

Version: Jun2013

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: GAVAGE

Vehicle: CORN OIL

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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	052000603	03/14/07	727	50(3)	20(644)	584.8	Indole-3-carbinol
Battelle Columbus Laboratory	052030401	N/A	N/A	0(0)	0(0)	N/A	TEF evaluation (PCB 118)
Female							
Battelle Columbus Laboratory	052000603	03/15/07	729	50(5)	21(637)	353.0	Indole-3-carbinol
Battelle Columbus Laboratory	052030401	03/26/04	733	52(5)	21(616)	383.5	TEF evaluation (PCB 118)

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%)			40/50 (80%)	43/52 (83%)	
Overall Incidence	Total	27/50 (54%)	Mean 54%	SD 0%	Total 83/102 (81.37%)	Mean 81.35%	SD 1.9%
.....							
#All Organs:							
Malignant Tumors							
		12/50 (24%)			14/50 (28%)	15/52 (29%)	
Overall Incidence	Total	12/50 (24%)	Mean 24%	SD 0%	Total 29/102 (28.43%)	Mean 28.42%	SD 0.6%
.....							
#All Organs:							
Malignant and Benign Tumors							
		33/50 (66%)			46/50 (92%)	48/52 (92%)	
Overall Incidence	Total	33/50 (66%)	Mean 66%	SD 0%	Total 94/102 (92.16%)	Mean 92.15%	SD 0.22%
.....							
#All Organs:							
Hemangiosarcoma							
		1/50 (2%)			1/50 (2%)	1/52 (2%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total 2/102 (1.96%)	Mean 1.96%	SD 0.05%
.....							
#All Organs:							
Hemangiosarcoma or Hemangioma							
		1/50 (2%)			1/50 (2%)	1/52 (2%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total 2/102 (1.96%)	Mean 1.96%	SD 0.05%
.....							
#All Organs:							
Histiocytic Sarcoma							
		0/50 (0%)			1/50 (2%)	1/52 (2%)	
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total 2/102 (1.96%)	Mean 1.96%	SD 0.05%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#All Organs:								
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type								
		0/50 (0%)			0/50 (0%)	2/52 (4%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/102 (1.96%)	Mean 1.92%	SD 2.72%
.....								
#All Organs:								
Mesothelioma: Benign, Malignant, NOS								
		1/50 (2%)			0/50 (0%)	0/52 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (0%)	Mean 0%	SD 0%
.....								
#All Organs:								
Mesothelioma: Malignant								
		1/50 (2%)			0/50 (0%)	0/52 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (0%)	Mean 0%	SD 0%
.....								
*Adrenal Cortex:								
Adenoma								
		0/50 (0%)			0/50 (0%)	2/52 (4%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/102 (1.96%)	Mean 1.92%	SD 2.72%
.....								
*Adrenal Cortex:								
Carcinoma								
		0/50 (0%)			0/50 (0%)	1/52 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/102 (0.98%)	Mean 0.96%	SD 1.36%
.....								
*Adrenal Medulla:								
Pheochromocytoma Benign								
		5/50 (10%)			0/50 (0%)	3/52 (6%)		
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total	3/102 (2.94%)	Mean 2.88%	SD 4.08%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Adrenal Medulla:							
Pheochromocytoma Complex							
		1/50 (2%)			0/50 (0%)	0/52 (0%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total 0/102 (0%)	Mean 0%	SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma Malignant							
		2/50 (4%)			0/50 (0%)	0/52 (0%)	
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total 0/102 (0%)	Mean 0%	SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma: Benign, Complex, Malignant, NOS							
		8/50 (16%)			0/50 (0%)	3/52 (6%)	
Overall Incidence	Total	8/50 (16%)	Mean 16%	SD 0%	Total 3/102 (2.94%)	Mean 2.88%	SD 4.08%
.....							
*Brain:							
Granular Cell Tumor Benign							
		0/50 (0%)			1/50 (2%)	0/52 (0%)	
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total 1/102 (0.98%)	Mean 1%	SD 1.41%
.....							
*Heart:							
Schwannoma Malignant							
		1/50 (2%)			0/50 (0%)	0/52 (0%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total 0/102 (0%)	Mean 0%	SD 0%
.....							
*Islets, Pancreatic:							
Adenoma							
		2/50 (4%)			0/50 (0%)	0/52 (0%)	
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total 0/102 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

		Male			Female		
*Islets, Pancreatic:							
 Carcinoma or Adenoma							
		2/50 (4%)			0/50 (0%)	0/52 (0%)	
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/102 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule:							
 Adenoma							
		1/50 (2%)			0/50 (0%)	0/52 (0%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule:							
 Carcinoma or Adenoma							
		1/50 (2%)			0/50 (0%)	0/52 (0%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (0%)	Mean 0% SD 0%
.....							
*Liver:							
 Cholangioma							
		0/50 (0%)			0/50 (0%)	1/52 (2%)	
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/102 (0.98%)	Mean 0.96% SD 1.36%
.....							
*Liver:							
 Hepatocellular Adenoma							
		1/50 (2%)			2/50 (4%)	0/52 (0%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	2/102 (1.96%)	Mean 2% SD 2.83%
.....							
*Liver:							
 Hepatocellular Carcinoma or Hepatocellular Adenoma							
		1/50 (2%)			2/50 (4%)	0/52 (0%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	2/102 (1.96%)	Mean 2% SD 2.83%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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
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	Male				Female			
*Liver:								
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma								
		1/50 (2%)			2/50 (4%)	0/52 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	2/102 (1.96%)	Mean 2%	SD 2.83%
.....								
*Lung:								
Alveolar/Bronchiolar Adenoma								
		0/49 (0%)			1/50 (2%)	0/51 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	1/101 (0.99%)	Mean 1%	SD 1.41%
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma								
		0/49 (0%)			1/50 (2%)	0/51 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	1/101 (0.99%)	Mean 1%	SD 1.41%
.....								
*Lung:								
Sarcoma								
		0/49 (0%)			1/50 (2%)	0/51 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	1/101 (0.99%)	Mean 1%	SD 1.41%
.....								
#Lymph Node, Mesenteric:								
Hemangiosarcoma								
		1/50 (2%)			0/50 (0%)	0/52 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (0%)	Mean 0%	SD 0%
.....								
#Mammary Gland:								
Adenoma								
		0/50 (0%)			3/50 (6%)	0/52 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	3/102 (2.94%)	Mean 3%	SD 4.24%

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

		Male			Female		
#Mammary Gland:							
Carcinoma							
		0/50 (0%)			3/50 (6%)	2/52 (4%)	
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total 5/102 (4.9%)	Mean 4.92%	SD 1.52%
.....							
#Mammary Gland:							
Carcinoma or Adenoma							
		0/50 (0%)			6/50 (12%)	2/52 (4%)	
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total 8/102 (7.84%)	Mean 7.92%	SD 5.77%
.....							
#Mammary Gland:							
Fibroadenoma							
		1/50 (2%)			29/50 (58%)	25/52 (48%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total 54/102 (52.94%)	Mean 53.04%	SD 7.02%
.....							
#Mammary Gland:							
Fibroma, Fibroadenoma or Adenoma							
		1/50 (2%)			30/50 (60%)	25/52 (48%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total 55/102 (53.92%)	Mean 54.04%	SD 8.43%
.....							
#Mammary Gland:							
Fibroma, Fibroadenoma, Carcinoma, or Adenoma							
		1/50 (2%)			32/50 (64%)	27/52 (52%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total 59/102 (57.84%)	Mean 57.96%	SD 8.54%
.....							
#Mammary Gland:							
Myoepithelioma							
		0/50 (0%)			1/50 (2%)	0/52 (0%)	
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total 1/102 (0.98%)	Mean 1%	SD 1.41%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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
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	Male				Female			
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva): Squamous Cell Carcinoma								
		1/50 (2%)			0/50 (0%)	0/52 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (0%)	Mean 0%	SD 0%
.....								
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva): Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma								
		1/50 (2%)			0/50 (0%)	0/52 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (0%)	Mean 0%	SD 0%
.....								
#Oral Mucosa: Squamous Cell Carcinoma								
		1/50 (2%)			0/50 (0%)	0/52 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (0%)	Mean 0%	SD 0%
.....								
*Ovary: Granulosa-Theca Tumor Benign								
					1/50 (2%)	0/52 (0%)		
Overall Incidence					Total	1/102 (0.98%)	Mean 1%	SD 1.41%
.....								
*Ovary: Luteoma								
					0/50 (0%)	1/52 (2%)		
Overall Incidence					Total	1/102 (0.98%)	Mean 0.96%	SD 1.36%
.....								
*Ovary: Tubulostromal Carcinoma								
					1/50 (2%)	0/52 (0%)		
Overall Incidence					Total	1/102 (0.98%)	Mean 1%	SD 1.41%

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

Version: Jun2013
 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: GAVAGE
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		Male			Female		
*Pancreas:							
Adenoma							
		5/50 (10%)			0/50 (0%)	0/52 (0%)	
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total 0/102 (0%)	Mean 0%	SD 0%
.....							
*Pancreas:							
Carcinoma or Adenoma							
		5/50 (10%)			0/50 (0%)	0/52 (0%)	
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total 0/102 (0%)	Mean 0%	SD 0%
.....							
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Adenoma							
		5/50 (10%)			18/50 (36%)	17/52 (33%)	
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total 35/102 (34.31%)	Mean 34.35%	SD 2.34%
.....							
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Carcinoma							
		0/50 (0%)			0/50 (0%)	2/52 (4%)	
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total 2/102 (1.96%)	Mean 1.92%	SD 2.72%
.....							
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Carcinoma or Adenoma							
		5/50 (10%)			18/50 (36%)	19/52 (37%)	
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total 37/102 (36.27%)	Mean 36.27%	SD 0.38%
.....							
*Salivary Glands:							
Schwannoma Malignant							
		1/50 (2%)			0/50 (0%)	0/51 (0%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total 0/101 (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%)				1/50 (2%)	0/52 (0%)	
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/102 (0.98%)	Mean 1%	SD 1.41%
.....								
#Skin:								
Basal Cell Carcinoma								
		1/50 (2%)				0/50 (0%)	0/52 (0%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)								
		1/50 (2%)				0/50 (0%)	0/52 (0%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma								
		1/50 (2%)				0/50 (0%)	0/52 (0%)	
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (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								
		6/50 (12%)				0/50 (0%)	1/52 (2%)	
Overall Incidence	Total	6/50 (12%)	Mean 12%	SD 0%	Total	1/102 (0.98%)	Mean 0.96%	SD 1.36%
.....								
#Skin:								
Fibroma								
		5/50 (10%)				1/50 (2%)	2/52 (4%)	
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total	3/102 (2.94%)	Mean 2.92%	SD 1.31%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma								
		7/50 (14%)			2/50 (4%)	2/52 (4%)		
Overall Incidence	Total	7/50 (14%)	Mean 14%	SD 0%	Total	4/102 (3.92%)	Mean 3.92%	SD 0.11%
.....								
#Skin:								
Fibrosarcoma								
		1/50 (2%)			1/50 (2%)	0/52 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	1/102 (0.98%)	Mean 1%	SD 1.41%
.....								
#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma								
		2/50 (4%)			1/50 (2%)	0/52 (0%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	1/102 (0.98%)	Mean 1%	SD 1.41%
.....								
#Skin:								
Fibrous Histiocytoma								
		1/50 (2%)			0/50 (0%)	0/52 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Hemangiosarcoma								
		0/50 (0%)			1/50 (2%)	1/52 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/102 (1.96%)	Mean 1.96%	SD 0.05%
.....								
#Skin:								
Keratoacanthoma								
		4/50 (8%)			0/50 (0%)	1/52 (2%)		
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	1/102 (0.98%)	Mean 0.96%	SD 1.36%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

	Male				Female			
#Skin:								
Neurofibrosarcoma or Schwannoma (malignant or NOS)								
		0/50 (0%)			1/50 (2%)	1/52 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/102 (1.96%)	Mean 1.96%	SD 0.05%
.....								
#Skin:								
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)								
		0/50 (0%)			1/50 (2%)	1/52 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/102 (1.96%)	Mean 1.96%	SD 0.05%
.....								
#Skin:								
Schwannoma Malignant								
		0/50 (0%)			1/50 (2%)	1/52 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/102 (1.96%)	Mean 1.96%	SD 0.05%
.....								
#Skin:								
Squamous Cell Carcinoma								
		1/50 (2%)			0/50 (0%)	0/52 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma								
		2/50 (4%)			0/50 (0%)	0/52 (0%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/102 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Squamous Cell Papilloma								
		1/50 (2%)			0/50 (0%)	0/52 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/102 (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 or Papilloma									
		1/50	(2%)			0/50	(0%)	0/52	(0%)
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/102 (0%)	Mean 0%	SD 0%
.....									
#Skin:									
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma									
		5/50	(10%)			0/50	(0%)	1/52	(2%)
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	1/102 (0.98%)	Mean 0.96%	SD 1.36%
.....									
#Skin:									
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma									
		5/50	(10%)			0/50	(0%)	1/52	(2%)
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	1/102 (0.98%)	Mean 0.96%	SD 1.36%
.....									
#Stomach, Forestomach:									
Squamous Cell Carcinoma									
		1/50	(2%)			1/50	(2%)	0/52	(0%)
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/102 (0.98%)	Mean 1%	SD 1.41%
.....									
#Stomach, Forestomach:									
Squamous Cell Carcinoma or Papilloma Squamous									
		1/50	(2%)			1/50	(2%)	0/52	(0%)
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/102 (0.98%)	Mean 1%	SD 1.41%
.....									
*Testes:									
Adenoma									
		3/49	(6%)						
Overall Incidence	Total	3/49	(6.12%)	Mean 6.12%	SD 0%				
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: Harlan Sprague-Dawley
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Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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		Male			Female		
*Thymus:							
Thymoma Benign							
		1/46 (2%)			0/47 (0%)	0/51 (0%)	
Overall Incidence	Total	1/46 (2.17%)	Mean 2.17%	SD 0%	Total	0/98 (0%)	Mean 0% SD 0%
.....							
*Thymus:							
Thymoma: Benign, Malignant, NOS							
		1/46 (2%)			0/47 (0%)	0/51 (0%)	
Overall Incidence	Total	1/46 (2.17%)	Mean 2.17%	SD 0%	Total	0/98 (0%)	Mean 0% SD 0%
.....							
*Thyroid Gland: C-Cell:							
Adenoma							
		13/50 (26%)			11/49 (22%)	9/51 (18%)	
Overall Incidence	Total	13/50 (26%)	Mean 26%	SD 0%	Total	20/100 (20%)	Mean 20.05% SD 3.4%
.....							
*Thyroid Gland: C-Cell:							
Carcinoma							
		0/50 (0%)			0/49 (0%)	2/51 (4%)	
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/100 (2%)	Mean 1.96% SD 2.77%
.....							
*Thyroid Gland: C-Cell:							
Carcinoma or Adenoma							
		13/50 (26%)			11/49 (22%)	11/51 (22%)	
Overall Incidence	Total	13/50 (26%)	Mean 26%	SD 0%	Total	22/100 (22%)	Mean 22.01% SD 0.62%
.....							
*Thyroid Gland: Follicular Cell:							
Adenoma							
		0/50 (0%)			0/49 (0%)	1/51 (2%)	
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/100 (1%)	Mean 0.98% SD 1.39%

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

	Male				Female			
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma								
		0/50 (0%)			0/49 (0%)	1/51 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/100 (1%)	Mean 0.98%	SD 1.39%
.....								
#Tooth: Odontoma								
		0/50 (0%)			0/50 (0%)	1/52 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/102 (0.98%)	Mean 0.96%	SD 1.36%
.....								
#Uterus: Carcinoma								
					0/50 (0%)	2/52 (4%)		
Overall Incidence					Total	2/102 (1.96%)	Mean 1.92%	SD 2.72%
.....								
#Uterus: Polyp Stromal								
					10/50 (20%)	3/52 (6%)		
Overall Incidence					Total	13/102 (12.75%)	Mean 12.88%	SD 10.06%
.....								
#Uterus: Sarcoma Stromal								
					2/50 (4%)	0/52 (0%)		
Overall Incidence					Total	2/102 (1.96%)	Mean 2%	SD 2.83%
.....								
#Uterus: Sarcoma Stromal or Polyp Stromal								
					12/50 (24%)	3/52 (6%)		
Overall Incidence					Total	15/102 (14.71%)	Mean 14.88%	SD 12.89%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013

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: GAVAGE

Vehicle: CORN OIL

Page: 19

Report Date: 06/17/2013

	Male			Female		
#Uterus:						
Schwannoma Malignant						
			0/50 (0%)	1/52 (2%)		
Overall Incidence		Total	1/102 (0.98%)	Mean 0.96%	SD	1.36%
.....						
#Vagina:						
Polyp						
			1/50 (2%)	1/52 (2%)		
Overall Incidence		Total	2/102 (1.96%)	Mean 1.96%	SD	0.05%
.....						
#Vagina:						
Schwannoma Malignant						
			1/50 (2%)	0/52 (0%)		
Overall Incidence		Total	1/102 (0.98%)	Mean 1%	SD	1.41%
.....						
#Vagina:						
Squamous Cell Carcinoma						
			0/50 (0%)	1/52 (2%)		
Overall Incidence		Total	1/102 (0.98%)	Mean 0.96%	SD	1.36%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied