Carcinoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Oral Mucosa:									
Squamous Cell Carcinoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%
									SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: PERINATAL AND POSTNATAL GAVAGE

Vehicle: METHYLCELLULOSE

Page: 157

Report Date: 10/05/2022

	Male			Female	
*Ovary: Cystadenoma					
		0/50 (0%)		0/50 (0%)	
Overall Incidence		Total 0/100 (0%)		Mean 0%	SD 0%
.....					
*Ovary: Granulosa Cell Tumor Benign					
		0/50 (0%)		0/50 (0%)	
Overall Incidence		Total 0/100 (0%)		Mean 0%	SD 0%
.....					
*Ovary: Granulosa Cell Tumor Malignant					
		0/50 (0%)		1/50 (2%)	
Overall Incidence		Total 1/100 (1%)		Mean 1%	SD 1.41%
.....					
*Ovary: Granulosa Cell Tumor: Benign, Malignant, NOS					
		0/50 (0%)		1/50 (2%)	
Overall Incidence		Total 1/100 (1%)		Mean 1%	SD 1.41%
.....					
*Ovary: Granulosa-Theca Tumor Benign					
		0/50 (0%)		0/50 (0%)	
Overall Incidence		Total 0/100 (0%)		Mean 0%	SD 0%
.....					
*Ovary: Granulosa-Theca Tumor Malignant					
		0/50 (0%)		0/50 (0%)	
Overall Incidence		Total 0/100 (0%)		Mean 0%	SD 0%
.....					

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Male					Female								
*Ovary:													
Luteoma													
					0/50	(0%)	0/50	(0%)					
Overall Incidence					Total	0/100	(0%)	Mean	0%	SD 0%			
.....													
*Ovary:													
Schwannoma Malignant													
					0/50	(0%)	0/50	(0%)					
Overall Incidence					Total	0/100	(0%)	Mean	0%	SD 0%			
.....													
*Ovary:													
Sertoli Cell Tumor Benign													
					0/50	(0%)	0/50	(0%)					
Overall Incidence					Total	0/100	(0%)	Mean	0%	SD 0%			
.....													
*Ovary:													
Thecoma Benign													
					0/50	(0%)	0/50	(0%)					
Overall Incidence					Total	0/100	(0%)	Mean	0%	SD 0%			
.....													
*Pancreas:													
Adenoma													
		6/50	(12%)	8/50	(16%)			0/50	(0%)	0/50	(0%)		
Overall Incidence		Total	14/100	(14%)	Mean	14%	SD 2.83%	Total	0/100	(0%)	Mean	0%	SD 0%
.....													
*Pancreas:													
Carcinoma													
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)		
Overall Incidence		Total	1/100	(1%)	Mean	1%	SD 1.41%	Total	0/100	(0%)	Mean	0%	SD 0%
.....													

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Pancreas:									
 Carcinoma or Adenoma									
		7/50 (14%)	8/50 (16%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	15/100 (15%)	Mean 15%	SD 1.41%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
*Parathyroid Gland:									
 Adenoma									
		0/49 (0%)	1/49 (2%)		0/46 (0%)	0/48 (0%)			
Overall Incidence	Total	1/98 (1.02%)	Mean 1.02%	SD 1.44%	Total	0/94 (0%)	Mean 0%	SD 0%	
.....									
#Peripheral Nerve:									
 Paraganglioma									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Peripheral Nerve:									
 Schwannoma Malignant									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Peripheral Nerve:									
 Schwannoma: Benign, Malignant, NOS									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
 Adenoma									
		12/50 (24%)	10/50 (20%)		20/50 (40%)	21/50 (42%)			
Overall Incidence	Total	22/100 (22%)	Mean 22%	SD 2.83%	Total	41/100 (41%)	Mean 41%	SD 1.41%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Carcinoma or Adenoma									
		12/50	(24%)	10/50	(20%)	20/50	(40%)	21/50	(42%)
Overall Incidence	Total	22/100	(22%)	Mean 22%	SD 2.83%	Total	41/100	(41%)	Mean 41%
									SD 1.41%
.....									
*Pituitary Gland: Pars Intermedia:									
Adenoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	1/100	(1%)	Mean 1%
									SD 1.41%
.....									
*Pituitary Gland: Pars Intermedia:									
Carcinoma or Adenoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	1/100	(1%)	Mean 1%
									SD 1.41%
.....									
*Pituitary Gland: Pars Nervosa:									
Schwannoma Malignant									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
*Prostate:									
Adenoma									
		0/50	(0%)	0/50	(0%)				
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%				
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL GAVAGE
 Vehicle: METHYLCELLULOSE

Page: 161
 Report Date: 10/05/2022

		Male				Female			
*Prostate:									
 Carcinoma or Adenoma									
		0/50	(0%)	0/50	(0%)				
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%				
.....									
*Salivary Glands:									
 Schwannoma Malignant									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Seminal Vesicle:									
 Hemangiosarcoma									
		0/50	(0%)	0/50	(0%)				
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%				
.....									
#Skeletal Muscle:									
 Hemangioma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Skeletal Muscle:									
 Hemangiosarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Skeletal Muscle:									
 Liposarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

		Male				Female			
#Skeletal Muscle:									
Sarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Skin:									
Basal Cell Adenoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%
									SD 1.41%
.....									
#Skin:									
Basal Cell Adenoma or Basosquamous Tumor Benign									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%
									SD 1.41%
.....									
#Skin:									
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%
									SD 1.41%
.....									
#Skin:									
Basal Cell Carcinoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	2/50	(4%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	2/100	(2%)	Mean 2%
									SD 2.83%
.....									
#Skin:									
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	2/50	(4%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	2/100	(2%)	Mean 2%
									SD 2.83%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male					Female				
#Skin:										
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma										
		0/50	(0%)	1/50	(2%)		0/50	(0%)	3/50	(6%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	3/100	(3%)	Mean 3%	SD 4.24%
.....										
#Skin:										
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma										
		1/50	(2%)	5/50	(10%)		0/50	(0%)	3/50	(6%)
Overall Incidence	Total	6/100	(6%)	Mean 6%	SD 5.66%	Total	3/100	(3%)	Mean 3%	SD 4.24%
.....										
#Skin:										
Fibroma										
		4/50	(8%)	2/50	(4%)		0/50	(0%)	0/50	(0%)
Overall Incidence	Total	6/100	(6%)	Mean 6%	SD 2.83%	Total	0/100	(0%)	Mean 0%	SD 0%
.....										
#Skin:										
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma										
		6/50	(12%)	3/50	(6%)		0/50	(0%)	0/50	(0%)
Overall Incidence	Total	9/100	(9%)	Mean 9%	SD 4.24%	Total	0/100	(0%)	Mean 0%	SD 0%
.....										
#Skin:										
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma										
		6/50	(12%)	3/50	(6%)		0/50	(0%)	0/50	(0%)
Overall Incidence	Total	9/100	(9%)	Mean 9%	SD 4.24%	Total	0/100	(0%)	Mean 0%	SD 0%
.....										
#Skin:										
Fibrosarcoma										
		1/50	(2%)	1/50	(2%)		0/50	(0%)	0/50	(0%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%
.....										

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		2/50 (4%)	1/50 (2%)			0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	3/100 (3%)	Mean 3%	SD 1.41%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Hemangioma								
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Hemangiopericytoma								
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Keratoacanthoma								
		1/50 (2%)	2/50 (4%)			0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	3/100 (3%)	Mean 3%	SD 1.41%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Lipoma								
		2/50 (4%)	0/50 (0%)			1/50 (2%)	1/50 (2%)	
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 2.83%	Total	2/100 (2%)	Mean 2%	SD 0%
.....								
#Skin:								
Liposarcoma								
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Malignant Fibrous Histiocytoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Neurofibrosarcoma or Schwannoma (malignant or NOS)								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Osteosarcoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Pilomatrixoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Sarcoma								
		1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	0/100 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female					
#Skin:											
Schwannoma Malignant											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Skin:											
Squamous Cell Carcinoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Skin:											
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	2/50	(4%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	2/100	(2%)	Mean 2%	SD 2.83%	
.....											
#Skin:											
Squamous Cell Papilloma											
		0/50	(0%)	2/50	(4%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Skin:											
Squamous Cell Papilloma or Papilloma											
		0/50	(0%)	2/50	(4%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Skin:											
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma											
		1/50	(2%)	4/50	(8%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	5/100	(5%)	Mean 5%	SD 4.24%	Total	0/100	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma								
		1/50 (2%)	4/50 (8%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	5/100 (5%)	Mean 5%	SD 4.24%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Trichoepithelioma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin: Sebaceous Gland:								
Adenoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin: Sebaceous Gland:								
Carcinoma or Adenoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
*Spleen:								
Hemangiosarcoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Stomach, Forestomach:								
Sarcoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Stomach, Forestomach:									
Squamous Cell Carcinoma or Papilloma Squamous									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Stomach, Forestomach:									
Squamous Cell Papilloma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
*Testis:									
Adenoma									
		1/50	(2%)	0/50	(0%)				
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%				
.....									
*Thymus:									
Thymoma Benign									
		0/46	(0%)	0/48	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/94	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0% SD 0%
.....									
*Thymus:									
Thymoma Malignant									
		0/46	(0%)	0/48	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/94	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0% SD 0%
.....									
*Thymus:									
Thymoma: Benign, Malignant, NOS									
		0/46	(0%)	0/48	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/94	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
*Thyroid Gland: C-Cell: Adenoma									
		11/50 (22%)	8/50 (16%)		9/50 (18%)	16/50 (32%)			
Overall Incidence	Total	19/100 (19%)	Mean 19%	SD 4.24%	Total	25/100 (25%)	Mean 25%	SD 9.9%	
.....									
*Thyroid Gland: C-Cell: Carcinoma									
		1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
*Thyroid Gland: C-Cell: Carcinoma or Adenoma									
		11/50 (22%)	8/50 (16%)		9/50 (18%)	16/50 (32%)			
Overall Incidence	Total	19/100 (19%)	Mean 19%	SD 4.24%	Total	25/100 (25%)	Mean 25%	SD 9.9%	
.....									
*Thyroid Gland: Follicular Cell: Adenoma									
		0/50 (0%)	2/50 (4%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 2.83%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
*Thyroid Gland: Follicular Cell: Carcinoma									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma									
		0/50 (0%)	2/50 (4%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 2.83%	Total	0/100 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male				Female			
#Tissue NOS:									
Schwannoma Malignant									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Tongue:									
Squamous Cell Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Tongue:									
Squamous Cell Carcinoma or Papilloma Squamous									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Tooth:									
Odontoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
*Urinary Bladder:									
Leiomyosarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0% SD 0%
.....									
#Uterus:									
Adenocarcinoma									
						2/50	(4%)	2/50	(4%)
Overall Incidence	Total					4/100	(4%)	Mean 4%	SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: PERINATAL AND POSTNATAL GAVAGE

Vehicle: METHYLCELLULOSE

Page: 171

Report Date: 10/05/2022

	Male	Female
#Uterus:		
Adenocarcinoma or Adenoma		
Overall Incidence	Total 2/50 (4%) 6/100 (6%)	4/50 (8%) Mean 6% SD 2.83%
.....		
#Uterus:		
Adenoma		
Overall Incidence	Total 0/50 (0%) 2/100 (2%)	2/50 (4%) Mean 2% SD 2.83%
.....		
#Uterus:		
Adenoma, Adenocarcinoma, Sq Cell Carcinoma, or Sq Cell Papilloma		
Overall Incidence	Total 4/50 (8%) 8/100 (8%)	4/50 (8%) Mean 8% SD 0%
.....		
#Uterus:		
Deciduoma Benign		
Overall Incidence	Total 0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0% SD 0%
.....		
#Uterus:		
Granular Cell Tumor Benign		
Overall Incidence	Total 0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0% SD 0%
.....		
#Uterus:		
Hemangioma		
Overall Incidence	Total 0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: PERINATAL AND POSTNATAL GAVAGE
Vehicle: METHYLCELLULOSE

Page: 172

Report Date: 10/05/2022

	Male		Female	
#Uterus:				
Polyp Stromal				
		9/50 (18%)	2/50 (4%)	
Overall Incidence	Total	11/100 (11%)	Mean 11%	SD 9.9%
.....				
#Uterus:				
Sarcoma				
		0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Sarcoma Stromal				
		0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Sarcoma Stromal or Polyp Stromal				
		9/50 (18%)	2/50 (4%)	
Overall Incidence	Total	11/100 (11%)	Mean 11%	SD 9.9%
.....				
#Uterus:				
Schwannoma Malignant				
		0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%
.....				
#Uterus:				
Sq Cell Carcinoma or Papilloma Squamous				
		2/50 (4%)	0/50 (0%)	
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 2.83%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: PERINATAL AND POSTNATAL GAVAGE

Vehicle: METHYLCELLULOSE

Page: 173

Report Date: 10/05/2022

	Male			Female	
#Uterus: Squamous Cell Carcinoma					
		1/50 (2%)		0/50 (0%)	
Overall Incidence	Total	1/100 (1%)	Mean 1%		SD 1.41%
.....					
#Uterus: Squamous Cell Papilloma					
		1/50 (2%)		0/50 (0%)	
Overall Incidence	Total	1/100 (1%)	Mean 1%		SD 1.41%
.....					
#Vagina: Granular Cell Tumor Benign					
		0/50 (0%)		0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%		SD 0%
.....					
#Vagina: Polyp					
		0/50 (0%)		0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%		SD 0%
.....					
#Vagina: Sarcoma					
		0/50 (0%)		0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%		SD 0%
.....					
#Vagina: Schwannoma Malignant					
		0/50 (0%)		1/50 (2%)	
Overall Incidence	Total	1/100 (1%)	Mean 1%		SD 1.41%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: PERINATAL AND POSTNATAL GAVAGE

Vehicle: METHYLCELLULOSE

Page: 174

Report Date: 10/05/2022

		Male				Female					
#Zymbal's Gland:											
Adenoma											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Zymbal's Gland:											
Carcinoma											
		1/50	(2%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Zymbal's Gland:											
Carcinoma or Adenoma											
		2/50	(4%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

Page: 175

Report Date: 10/05/2022

Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
Male							
I. I. T. Research Institute	052010556	09/16/12	730	90(1)	25(642)	658.1	Radiofrequency Radiation
Female							
I. I. T. Research Institute	052010556	09/16/12	737	90(1)	48(659)	462.4	Radiofrequency Radiation

NOTE: The text on page 2 ("Report Description") describes how the studies listed here are displayed on the data pages that follow.

		Male			Female		
#All Organs:							
Benign Tumors							
		49/90 (54%)			82/90 (91%)		
Overall Incidence	Total	49/90 (54.44%)	Mean 54.44%	SD 0%	Total	82/90 (91.11%)	Mean 91.11% SD 0%
.....							
#All Organs:							
Malignant Tumors							
		24/90 (27%)			37/90 (41%)		
Overall Incidence	Total	24/90 (26.67%)	Mean 26.67%	SD 0%	Total	37/90 (41.11%)	Mean 41.11% SD 0%
.....							
#All Organs:							
Malignant and Benign Tumors							
		57/90 (63%)			89/90 (99%)		
Overall Incidence	Total	57/90 (63.33%)	Mean 63.33%	SD 0%	Total	89/90 (98.89%)	Mean 98.89% SD 0%
.....							
#All Organs:							
Hemangioma							
		0/90 (0%)			0/90 (0%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma							
		3/90 (3%)			3/90 (3%)		
Overall Incidence	Total	3/90 (3.33%)	Mean 3.33%	SD 0%	Total	3/90 (3.33%)	Mean 3.33% SD 0%
.....							
#All Organs:							
Hemangiosarcoma or Hemangioma							
		3/90 (3%)			3/90 (3%)		
Overall Incidence	Total	3/90 (3.33%)	Mean 3.33%	SD 0%	Total	3/90 (3.33%)	Mean 3.33% SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
#All Organs:							
Histiocytic Sarcoma							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%
#All Organs:							
Leukemia: Granulocytic							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%
#All Organs:							
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%
#All Organs:							
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type							
		2/90	(2%)		5/90	(6%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	5/90 (5.56%)
						Mean 5.56%	SD 0%
#All Organs:							
Malignant Schwannoma							
		3/90	(3%)		4/90	(4%)	
Overall Incidence	Total	3/90	(3.33%)	Mean 3.33%	SD 0%	Total	4/90 (4.44%)
						Mean 4.44%	SD 0%
#All Organs:							
Mesothelioma: Benign, Malignant, NOS							
		2/90	(2%)		0/90	(0%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#All Organs:								
Mesothelioma: Malignant								
		2/90	(2%)			0/90	(0%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	0/90	(0%)
							Mean 0%	SD 0%
#All Organs:								
Osteosarcoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
							Mean 0%	SD 0%
#All Organs:								
Osteosarcoma or Osteoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
							Mean 0%	SD 0%
*Adrenal Cortex:								
Adenoma								
		1/90	(1%)			1/90	(1%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	1/90	(1.11%)
							Mean 1.11%	SD 0%
*Adrenal Cortex:								
Carcinoma								
		0/90	(0%)			1/90	(1%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90	(1.11%)
							Mean 1.11%	SD 0%
*Adrenal Medulla:								
Ganglioneuroma								
		0/88	(0%)			0/86	(0%)	
Overall Incidence	Total	0/88	(0%)	Mean 0%	SD 0%	Total	0/86	(0%)
							Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female				
*Adrenal Medulla:									
Pheochromocytoma Benign									
		10/88	(11%)			1/86	(1%)		
Overall Incidence	Total	10/88	(11.36%)	Mean 11.36%	SD 0%	Total	1/86 (1.16%)	Mean 1.16%	SD 0%
.....									
*Adrenal Medulla:									
Pheochromocytoma Complex									
		1/88	(1%)			0/86	(0%)		
Overall Incidence	Total	1/88	(1.14%)	Mean 1.14%	SD 0%	Total	0/86 (0%)	Mean 0%	SD 0%
.....									
*Adrenal Medulla:									
Pheochromocytoma Malignant									
		1/88	(1%)			0/86	(0%)		
Overall Incidence	Total	1/88	(1.14%)	Mean 1.14%	SD 0%	Total	0/86 (0%)	Mean 0%	SD 0%
.....									
*Adrenal Medulla:									
Pheochromocytoma: Benign, Complex, Malignant, NOS									
		11/88	(13%)			1/86	(1%)		
Overall Incidence	Total	11/88	(12.5%)	Mean 12.5%	SD 0%	Total	1/86 (1.16%)	Mean 1.16%	SD 0%
.....									
#Bone:									
Osteosarcoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									
#Bone:									
Osteosarcoma or Osteoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

		Male				Female			
*Brain:									
 Glioma Malignant									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									
*Brain:									
 Granular Cell Tumor Benign									
		1/90	(1%)			1/90	(1%)		
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	1/90	(1.11%)	Mean 1.11% SD 0%
.....									
*Brain:									
 Granular Cell Tumor Malignant									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									
*Brain:									
 Meningioma Benign									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									
*Brain:									
 Meningioma Malignant									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									
*Brain:									
 Meningioma: Benign, Malignant, NOS									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Brain:							
 Oligodendroglioma Malignant							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%
.....							
*Brain:							
 Oligodendroglioma, Glioma, or Astrocytoma							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%
.....							
*Brain:							
 Schwannoma Malignant							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%
.....							
*Clitoral/Preputial Gland:							
 Adenoma							
		0/88	(0%)		0/87	(0%)	
Overall Incidence	Total	0/88	(0%)	Mean 0%	SD 0%	Total	0/87 (0%)
						Mean 0%	SD 0%
.....							
*Clitoral/Preputial Gland:							
 Carcinoma							
		0/88	(0%)		0/87	(0%)	
Overall Incidence	Total	0/88	(0%)	Mean 0%	SD 0%	Total	0/87 (0%)
						Mean 0%	SD 0%
.....							
*Clitoral/Preputial Gland:							
 Carcinoma or Adenoma							
		0/88	(0%)		0/87	(0%)	
Overall Incidence	Total	0/88	(0%)	Mean 0%	SD 0%	Total	0/87 (0%)
						Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

Page: 182
 Report Date: 10/05/2022

		Male			Female		
*Clitoral/Preputial Gland: Squamous Cell Carcinoma							
Overall Incidence	Total	0/88 (0%)	Mean 0%	SD 0%	Total	0/87 (0%)	Mean 0% SD 0%
.....							
*Clitoral/Preputial Gland: Squamous Cell Papilloma							
Overall Incidence	Total	0/88 (0%)	Mean 0%	SD 0%	Total	0/87 (0%)	Mean 0% SD 0%
.....							
*Epididymis: Sarcoma							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%			
.....							
#Eye: Leiomyoma							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....							
*Heart: Schwannoma Malignant							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....							
#Intestine Large: Cecum: Leiomyosarcoma							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....							
*: Denominator is number of animals with tissues examined microscopically							
#: Denominator is number of animals necropsied							

		Male				Female			
#Intestine Large: Cecum:									
Liposarcoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									
#Intestine Large: Colon/Rectum:									
Granular Cell Tumor Benign									
		0/90	(0%)			1/90	(1%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90	(1.11%)	Mean 1.11% SD 0%
.....									
#Intestine Large: Colon/Rectum:									
Leiomyoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									
#Intestine Small: Jejunum:									
Carcinoma									
		2/90	(2%)			0/90	(0%)		
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									
#Intestine Small: Jejunum:									
Leiomyosarcoma									
		0/90	(0%)			1/90	(1%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90	(1.11%)	Mean 1.11% SD 0%
.....									
#Intestine Small: Site Unspecified:									
Carcinoma									
		2/90	(2%)			0/90	(0%)		
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
#Intestine Small: Site Unspecified:							
Carcinoma or Adenoma							
		2/90 (2%)			0/90 (0%)		
Overall Incidence	Total	2/90 (2.22%)	Mean 2.22%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Site Unspecified:							
Leiomyosarcoma							
		0/90 (0%)			1/90 (1%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11% SD 0%
.....							
*Islets, Pancreatic:							
Adenoma							
		5/90 (6%)			5/90 (6%)		
Overall Incidence	Total	5/90 (5.56%)	Mean 5.56%	SD 0%	Total	5/90 (5.56%)	Mean 5.56% SD 0%
.....							
*Islets, Pancreatic:							
Carcinoma							
		8/90 (9%)			2/90 (2%)		
Overall Incidence	Total	8/90 (8.89%)	Mean 8.89%	SD 0%	Total	2/90 (2.22%)	Mean 2.22% SD 0%
.....							
*Islets, Pancreatic:							
Carcinoma or Adenoma							
		13/90 (14%)			7/90 (8%)		
Overall Incidence	Total	13/90 (14.44%)	Mean 14.44%	SD 0%	Total	7/90 (7.78%)	Mean 7.78% SD 0%
.....							
*Kidney: Pelvis and Transitional Epithelium:							
Papilloma							
		0/90 (0%)			0/90 (0%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
*Kidney: Renal Tubule: Adenoma								
Overall Incidence	Total	3/90 (3%)	Mean 3.33%	SD 0%	Total	1/90 (1%)	Mean 1.11%	SD 0%
.....								
*Kidney: Renal Tubule: Carcinoma								
Overall Incidence	Total	1/90 (1%)	Mean 1.11%	SD 0%	Total	1/90 (1%)	Mean 1.11%	SD 0%
.....								
*Kidney: Renal Tubule: Carcinoma or Adenoma								
Overall Incidence	Total	3/90 (3%)	Mean 3.33%	SD 0%	Total	2/90 (2%)	Mean 2.22%	SD 0%
.....								
*Kidney: Renal Tubule: Hemangioma								
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Kidney: Renal Tubule: Lipoma								
Overall Incidence	Total	1/90 (1%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Kidney: Renal Tubule: Liposarcoma								
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
*Kidney: Renal Tubule: Oncocytoma Benign								
Overall Incidence	Total	1/90 (1%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Kidney: Renal Tubule: Polyp Adenomatous								
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
#Lacrimal Gland: Carcinoma								
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Liver: Cholangioma								
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Liver: Hemangioma								
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Liver: Hepatocellular Adenoma								
Overall Incidence	Total	7/90 (8%)	Mean 7.78%	SD 0%	Total	7/90 (7.78%)	Mean 7.78%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Liver:							
Hepatocellular Carcinoma							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%
*Liver:							
Hepatocellular Carcinoma or Hepatoblastoma							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%
*Liver:							
Hepatocellular Carcinoma or Hepatocellular Adenoma							
		0/90	(0%)		7/90	(8%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	7/90 (7.78%)
						Mean 7.78%	SD 0%
*Liver:							
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma							
		0/90	(0%)		7/90	(8%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	7/90 (7.78%)
						Mean 7.78%	SD 0%
*Lung:							
Alveolar/Bronchiolar Adenoma							
		1/90	(1%)		0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%
*Lung:							
Alveolar/Bronchiolar Carcinoma							
		0/90	(0%)		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)
						Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

Page: 188
 Report Date: 10/05/2022

	Male				Female			
*Lung:								
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma								
		1/90 (1%)				0/90 (0%)		
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
#Mammary Gland:								
Adenolipoma								
		0/90 (0%)				0/90 (0%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
#Mammary Gland:								
Adenoma								
		0/90 (0%)				8/90 (9%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	8/90 (8.89%)	Mean 8.89%	SD 0%
.....								
#Mammary Gland:								
Carcinoma								
		0/90 (0%)				10/90 (11%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	10/90 (11.11%)	Mean 11.11%	SD 0%
.....								
#Mammary Gland:								
Carcinoma or Adenoma								
		0/90 (0%)				16/90 (18%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	16/90 (17.78%)	Mean 17.78%	SD 0%
.....								
#Mammary Gland:								
Fibroadenoma								
		2/90 (2%)				63/90 (70%)		
Overall Incidence	Total	2/90 (2.22%)	Mean 2.22%	SD 0%	Total	63/90 (70%)	Mean 70%	SD 0%

*: Denominator is number of animals with tissues examined microscopically
 #: Denominator is number of animals necropsied

	Male				Female			
#Mammary Gland:								
Fibroma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
.....								
#Mammary Gland:								
Fibroma, Fibroadenoma or Adenoma								
		2/90	(2%)			64/90	(71%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	64/90	(71.11%)
.....								
#Mammary Gland:								
Fibroma, Fibroadenoma, Carcinoma, or Adenoma								
		2/90	(2%)			66/90	(73%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	66/90	(73.33%)
.....								
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):								
Squamous Cell Carcinoma								
		0/90	(0%)			2/90	(2%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	2/90	(2.22%)
.....								
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):								
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma								
		0/90	(0%)			2/90	(2%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	2/90	(2.22%)
.....								
#Oral Mucosa:								
Squamous Cell Carcinoma								
		0/90	(0%)			1/90	(1%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90	(1.11%)
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

Page: 190

Report Date: 10/05/2022

	Male		Female	
*Ovary:				
Cystadenoma				
		1/90	(1%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11% SD 0%
.....				
*Ovary:				
Granulosa Cell Tumor Benign				
		1/90	(1%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11% SD 0%
.....				
*Ovary:				
Granulosa Cell Tumor Malignant				
		2/90	(2%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22% SD 0%
.....				
*Ovary:				
Granulosa Cell Tumor: Benign, Malignant, NOS				
		3/90	(3%)	
Overall Incidence	Total	3/90	(3.33%)	Mean 3.33% SD 0%
.....				
*Ovary:				
Granulosa-Theca Tumor Benign				
		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0% SD 0%
.....				
*Ovary:				
Granulosa-Theca Tumor Malignant				
		0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Male					Female					
*Ovary:										
Luteoma										
					0/90	(0%)				
Overall Incidence					Total	0/90 (0%)	Mean 0%	SD 0%		
.....										
*Ovary:										
Schwannoma Malignant										
					0/90	(0%)				
Overall Incidence					Total	0/90 (0%)	Mean 0%	SD 0%		
.....										
*Ovary:										
Sertoli Cell Tumor Benign										
					1/90	(1%)				
Overall Incidence					Total	1/90 (1.11%)	Mean 1.11%	SD 0%		
.....										
*Ovary:										
Thecoma Benign										
					0/90	(0%)				
Overall Incidence					Total	0/90 (0%)	Mean 0%	SD 0%		
.....										
*Pancreas:										
Adenoma										
					18/90	(20%)				
Overall Incidence					Total	18/90 (20%)	Mean 20%	SD 0%		
.....										
*Pancreas:										
Carcinoma										
					1/90	(1%)				
Overall Incidence					Total	1/90 (1.11%)	Mean 1.11%	SD 0%		
.....										

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

Page: 192
 Report Date: 10/05/2022

	Male				Female			
*Pancreas:								
Carcinoma or Adenoma								
		18/90 (20%)			0/90 (0%)			
Overall Incidence	Total	18/90 (20%)	Mean 20%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Parathyroid Gland:								
Adenoma								
		1/83 (1%)			0/87 (0%)			
Overall Incidence	Total	1/83 (1.2%)	Mean 1.2%	SD 0%	Total	0/87 (0%)	Mean 0%	SD 0%
.....								
#Peripheral Nerve:								
Paraganglioma								
		0/90 (0%)			0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
#Peripheral Nerve:								
Schwannoma Malignant								
		0/90 (0%)			0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
#Peripheral Nerve:								
Schwannoma: Benign, Malignant, NOS								
		0/90 (0%)			0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Adenoma								
		17/89 (19%)			43/90 (48%)			
Overall Incidence	Total	17/89 (19.1%)	Mean 19.1%	SD 0%	Total	43/90 (47.78%)	Mean 47.78%	SD 0%
.....								
*: Denominator is number of animals with tissues examined microscopically								
#: Denominator is number of animals necropsied								

		Male			Female		
*Pituitary Gland: Pars Distalis or Unspecified Site:							
 Carcinoma							
		0/89	(0%)		1/90	(1%)	
Overall Incidence	Total	0/89	(0%)	Mean 0%	Total	1/90 (1.11%)	Mean 1.11%
				SD 0%			SD 0%
.....							
*Pituitary Gland: Pars Distalis or Unspecified Site:							
 Carcinoma or Adenoma							
		17/89	(19%)		44/90	(49%)	
Overall Incidence	Total	17/89	(19.1%)	Mean 19.1%	Total	44/90 (48.89%)	Mean 48.89%
				SD 0%			SD 0%
.....							
*Pituitary Gland: Pars Intermedia:							
 Adenoma							
		0/89	(0%)		0/90	(0%)	
Overall Incidence	Total	0/89	(0%)	Mean 0%	Total	0/90 (0%)	Mean 0%
				SD 0%			SD 0%
.....							
*Pituitary Gland: Pars Intermedia:							
 Carcinoma or Adenoma							
		0/89	(0%)		0/90	(0%)	
Overall Incidence	Total	0/89	(0%)	Mean 0%	Total	0/90 (0%)	Mean 0%
				SD 0%			SD 0%
.....							
*Pituitary Gland: Pars Nervosa:							
 Schwannoma Malignant							
		0/89	(0%)		0/90	(0%)	
Overall Incidence	Total	0/89	(0%)	Mean 0%	Total	0/90 (0%)	Mean 0%
				SD 0%			SD 0%
.....							
*Prostate:							
 Adenoma							
		2/90	(2%)				
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%			SD 0%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
*Prostate:								
Carcinoma or Adenoma								
		2/90	(2%)					
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%			
.....								
*Salivary Glands:								
Schwannoma Malignant								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
							Mean 0%	SD 0%
.....								
#Seminal Vesicle:								
Hemangiosarcoma								
		0/90	(0%)					
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%			
.....								
#Skeletal Muscle:								
Hemangioma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
							Mean 0%	SD 0%
.....								
#Skeletal Muscle:								
Hemangiosarcoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
							Mean 0%	SD 0%
.....								
#Skeletal Muscle:								
Liposarcoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
							Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skeletal Muscle:								
Sarcoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
#Skin:								
Basal Cell Adenoma								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
#Skin:								
Basal Cell Adenoma or Basosquamous Tumor Benign								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
#Skin:								
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
#Skin:								
Basal Cell Carcinoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
#Skin:								
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma								
Overall Incidence	Total	1/90 (1%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma								
Overall Incidence	Total	8/90 (8.89%)	Mean 8.89%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Fibroma								
Overall Incidence	Total	2/90 (2.22%)	Mean 2.22%	SD 0%	Total	2/90 (2.22%)	Mean 2.22%	SD 0%
.....								
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma								
Overall Incidence	Total	5/90 (5.56%)	Mean 5.56%	SD 0%	Total	5/90 (5.56%)	Mean 5.56%	SD 0%
.....								
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
Overall Incidence	Total	5/90 (5.56%)	Mean 5.56%	SD 0%	Total	5/90 (5.56%)	Mean 5.56%	SD 0%
.....								
#Skin:								
Fibrosarcoma								
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Malignant Fibrous Histiocytoma								
		3/90	(3%)			3/90	(3%)	
Overall Incidence	Total	3/90	(3.33%)	Mean 3.33%	SD 0%	Total	3/90	(3.33%)
								Mean 3.33%
								SD 0%
.....								
#Skin:								
Hemangioma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
#Skin:								
Hemangiopericytoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
#Skin:								
Keratoacanthoma								
		5/90	(6%)			0/90	(0%)	
Overall Incidence	Total	5/90	(5.56%)	Mean 5.56%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
#Skin:								
Lipoma								
		2/90	(2%)			0/90	(0%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%
.....								
#Skin:								
Liposarcoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
								Mean 0%
								SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female				
#Skin:									
Malignant Fibrous Histiocytoma									
		0/90	(0%)			1/90	(1%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11%	SD 0%
.....									
#Skin:									
Neurofibrosarcoma or Schwannoma (malignant or NOS)									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									
#Skin:									
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									
#Skin:									
Osteosarcoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									
#Skin:									
Pilomatrixoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									
#Skin:									
Sarcoma									
		2/90	(2%)			2/90	(2%)		
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	2/90 (2.22%)	Mean 2.22%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Schwannoma Malignant								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
.....								
#Skin:								
Squamous Cell Carcinoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
.....								
#Skin:								
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)
.....								
#Skin:								
Squamous Cell Papilloma								
		2/90	(2%)			0/90	(0%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	0/90	(0%)
.....								
#Skin:								
Squamous Cell Papilloma or Papilloma								
		2/90	(2%)			0/90	(0%)	
Overall Incidence	Total	2/90	(2.22%)	Mean 2.22%	SD 0%	Total	0/90	(0%)
.....								
#Skin:								
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma								
		7/90	(8%)			0/90	(0%)	
Overall Incidence	Total	7/90	(7.78%)	Mean 7.78%	SD 0%	Total	0/90	(0%)

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma								
		7/90	(8%)			0/90	(0%)	
Overall Incidence	Total	7/90	(7.78%)	Mean 7.78%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....								
#Skin:								
Trichoepithelioma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....								
#Skin: Sebaceous Gland:								
Adenoma								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....								
#Skin: Sebaceous Gland:								
Carcinoma or Adenoma								
		1/90	(1%)			0/90	(0%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....								
*Spleen:								
Hemangiosarcoma								
		3/90	(3%)			1/90	(1%)	
Overall Incidence	Total	3/90	(3.33%)	Mean 3.33%	SD 0%	Total	1/90 (1.11%)	Mean 1.11% SD 0%
.....								
#Stomach, Forestomach:								
Sarcoma								
		0/90	(0%)			1/90	(1%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Stomach, Forestomach:								
Squamous Cell Carcinoma or Papilloma Squamous								
		1/90 (1%)				0/90 (0%)		
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
#Stomach, Forestomach:								
Squamous Cell Papilloma								
		1/90 (1%)				0/90 (0%)		
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....								
*Testis:								
Adenoma								
		2/90 (2%)						
Overall Incidence	Total	2/90 (2.22%)	Mean 2.22%	SD 0%				
.....								
*Thymus:								
Thymoma Benign								
		0/88 (0%)				1/87 (1%)		
Overall Incidence	Total	0/88 (0%)	Mean 0%	SD 0%	Total	1/87 (1.15%)	Mean 1.15%	SD 0%
.....								
*Thymus:								
Thymoma Malignant								
		0/88 (0%)				1/87 (1%)		
Overall Incidence	Total	0/88 (0%)	Mean 0%	SD 0%	Total	1/87 (1.15%)	Mean 1.15%	SD 0%
.....								
*Thymus:								
Thymoma: Benign, Malignant, NOS								
		0/88 (0%)				2/87 (2%)		
Overall Incidence	Total	0/88 (0%)	Mean 0%	SD 0%	Total	2/87 (2.3%)	Mean 2.3%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female				
*Thyroid Gland: C-Cell: Adenoma									
		8/89	(9%)		6/90	(7%)			
Overall Incidence	Total	8/89	(8.99%)	Mean 8.99%	SD 0%	Total	6/90 (6.67%)	Mean 6.67%	SD 0%
.....									
*Thyroid Gland: C-Cell: Carcinoma									
		2/89	(2%)		0/90	(0%)			
Overall Incidence	Total	2/89	(2.25%)	Mean 2.25%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									
*Thyroid Gland: C-Cell: Carcinoma or Adenoma									
		10/89	(11%)		6/90	(7%)			
Overall Incidence	Total	10/89	(11.24%)	Mean 11.24%	SD 0%	Total	6/90 (6.67%)	Mean 6.67%	SD 0%
.....									
*Thyroid Gland: Follicular Cell: Adenoma									
		0/89	(0%)		0/90	(0%)			
Overall Incidence	Total	0/89	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
.....									
*Thyroid Gland: Follicular Cell: Carcinoma									
		0/89	(0%)		1/90	(1%)			
Overall Incidence	Total	0/89	(0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11%	SD 0%
.....									
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma									
		0/89	(0%)		1/90	(1%)			
Overall Incidence	Total	0/89	(0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: Whole Body Exposure
 Vehicle: AIR

Page: 203
 Report Date: 10/05/2022

	Male				Female			
#Tissue NOS:								
Schwannoma Malignant								
		1/90	(1%)			1/90	(1%)	
Overall Incidence	Total	1/90	(1.11%)	Mean 1.11%	SD 0%	Total	1/90 (1.11%)	Mean 1.11% SD 0%
.....								
#Tongue:								
Squamous Cell Carcinoma								
		0/90	(0%)			1/90	(1%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11% SD 0%
.....								
#Tongue:								
Squamous Cell Carcinoma or Papilloma Squamous								
		0/90	(0%)			1/90	(1%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11% SD 0%
.....								
#Tooth:								
Odontoma								
		0/90	(0%)			0/90	(0%)	
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0% SD 0%
.....								
*Urinary Bladder:								
Leiomyosarcoma								
		0/89	(0%)			1/88	(1%)	
Overall Incidence	Total	0/89	(0%)	Mean 0%	SD 0%	Total	1/88 (1.14%)	Mean 1.14% SD 0%
.....								
#Uterus:								
Adenocarcinoma								
Overall Incidence								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

Page: 204

Report Date: 10/05/2022

Male

Female

#Uterus:
Adenocarcinoma or Adenoma

Overall Incidence

.....

#Uterus:
Adenoma

Overall Incidence

.....

#Uterus:
Adenoma, Adenocarcinoma, Sq Cell Carcinoma, or Sq Cell Papilloma

Overall Incidence

.....

#Uterus:
Deciduoma Benign

Overall Incidence

.....

#Uterus:
Granular Cell Tumor Benign

Overall Incidence

.....

#Uterus:
Hemangioma

Overall Incidence

.....

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

Page: 205

Report Date: 10/05/2022

Male

Female

#Uterus:
Polyp Stromal

Overall Incidence

.....

#Uterus:
Sarcoma

Overall Incidence

.....

#Uterus:
Sarcoma Stromal

Overall Incidence

.....

#Uterus:
Sarcoma Stromal or Polyp Stromal

Overall Incidence

.....

#Uterus:
Schwannoma Malignant

Overall Incidence

.....

#Uterus:
Sq Cell Carcinoma or Papilloma Squamous

Overall Incidence

.....

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

Page: 206

Report Date: 10/05/2022

	Male			Female
#Uterus: Squamous Cell Carcinoma				
Overall Incidence				
.....				
#Uterus: Squamous Cell Papilloma				
Overall Incidence				
.....				
#Vagina: Granular Cell Tumor Benign				
Overall Incidence		Total	0/90 (0%)	Mean 0% SD 0%
.....				
#Vagina: Polyp				
Overall Incidence		Total	0/90 (0%)	Mean 0% SD 0%
.....				
#Vagina: Sarcoma				
Overall Incidence		Total	0/90 (0%)	Mean 0% SD 0%
.....				
#Vagina: Schwannoma Malignant				
Overall Incidence		Total	1/90 (1.11%)	Mean 1.11% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Oct2022

Contract/Lab: All Laboratories

Species: RATS

Strain: Harlan Sprague-Dawley

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

Page: 207

Report Date: 10/05/2022

Male					Female				
#Zymbal's Gland: Adenoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									
#Zymbal's Gland: Carcinoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									
#Zymbal's Gland: Carcinoma or Adenoma									
		0/90	(0%)			0/90	(0%)		
Overall Incidence	Total	0/90	(0%)	Mean 0%	SD 0%	Total	0/90	(0%)	Mean 0% SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied