

Version: May2011
Contract/Lab: All Laboratories
Species: RATS
Strain: F 344/N
Length of Study: CHRONIC

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

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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	052000903	11/18/04	726	50(3)	33(668)	516.1	beta-Picoline
Southern Research Institute	052011407	10/02/02	730	50(3)	28(696)	532.4	Sodium dichromate dihydrate (VI)
Female							
Battelle Columbus Laboratory	052000903	11/19/04	727	50(5)	30(688)	352.7	beta-Picoline
Southern Research Institute	052011407	10/02/02	735	50(5)	33(700)	351.2	Sodium dichromate dihydrate (VI)

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		Male				Female			
#All Organs:									
Benign Tumors									
		45/50 (90%)	49/50 (98%)		47/50 (94%)	47/50 (94%)			
Overall Incidence	Total	94/100 (94%)	Mean 94%	SD 5.66%	Total	94/100 (94%)	Mean 94%	SD 0%	
.....									
#All Organs:									
Malignant Tumors									
		23/50 (46%)	29/50 (58%)		17/50 (34%)	20/50 (40%)			
Overall Incidence	Total	52/100 (52%)	Mean 52%	SD 8.49%	Total	37/100 (37%)	Mean 37%	SD 4.24%	
.....									
#All Organs:									
Malignant and Benign Tumors									
		48/50 (96%)	50/50 (100%)		49/50 (98%)	49/50 (98%)			
Overall Incidence	Total	98/100 (98%)	Mean 98%	SD 2.83%	Total	98/100 (98%)	Mean 98%	SD 0%	
.....									
#All Organs:									
Hemangioma									
		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:									
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%)	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

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		Male			Female		
#All Organs:							
Histiocytic 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%
.....							
#All Organs:							
Leukemia: Erythrocytic							
		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							
		14/50 (28%)	26/50 (52%)		12/50 (24%)	8/50 (16%)	
Overall Incidence	Total	40/100 (40%)	Mean 40%	SD 16.97%	Total	20/100 (20%)	Mean 20% SD 5.66%
.....							
#All Organs:							
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type							
		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:							
Mesothelioma: 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%
.....							
#All Organs:							
Mesothelioma: Benign, Malignant, NOS							
		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%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

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		Male			Female			
#All Organs:								
Mesothelioma: Malignant								
		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%
.....								
#All Organs:								
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%
.....								
#All Organs:								
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%
.....								
#All Organs:								
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%
.....								
*Adrenal Cortex:								
Adenoma								
		1/50 (2%)	0/50 (0%)		2/50 (4%)	1/50 (2%)		
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	3/100 (3%)	Mean 3%	SD 1.41%
.....								
*Adrenal Cortex:								
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

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		Male				Female			
*Adrenal Medulla: Ganglioneuroma									
		0/50 (0%)	0/49 (0%)		0/50 (0%)	0/49 (0%)			
Overall Incidence	Total	0/99 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0%	SD 0%	
*Adrenal Medulla: Hemangioma									
		0/50 (0%)	0/49 (0%)		0/50 (0%)	0/49 (0%)			
Overall Incidence	Total	0/99 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0%	SD 0%	
*Adrenal Medulla: Pheochromocytoma Benign									
		5/50 (10%)	6/49 (12%)		2/50 (4%)	2/49 (4%)			
Overall Incidence	Total	11/99 (11.11%)	Mean 11.12%	SD 1.59%	Total	4/99 (4.04%)	Mean 4.04%	SD 0.06%	
*Adrenal Medulla: Pheochromocytoma Complex									
		1/50 (2%)	0/49 (0%)		0/50 (0%)	0/49 (0%)			
Overall Incidence	Total	1/99 (1.01%)	Mean 1%	SD 1.41%	Total	0/99 (0%)	Mean 0%	SD 0%	
*Adrenal Medulla: Pheochromocytoma Malignant									
		0/50 (0%)	1/49 (2%)		0/50 (0%)	1/49 (2%)			
Overall Incidence	Total	1/99 (1.01%)	Mean 1.02%	SD 1.44%	Total	1/99 (1.01%)	Mean 1.02%	SD 1.44%	
*Adrenal Medulla: Pheochromocytoma: Benign, Complex, Malignant, NOS									
		6/50 (12%)	7/49 (14%)		2/50 (4%)	3/49 (6%)			
Overall Incidence	Total	13/99 (13.13%)	Mean 13.14%	SD 1.62%	Total	5/99 (5.05%)	Mean 5.06%	SD 1.5%	

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		Male				Female			
#Bone:									
Chordoma									
		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%
.....									
#Bone:									
Osteoma									
		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%
.....									
#Bone:									
Osteosarcoma									
		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%
.....									
#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%	0/100	(0%)	Mean 0%	SD 0%
.....									
*Brain:									
Astrocytoma 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%
.....									
*Brain:									
Ependymoma Benign									
		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%

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		Male				Female			
*Brain:									
Ependymoma 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:									
Glioma									
		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:									
Glioma Benign									
		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%
.....									
*Brain:									
Glioma 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:									
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:									
Oligodendroglioma 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%

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		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											
		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%	
.....											
*Brain:											
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%	
.....											
*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%)	4/50	(8%)		7/50	(14%)	2/50	(4%)	
Overall Incidence	Total	4/100	(4%)	Mean 4%	SD 5.66%	Total	9/100	(9%)	Mean 9%	SD 7.07%	
.....											
*Clitoral/Preputial Gland:											
Carcinoma											
		2/50	(4%)	1/50	(2%)		0/50	(0%)	8/50	(16%)	
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	8/100	(8%)	Mean 8%	SD 11.31%	
.....											

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		Male				Female			
*Clitoral/Preputial Gland: Carcinoma or Adenoma									
		2/50 (4%)	4/50 (8%)		7/50 (14%)	10/50 (20%)			
Overall Incidence	Total	6/100 (6%)	Mean 6%	SD 2.83%	Total	17/100 (17%)	Mean 17%	SD 4.24%	
.....									
*Clitoral/Preputial Gland: Sarcoma									
		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%	
.....									
#Ear: Neural Crest Tumor									
		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%	
.....									
#Esophagus: 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%	
.....									
#Eye: Melanoma 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%	
.....									
#Eye: Melanoma 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%	

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#: Denominator is number of animals necropsied

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		Male				Female					
#Eye:											
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%	
.....											
#Harderian 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%	
.....											
#Harderian Gland:											
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%	
.....											
#Harderian Gland:											
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%	
.....											
*Heart:											
Schwannoma 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%	
.....											
*Heart:											
Schwannoma Malignant											
		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%	

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#: Denominator is number of animals necropsied

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		Male				Female					
#Intestine Large: Colon/Rectum:											
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%	
.....											
#Intestine Large: Colon/Rectum:											
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%	
.....											
#Intestine Large: Colon/Rectum:											
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%	
.....											
#Intestine Small: Duodenum:											
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%	
.....											
#Intestine Small: Duodenum:											
Leiomyoma											
		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%	
.....											
#Intestine Small: Duodenum:											
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%	

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#: Denominator is number of animals necropsied

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		Male				Female			
#Intestine Small: Ileum:									
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%
.....									
#Intestine Small: Jejunum:									
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%
.....									
#Intestine Small: Jejunum:									
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%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Intestine Small: Jejunum:									
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%
.....									
#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%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Intestine Small: Site Unspecified:									
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%

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

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

		Male				Female			
#Intestine Small: Site Unspecified: 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%
.....									
#Intestine Small: Site Unspecified: 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%
.....									
#Intestine Small: Site Unspecified: 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%
.....									
#Intestine Small: Site Unspecified: Leiomyoma									
		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%
.....									
#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%
.....									
#Intestine Small: Site Unspecified: 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%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

		Male				Female			
*Islets, Pancreatic:									
Adenoma									
		4/50	(8%)	4/50	(8%)	0/50	(0%)	2/50	(4%)
Overall Incidence	Total	8/100	(8%)	Mean 8%	SD 0%	Total	2/100	(2%)	Mean 2%
									SD 2.83%
.....									
*Islets, Pancreatic:									
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%
.....									
*Islets, Pancreatic:									
Carcinoma or Adenoma									
		4/50	(8%)	4/50	(8%)	0/50	(0%)	2/50	(4%)
Overall Incidence	Total	8/100	(8%)	Mean 8%	SD 0%	Total	2/100	(2%)	Mean 2%
									SD 2.83%
.....									
*Kidney: Pelvis and Transitional Epithelium:									
Carcinoma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									
*Kidney: Pelvis and Transitional Epithelium:									
Carcinoma or Adenoma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									
*Kidney: Pelvis and Transitional Epithelium:									
Papilloma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(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: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

		Male				Female			
*Kidney: Renal Tubule: Adenoma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/99	(0%)	Mean 0%	SD 0%
.....									
*Kidney: Renal Tubule: Carcinoma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/99	(0%)	Mean 0%	SD 0%
.....									
*Kidney: Renal Tubule: Carcinoma or Adenoma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/99	(0%)	Mean 0%	SD 0%
.....									
*Kidney: Renal Tubule: Hemangiosarcoma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/99	(0%)	Mean 0%	SD 0%
.....									
*Kidney: Renal Tubule: Lipoma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/99	(0%)	Mean 0%	SD 0%
.....									
*Kidney: Renal Tubule: Mesenchymal Tumor Benign									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/99	(0%)	Mean 0%	SD 0%

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

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

		Male				Female			
*Kidney: Renal Tubule:									
Mesenchymal Tumor Malignant									
		0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule:									
Nephroblastoma									
		0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule:									
Sarcoma									
		0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (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:									
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%	
.....									
*Liver:									
Hepatocellular Adenoma									
		3/50 (6%)	0/50 (0%)		2/50 (4%)	1/50 (2%)			
Overall Incidence	Total	3/100 (3%)	Mean 3%	SD 4.24%	Total	3/100 (3%)	Mean 3%	SD 1.41%	

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

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

		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									
		3/50	(6%)	0/50	(0%)	2/50	(4%)	1/50	(2%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 4.24%	Total	3/100	(3%)	Mean 3%
									SD 1.41%
*Liver:									
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma									
		3/50	(6%)	0/50	(0%)	2/50	(4%)	1/50	(2%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 4.24%	Total	3/100	(3%)	Mean 3%
									SD 1.41%
*Liver:									
Ito 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%
*Lung:									
Alveolar/Bronchiolar Adenoma									
		3/50	(6%)	4/50	(8%)	0/50	(0%)	4/50	(8%)
Overall Incidence	Total	7/100	(7%)	Mean 7%	SD 1.41%	Total	4/100	(4%)	Mean 4%
									SD 5.66%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

		Male				Female			
*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%
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma									
		3/50	(6%)	4/50	(8%)	0/50	(0%)	4/50	(8%)
Overall Incidence	Total	7/100	(7%)	Mean 7%	SD 1.41%	Total	4/100	(4%)	Mean 4% SD 5.66%
.....									
*Lung:									
Fibrosarcoma									
		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%
.....									
*Lung:									
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%
.....									
*Lung:									
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%
.....									
#Lymph Node:									
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%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

		Male				Female			
#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%)	0/50	(0%)	2/50	(4%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	2/100	(2%)	Mean 2%
									SD 2.83%
.....									
#Mammary Gland:									
Carcinoma									
		0/50	(0%)	1/50	(2%)	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%
.....									
#Mammary Gland:									
Carcinoma or Adenoma									
		0/50	(0%)	1/50	(2%)	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%
.....									
#Mammary Gland:									
Fibroadenoma									
		1/50	(2%)	2/50	(4%)	34/50	(68%)	37/50	(74%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	71/100	(71%)	Mean 71%
									SD 4.24%
.....									
#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%

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

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

	Male				Female			
#Mammary Gland:								
Fibroma, Fibroadenoma or Adenoma								
		1/50 (2%)	2/50 (4%)		34/50 (68%)	37/50 (74%)		
Overall Incidence	Total	3/100 (3%)	Mean 3%	SD 1.41%	Total	71/100 (71%)	Mean 71%	SD 4.24%
.....								
#Mammary Gland:								
Fibroma, Fibroadenoma, Carcinoma, or Adenoma								
		1/50 (2%)	3/50 (6%)		34/50 (68%)	37/50 (74%)		
Overall Incidence	Total	4/100 (4%)	Mean 4%	SD 2.83%	Total	71/100 (71%)	Mean 71%	SD 4.24%
.....								
#Mesentery:								
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%
.....								
#Mesentery:								
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%
.....								
#Mesentery:								
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%
.....								
#Mesentery:								
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%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

		Male				Female			
*Nose:									
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%
.....									
*Nose:									
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%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Papilloma Squamous or Papilloma									
		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%
.....									
#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%	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%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	1/100	(1%)	Mean 1%	SD 1.41%
.....									
#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%	0/100	(0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

	Male				Female			
#Oral Mucosa:								
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%
.....								
*Ovary:								
Cystadenoma								
					0/50 (0%)	0/49 (0%)		
Overall Incidence					Total	0/99 (0%)	Mean 0%	SD 0%
.....								
*Ovary:								
Fibrosarcoma								
					0/50 (0%)	0/49 (0%)		
Overall Incidence					Total	0/99 (0%)	Mean 0%	SD 0%
.....								
*Ovary:								
Granulosa Cell Tumor Benign								
					0/50 (0%)	0/49 (0%)		
Overall Incidence					Total	0/99 (0%)	Mean 0%	SD 0%
.....								
*Ovary:								
Granulosa Cell Tumor Malignant								
					0/50 (0%)	0/49 (0%)		
Overall Incidence					Total	0/99 (0%)	Mean 0%	SD 0%
.....								
*Ovary:								
Granulosa Cell Tumor: Benign, Malignant, NOS								
					0/50 (0%)	0/49 (0%)		
Overall Incidence					Total	0/99 (0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

Male					Female						
*Ovary:											
Granulosa-Theca Tumor Benign											
					0/50	(0%)	0/49	(0%)			
Overall Incidence					Total	0/99	(0%)	Mean 0%	SD 0%		
.....											
*Ovary:											
Granulosa-Theca Tumor Malignant											
					0/50	(0%)	0/49	(0%)			
Overall Incidence					Total	0/99	(0%)	Mean 0%	SD 0%		
.....											
*Ovary:											
Schwannoma Malignant											
					1/50	(2%)	0/49	(0%)			
Overall Incidence					Total	1/99	(1.01%)	Mean 1%	SD 1.41%		
.....											
*Ovary:											
Tubulostromal Adenoma											
					0/50	(0%)	0/49	(0%)			
Overall Incidence					Total	0/99	(0%)	Mean 0%	SD 0%		
.....											
*Pancreas:											
Adenoma											
		1/49	(2%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence		Total	2/99	(2.02%)	Mean 2.02%	SD 0.03%	Total	0/100	(0%)	Mean 0%	SD 0%
.....											
*Pancreas:											
Carcinoma											
		0/49	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence		Total	0/99	(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: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

		Male			Female			
*Pancreas:								
Carcinoma or Adenoma								
		1/49 (2%)	1/50 (2%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	2/99 (2.02%)	Mean 2.02%	SD 0.03%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Mixed Tumor Benign								
		0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/99 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Mixed Tumor Malignant								
		0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/99 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
*Parathyroid Gland:								
Adenoma								
		0/50 (0%)	0/46 (0%)		0/47 (0%)	0/46 (0%)		
Overall Incidence	Total	0/96 (0%)	Mean 0%	SD 0%	Total	0/93 (0%)	Mean 0%	SD 0%
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Adenoma								
		28/50 (56%)	16/50 (32%)		30/50 (60%)	28/50 (56%)		
Overall Incidence	Total	44/100 (44%)	Mean 44%	SD 16.97%	Total	58/100 (58%)	Mean 58%	SD 2.83%
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Carcinoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	2/50 (4%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	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: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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		Male				Female			
*Pituitary Gland: Pars Distalis or Unspecified Site:									
 Carcinoma or Adenoma									
		28/50 (56%)	16/50 (32%)			30/50 (60%)	30/50 (60%)		
Overall Incidence	Total	44/100 (44%)	Mean 44%	SD 16.97%	Total	60/100 (60%)	Mean 60%	SD 0%	
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
 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%	
.....									
*Pituitary Gland: Pars Intermedia:									
 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%	
.....									
*Pituitary Gland: Pars Intermedia:									
 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%	
.....									
*Pituitary Gland: Pars Nervosa:									
 Craniopharyngioma									
		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									
		0/49 (0%)	2/50 (4%)						
Overall Incidence	Total	2/99 (2.02%)	Mean 2%	SD 2.83%					

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

	Male				Female			
*Prostate:								
Carcinoma or Adenoma								
		0/49 (0%)	2/50 (4%)					
Overall Incidence	Total	2/99 (2.02%)	Mean 2%	SD 2.83%				
.....								
*Salivary Glands:								
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%
.....								
*Salivary Glands:								
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%
.....								
*Salivary Glands:								
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%
.....								
*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:								
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: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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		Male				Female			
#Skeletal Muscle:									
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%
.....									
#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:									
Rhabdomyosarcoma									
		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:									
Rhabdomyosarcoma or Rhabdomyoma									
		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									
		1/50	(2%)	2/50	(4%)	1/50	(2%)	0/50	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	1/100	(1%)	Mean 1% SD 1.41%
.....									
#Skin:									
Basal Cell Adenoma or Basosquamous Tumor Benign									
		1/50	(2%)	2/50	(4%)	1/50	(2%)	0/50	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	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: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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		Male				Female					
#Skin:											
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma											
		1/50	(2%)	2/50	(4%)			1/50	(2%)	0/50	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	1/100	(1%)	Mean 1%	SD 1.41%	
.....											
#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%	
.....											
#Skin:											
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma											
		1/50	(2%)	2/50	(4%)			1/50	(2%)	0/50	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	1/100	(1%)	Mean 1%	SD 1.41%	
.....											
#Skin:											
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma											
		6/50	(12%)	5/50	(10%)			1/50	(2%)	1/50	(2%)
Overall Incidence	Total	11/100	(11%)	Mean 11%	SD 1.41%	Total	2/100	(2%)	Mean 2%	SD 0%	
.....											
#Skin:											
Fibroma											
		3/50	(6%)	8/50	(16%)			2/50	(4%)	1/50	(2%)
Overall Incidence	Total	11/100	(11%)	Mean 11%	SD 7.07%	Total	3/100	(3%)	Mean 3%	SD 1.41%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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	Male					Female				
#Skin:										
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma										
		4/50 (8%)	11/50 (22%)			2/50 (4%)	1/50 (2%)			
Overall Incidence	Total	15/100 (15%)	Mean 15%	SD 9.9%	Total	3/100 (3%)	Mean 3%	SD 1.41%		
.....										
#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%		
.....										
#Skin:										
Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma										
		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:										
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:										
Hemangioma										
		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%		
.....										
#Skin:										
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%		

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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		Male			Female		
#Skin:							
Keratoacanthoma							
		5/50 (10%)	2/50 (4%)		0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	7/100 (7%)	Mean 7%	SD 4.24%	Total	1/100 (1%)	Mean 1% SD 1.41%
.....							
#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%
.....							
#Skin:							
Neural Crest Tumor							
		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:							
Neural Crest 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%
.....							
#Skin:							
Neurofibroma or Schwannoma 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%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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	Male				Female			
#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:								
Sarcoma								
		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:								
Schwannoma 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:								
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%)	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: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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	Male					Female				
#Skin:										
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma										
Overall Incidence	Total	0/50 (0%) 1/100 (1%)	1/50 (2%) Mean 1%	SD 1.41%	Total	0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0%	SD 0%		
#Skin:										
Squamous Cell Papilloma										
Overall Incidence	Total	0/50 (0%) 1/100 (1%)	1/50 (2%) Mean 1%	SD 1.41%	Total	0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0%	SD 0%		
#Skin:										
Squamous Cell Papilloma or Papilloma										
Overall Incidence	Total	0/50 (0%) 1/100 (1%)	1/50 (2%) Mean 1%	SD 1.41%	Total	0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0%	SD 0%		
#Skin:										
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma										
Overall Incidence	Total	5/50 (10%) 9/100 (9%)	4/50 (8%) Mean 9%	SD 1.41%	Total	0/50 (0%) 1/100 (1%)	1/50 (2%) Mean 1%	SD 1.41%		
#Skin:										
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma										
Overall Incidence	Total	5/50 (10%) 8/100 (8%)	3/50 (6%) Mean 8%	SD 2.83%	Total	0/50 (0%) 1/100 (1%)	1/50 (2%) Mean 1%	SD 1.41%		
#Skin:										
Trichoepithelioma										
Overall Incidence	Total	0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0%	SD 0%	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: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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		Male				Female			
#Skin: Sebaceous Gland:									
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: Sebaceous Gland:									
Carcinoma or 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%
.....									
#Spinal Cord:									
Astrocytoma 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%
.....									
#Spinal Cord:									
Astrocytoma 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%
.....									
#Spinal Cord:									
Glioma 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%
.....									
*Spleen:									
Fibrosarcoma									
		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: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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 Report Date: 05/18/2011

		Male				Female			
*Spleen:									
Fibrous Histiocytoma									
		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%
.....									
*Spleen:									
Hemangiosarcoma									
		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%
.....									
*Spleen:									
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%
.....									
*Spleen:									
Sarcoma									
		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%
.....									
#Stomach, Forestomach:									
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%
.....									
#Stomach, Forestomach:									
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%	0/100	(0%)	Mean 0%	SD 0%

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

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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		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%
.....									
#Stomach, Glandular:									
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%
.....									
#Stomach, Glandular:									
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%
.....									
#Stomach, Glandular:									
Lipoma									
		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%
.....									
#Stomach, Glandular:									
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

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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		Male				Female			
*Testes:									
Adenoma									
		35/50	(70%)	48/50	(96%)				
Overall Incidence	Total	83/100	(83%)	Mean 83%	SD 18.38%				
.....									
*Testes:									
Hemangioma									
		0/50	(0%)	0/50	(0%)				
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%				
.....									
*Thymus:									
Thymoma Benign									
		0/49	(0%)	0/48	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/97	(0%)	Mean 0%	SD 0%	Total 0/99	(0%)	Mean 0%	SD 0%
.....									
*Thymus:									
Thymoma Malignant									
		0/49	(0%)	0/48	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/97	(0%)	Mean 0%	SD 0%	Total 0/99	(0%)	Mean 0%	SD 0%
.....									
*Thymus:									
Thymoma NOS									
		0/49	(0%)	0/48	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/97	(0%)	Mean 0%	SD 0%	Total 0/99	(0%)	Mean 0%	SD 0%
.....									
*Thymus:									
Thymoma: Benign, Malignant, NOS									
		0/49	(0%)	0/48	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/97	(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: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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		Male				Female			
*Thyroid Gland: C-Cell: Adenoma									
		12/50 (24%)	5/50 (10%)			10/50 (20%)	8/50 (16%)		
Overall Incidence	Total	17/100 (17%)	Mean 17%	SD 9.9%	Total	18/100 (18%)	Mean 18%	SD 2.83%	
.....									
*Thyroid Gland: C-Cell: Carcinoma									
		1/50 (2%)	1/50 (2%)			1/50 (2%)	2/50 (4%)		
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 0%	Total	3/100 (3%)	Mean 3%	SD 1.41%	
.....									
*Thyroid Gland: C-Cell: Carcinoma or Adenoma									
		13/50 (26%)	6/50 (12%)			11/50 (22%)	10/50 (20%)		
Overall Incidence	Total	19/100 (19%)	Mean 19%	SD 9.9%	Total	21/100 (21%)	Mean 21%	SD 1.41%	
.....									
*Thyroid Gland: Follicular 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%	
.....									
*Thyroid Gland: Follicular 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: Follicular Cell: 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%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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		Male				Female			
#Tissue NOS:									
Paranglioma									
		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%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1% SD 1.41%
.....									
#Tongue:									
Squamous Cell Papilloma									
		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%
.....									
#Tooth:									
Adamantinoma 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%
.....									
#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%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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		Male				Female			
*Urinary Bladder:									
 Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/99	(0%)	Mean 0%	SD 0%
.....									
*Urinary Bladder:									
 Carcinoma or Papilloma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/99	(0%)	Mean 0%	SD 0%
.....									
*Urinary Bladder:									
 Hemangiosarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/99	(0%)	Mean 0%	SD 0%
.....									
*Urinary Bladder:									
 Papilloma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/99	(0%)	Mean 0%	SD 0%
.....									
#Uterus:									
 Adenoma									
						0/50	(0%)	1/50	(2%)
Overall Incidence	Total					1/100	(1%)	Mean 1%	SD 1.41%
.....									
#Uterus:									
 Carcinoma									
						1/50	(2%)	0/50	(0%)
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: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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	Male	Female
#Uterus: Deciduoma Benign		
Overall Incidence	Total 0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0% SD 0%
#Uterus: Leiomyosarcoma		
Overall Incidence	Total 1/50 (2%) 1/100 (1%)	0/50 (0%) Mean 1% SD 1.41%
#Uterus: Polyp Stromal		
Overall Incidence	Total 8/50 (16%) 18/100 (18%)	10/50 (20%) Mean 18% SD 2.83%
#Uterus: Sarcoma		
Overall Incidence	Total 0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0% SD 0%
#Uterus: Sarcoma Stromal		
Overall Incidence	Total 0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0% SD 0%
#Uterus: Sarcoma Stromal or Polyp Stromal		
Overall Incidence	Total 8/50 (16%) 18/100 (18%)	10/50 (20%) Mean 18% SD 2.83%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: May2011
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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

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Male					Female												
#Uterus:																	
Schwannoma Malignant																	
					0/50	(0%)			0/50	(0%)							
Overall Incidence					Total	0/100	(0%)	Mean	0%	SD 0%							
.....																	
#Vagina:																	
Polyp																	
					1/50	(2%)			0/50	(0%)							
Overall Incidence					Total	1/100	(1%)	Mean	1%	SD 1.41%							
.....																	
#Vagina:																	
Sarcoma																	
					0/50	(0%)			0/50	(0%)							
Overall Incidence					Total	0/100	(0%)	Mean	0%	SD 0%							
.....																	
#Vagina:																	
Schwannoma Malignant																	
					0/50	(0%)			0/50	(0%)							
Overall Incidence					Total	0/100	(0%)	Mean	0%	SD 0%							
.....																	
#Zymbal's Gland:																	
Adenoma																	
		0/50	(0%)	0/50	(0%)			0/50	(0%)								
Overall Incidence		Total	0/100	(0%)	Mean	0%	SD	0%	Total	0/50	(0%)	0/50	(0%)	Mean	0%	SD	0%
.....																	
#Zymbal's Gland:																	
Carcinoma																	
		1/50	(2%)	0/50	(0%)			0/50	(0%)								
Overall Incidence		Total	1/100	(1%)	Mean	1%	SD	1.41%	Total	0/50	(0%)	1/50	(2%)	Mean	1%	SD	1.41%

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

Version: May2011
Contract/Lab: All Laboratories
Species: RATS
Strain: F 344/N
Length of Study: CHRONIC

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

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	Male				Female			
#Zymbal's Gland:								
Carcinoma or Adenoma		1/50 (2%)	0/50 (0%)		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%

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