



National Toxicology Program
Department of Health and Human Services

NTP Historical Controls Report

By Route and Vehicle

F 344/N RATS

June 2013

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.

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Version: Jun2013
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: GAVAGE
Vehicle: CORN OIL

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Report Date: 06/05/2013

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	059903103	03/23/05	727	50(3)	38(706)	512.7	Ginkgo biloba extract
Battelle Columbus Laboratory	052000705	08/18/04	727	49(3)	34(692)	515.2	Kava kava extract
Battelle Columbus Laboratory	052010703	10/20/04	727	50(3)	37(702)	503.5	N,N-Dimethyl-p-toluidine
Female							
Battelle Columbus Laboratory	059903103	03/24/05	728	50(5)	37(700)	350.7	Ginkgo biloba extract
Battelle Columbus Laboratory	052000705	08/19/04	728	50(5)	34(683)	354.3	Kava kava extract
Battelle Columbus Laboratory	052010703	10/21/04	728	50(5)	33(704)	354.1	N,N-Dimethyl-p-toluidine

Version: Jun2013
 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: GAVAGE
 Vehicle: CORN OIL

Page: 5
 Report Date: 06/05/2013

		Male			Female		
#All Organs:							
Benign Tumors							
		50/50 (100%)	49/49 (100%)	48/50 (96%)	47/50 (94%)	43/50 (86%)	46/50 (92%)
Overall Incidence	Total	147/149 (98.66%)	Mean 98.67%	SD 2.31%	Total	136/150 (90.67%)	Mean 90.67% SD 4.16%
.....							
#All Organs:							
Malignant Tumors							
		13/50 (26%)	17/49 (35%)	20/50 (40%)	12/50 (24%)	11/50 (22%)	23/50 (46%)
Overall Incidence	Total	50/149 (33.56%)	Mean 33.56%	SD 7.07%	Total	46/150 (30.67%)	Mean 30.67% SD 13.32%
.....							
#All Organs:							
Malignant and Benign Tumors							
		50/50 (100%)	49/49 (100%)	49/50 (98%)	49/50 (98%)	46/50 (92%)	49/50 (98%)
Overall Incidence	Total	148/149 (99.33%)	Mean 99.33%	SD 1.15%	Total	144/150 (96%)	Mean 96% SD 3.46%
.....							
#All Organs:							
Hemangioma							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma or Hemangioma							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% 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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

Page: 6
 Report Date: 06/05/2013

		Male			Female			
#All Organs:								
Histiocytic Sarcoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#All Organs:								
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated								
		9/50 (18%)	7/49 (14%)	14/50 (28%)	8/50 (16%)	5/50 (10%)	15/50 (30%)	
Overall Incidence	Total	30/149 (20.13%)	Mean 20.1%	SD 7.09%	Total	28/150 (18.67%)	Mean 18.67%	SD 10.26%
.....								
#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%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
#All Organs:								
Mesothelioma: Benign, Malignant, NOS								
		3/50 (6%)	3/49 (6%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	7/149 (4.7%)	Mean 4.71%	SD 2.35%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#All Organs:								
Mesothelioma: Malignant								
		3/50 (6%)	3/49 (6%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	7/149 (4.7%)	Mean 4.71%	SD 2.35%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#All Organs:								
Osteoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

Page: 7
 Report Date: 06/05/2013

		Male			Female		
#All Organs:							
Osteosarcoma							
		0/50 (0%)	1/49 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	2/149 (1.34%)	Mean 1.35%	SD 1.17%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Osteosarcoma or Osteoma							
		0/50 (0%)	1/49 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	2/149 (1.34%)	Mean 1.35%	SD 1.17%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Adrenal Cortex:							
Adenoma							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	3/50 (6%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	3/150 (2%)	Mean 2% SD 3.46%
.....							
*Adrenal Cortex:							
Carcinoma							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma Benign							
		11/50 (22%)	5/49 (10%)	6/50 (12%)	2/50 (4%)	3/50 (6%)	2/50 (4%)
Overall Incidence	Total	22/149 (14.77%)	Mean 14.73%	SD 6.36%	Total	7/150 (4.67%)	Mean 4.67% SD 1.15%
.....							
*Adrenal Medulla:							
Pheochromocytoma Complex							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% 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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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 Report Date: 06/05/2013

		Male			Female		
*Adrenal Medulla:							
Pheochromocytoma Malignant							
		2/50 (4%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	3/149 (2.01%)	Mean 2%	SD 2%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma: Benign, Complex, Malignant, NOS							
		12/50 (24%)	5/49 (10%)	8/50 (16%)	2/50 (4%)	3/50 (6%)	2/50 (4%)
Overall Incidence	Total	25/149 (16.78%)	Mean 16.73%	SD 6.93%	Total	7/150 (4.67%)	Mean 4.67% SD 1.15%
.....							
#Blood Vessel:							
Leiomyosarcoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Bone:							
Chordoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Bone:							
Osteoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Bone:							
Osteosarcoma							
		0/50 (0%)	1/49 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	2/149 (1.34%)	Mean 1.35%	SD 1.17%	Total	0/150 (0%)	Mean 0% 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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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 Report Date: 06/05/2013

		Male			Female		
#Bone:							
Osteosarcoma or Osteoma							
		0/50 (0%)	1/49 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	2/149 (1.34%)	Mean 1.35%	SD 1.17%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Brain:							
Glioma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Brain:							
Glioma Benign							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Brain:							
Glioma Malignant							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Brain:							
Oligodendroglioma, Glioma, or Astrocytoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Brain:							
Osteosarcoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% 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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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 Report Date: 06/05/2013

		Male			Female		
*Clitoral/Preputial Gland: Adenoma							
		4/50 (8%)	0/49 (0%)	0/50 (0%)	5/50 (10%)	2/50 (4%)	5/50 (10%)
Overall Incidence	Total	4/149 (2.68%)	Mean 2.67%	SD 4.62%	Total	12/150 (8%)	Mean 8% SD 3.46%
.....							
*Clitoral/Preputial Gland: Carcinoma							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	2/50 (4%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	2/150 (1.33%)	Mean 1.33% SD 2.31%
.....							
*Clitoral/Preputial Gland: Carcinoma or Adenoma							
		4/50 (8%)	1/49 (2%)	0/50 (0%)	5/50 (10%)	4/50 (8%)	5/50 (10%)
Overall Incidence	Total	5/149 (3.36%)	Mean 3.35%	SD 4.16%	Total	14/150 (9.33%)	Mean 9.33% SD 1.15%
.....							
*Clitoral/Preputial Gland: Sarcoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Ear: Neural Crest Tumor							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	1/50 (2%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	2/150 (1.33%)	Mean 1.33% SD 1.15%
.....							
#Eye: Melanoma Benign							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67% SD 1.15%

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

Version: Jun2013
 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: GAVAGE
Vehicle: CORN OIL

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 Report Date: 06/05/2013

		Male			Female			
#Eye:								
Melanoma Malignant								
Overall Incidence	Total	0/50 (0%) 0/149 (0%)	0/49 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%
#Harderian Gland:								
Adenoma								
Overall Incidence	Total	0/50 (0%) 0/149 (0%)	0/49 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%
#Harderian Gland:								
Carcinoma								
Overall Incidence	Total	0/50 (0%) 0/149 (0%)	0/49 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%
#Harderian Gland:								
Carcinoma or Adenoma								
Overall Incidence	Total	0/50 (0%) 0/149 (0%)	0/49 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%
*Heart:								
Schwannoma Benign								
Overall Incidence	Total	0/50 (0%) 0/149 (0%)	0/49 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%
*Heart:								
Schwannoma Malignant								
Overall Incidence	Total	0/50 (0%) 0/149 (0%)	0/49 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) 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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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 Report Date: 06/05/2013

		Male				Female					
#Intestine Large: Colon/Rectum:											
Adenoma											
		0/50	(0%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/149	(0%)	Mean 0%	SD 0%	Total	0/150	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Large: Colon/Rectum:											
Carcinoma or Adenoma											
		0/50	(0%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/149	(0%)	Mean 0%	SD 0%	Total	0/150	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Duodenum:											
Leiomyoma											
		0/50	(0%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/149	(0%)	Mean 0%	SD 0%	Total	0/150	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Duodenum:											
Schwannoma Malignant											
		0/50	(0%)	0/49	(0%)	0/50	(0%)	1/50	(2%)	0/50	(0%)
Overall Incidence	Total	0/149	(0%)	Mean 0%	SD 0%	Total	1/150	(0.67%)	Mean 0.67%	SD 1.15%	
.....											
#Intestine Small: Ileum:											
Adenoma											
		0/50	(0%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/149	(0%)	Mean 0%	SD 0%	Total	0/150	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Jejunum:											
Carcinoma											
		0/50	(0%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/149	(0%)	Mean 0%	SD 0%	Total	0/150	(0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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		Male			Female			
#Intestine Small: Jejunum:								
Leiomyoma								
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#Intestine Small: Jejunum:								
Leiomyosarcoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
#Intestine Small: Site Unspecified:								
Adenoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#Intestine Small: Site Unspecified:								
Carcinoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#Intestine Small: Site Unspecified:								
Carcinoma or Adenoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#Intestine Small: Site Unspecified:								
Leiomyoma								
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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 Report Date: 06/05/2013

		Male			Female			
#Intestine Small: Site Unspecified:								
Leiomyosarcoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
#Intestine Small: Site Unspecified:								
Schwannoma Malignant								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
*Islets, Pancreatic:								
Adenoma								
		4/50 (8%)	4/49 (8%)	2/50 (4%)	1/50 (2%)	1/50 (2%)	0/50 (0%)	
Overall Incidence	Total	10/149 (6.71%)	Mean 6.72%	SD 2.36%	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%
.....								
*Islets, Pancreatic:								
Carcinoma								
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
*Islets, Pancreatic:								
Carcinoma or Adenoma								
		4/50 (8%)	4/49 (8%)	3/50 (6%)	1/50 (2%)	1/50 (2%)	0/50 (0%)	
Overall Incidence	Total	11/149 (7.38%)	Mean 7.39%	SD 1.2%	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%
.....								
*Kidney: Pelvis and Transitional Epithelium:								
Papilloma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
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		Male			Female		
*Kidney: Renal Tubule: Adenoma							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Carcinoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Carcinoma or Adenoma							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Lipoma							
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Mesenchymal Tumor Malignant							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Sarcoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% 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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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		Male			Female		
*Liver:							
Hepatocellular Adenoma							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Liver:							
Hepatocellular Carcinoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Liver:							
Hepatocellular Carcinoma or Hepatoblastoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Liver:							
Hepatocellular Carcinoma or Hepatocellular Adenoma							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Liver:							
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Liver:							
Ito Cell Tumor Benign							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% 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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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 Vehicle: CORN OIL

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		Male			Female			
*Lung:								
Alveolar/Bronchiolar Adenoma								
		1/50 (2%)	2/49 (4%)	0/50 (0%)	4/50 (8%)	0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	3/149 (2.01%)	Mean 2.03%	SD 2.04%	Total	5/150 (3.33%)	Mean 3.33%	SD 4.16%
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma								
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma								
		1/50 (2%)	2/49 (4%)	0/50 (0%)	4/50 (8%)	0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	3/149 (2.01%)	Mean 2.03%	SD 2.04%	Total	5/150 (3.33%)	Mean 3.33%	SD 4.16%
.....								
*Lung:								
Fibrosarcoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
#Mammary Gland:								
Adenolipoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
#Mammary Gland:								
Adenoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	2/50 (4%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	2/150 (1.33%)	Mean 1.33%	SD 2.31%

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

Version: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
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		Male				Female			
#Mammary Gland: Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	1/50 (2%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%	
.....									
#Mammary Gland: Carcinoma or Adenoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	3/50 (6%)	1/50 (2%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	4/150 (2.67%)	Mean 2.67%	SD 3.06%	
.....									
#Mammary Gland: Fibroadenoma									
		2/50 (4%)	0/49 (0%)	0/50 (0%)		23/50 (46%)	24/50 (48%)	29/50 (58%)	
Overall Incidence	Total	2/149 (1.34%)	Mean 1.33%	SD 2.31%	Total	76/150 (50.67%)	Mean 50.67%	SD 6.43%	
.....									
#Mammary Gland: Fibroma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
#Mammary Gland: Fibroma, Fibroadenoma or Adenoma									
		2/50 (4%)	0/49 (0%)	0/50 (0%)		23/50 (46%)	25/50 (50%)	29/50 (58%)	
Overall Incidence	Total	2/149 (1.34%)	Mean 1.33%	SD 2.31%	Total	77/150 (51.33%)	Mean 51.33%	SD 6.11%	
.....									
#Mammary Gland: Fibroma, Fibroadenoma, Carcinoma, or Adenoma									
		2/50 (4%)	0/49 (0%)	0/50 (0%)		23/50 (46%)	26/50 (52%)	30/50 (60%)	
Overall Incidence	Total	2/149 (1.34%)	Mean 1.33%	SD 2.31%	Total	79/150 (52.67%)	Mean 52.67%	SD 7.02%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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 Tumor Incidence for Selected Control Animal Groups
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		Male				Female			
#Mesentery:									
Fibrous Histiocytoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
#Mesentery:									
Schwannoma Malignant									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
*Nose:									
Adenoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/149 (0%)	Mean 0%	SD 0%	
.....									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Papilloma Squamous or Papilloma									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	
.....									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Squamous Cell Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (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%)	1/50 (2%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: GAVAGE
 Vehicle: CORN OIL

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		Male			Female			
#Oral Mucosa:								
Squamous Cell Carcinoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#Oral Mucosa:								
Squamous Cell Papilloma								
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
*Ovary:								
Cystadenoma								
					0/50 (0%)	1/50 (2%)	0/50 (0%)	
Overall Incidence					Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
*Ovary:								
Fibrosarcoma								
					0/50 (0%)	0/50 (0%)	1/50 (2%)	
Overall Incidence					Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
*Ovary:								
Granulosa Cell Tumor Benign								
					0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence					Total	0/150 (0%)	Mean 0%	SD 0%
.....								
*Ovary:								
Granulosa Cell Tumor Malignant								
					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

Version: Jun2013
 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
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				Male					Female
*Ovary:									
Granulosa Cell Tumor: Benign, Malignant, NOS									
				0/50 (0%)					0/50 (0%)
				0/50 (0%)					0/50 (0%)
Overall Incidence				Total	0/150 (0%)	Mean 0%		0/50 (0%)	SD 0%
.....									
*Ovary:									
Granulosa-Theca Tumor Malignant									
				0/50 (0%)					0/50 (0%)
				0/50 (0%)					0/50 (0%)
Overall Incidence				Total	0/150 (0%)	Mean 0%		0/50 (0%)	SD 0%
.....									
*Ovary:									
Schwannoma Malignant									
				0/50 (0%)					0/50 (0%)
				0/50 (0%)					0/50 (0%)
Overall Incidence				Total	0/150 (0%)	Mean 0%		0/50 (0%)	SD 0%
.....									
*Ovary:									
Sertoli Cell Tumor Malignant									
				0/50 (0%)					0/50 (0%)
				0/50 (0%)					0/50 (0%)
Overall Incidence				Total	0/150 (0%)	Mean 0%		0/50 (0%)	SD 0%
.....									
*Ovary:									
Tubulostromal Adenoma									
				1/50 (2%)					0/50 (0%)
				1/50 (2%)					0/50 (0%)
Overall Incidence				Total	1/150 (0.67%)	Mean 0.67%		0/50 (0%)	SD 1.15%
.....									
*Pancreas:									
Adenoma									
		0/50 (0%)	1/49 (2%)		0/50 (0%)				0/50 (0%)
		0/50 (0%)	1/49 (2%)		0/50 (0%)				0/50 (0%)
Overall Incidence		Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
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		Male			Female			
*Pancreas:								
Carcinoma or Adenoma								
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
*Pancreas:								
Mixed Tumor Benign								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
*Parathyroid Gland:								
Adenoma								
		0/47 (0%)	1/49 (2%)	0/49 (0%)	1/38 (3%)	0/44 (0%)	0/50 (0%)	
Overall Incidence	Total	1/145 (0.69%)	Mean 0.68%	SD 1.18%	Total	1/132 (0.76%)	Mean 0.88%	SD 1.52%
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Adenoma								
		38/50 (76%)	21/49 (43%)	23/50 (46%)	34/50 (68%)	29/50 (58%)	31/50 (62%)	
Overall Incidence	Total	82/149 (55.03%)	Mean 54.95%	SD 18.3%	Total	94/150 (62.67%)	Mean 62.67%	SD 5.03%
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Carcinoma								
		0/50 (0%)	0/49 (0%)	1/50 (2%)	2/50 (4%)	1/50 (2%)	0/50 (0%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	3/150 (2%)	Mean 2%	SD 2%
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Carcinoma or Adenoma								
		38/50 (76%)	21/49 (43%)	24/50 (48%)	36/50 (72%)	30/50 (60%)	31/50 (62%)	
Overall Incidence	Total	83/149 (55.7%)	Mean 55.62%	SD 17.84%	Total	97/150 (64.67%)	Mean 64.67%	SD 6.43%

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

Version: Jun2013
 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
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		Male			Female		
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Ganglioneuroma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Pituitary Gland: Pars Intermedia:							
Adenoma							
		1/50 (2%)	0/49 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	1/150 (0.67%)	Mean 0.67% SD 1.15%
.....							
*Pituitary Gland: Pars Intermedia:							
Carcinoma or Adenoma							
		1/50 (2%)	0/49 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	1/150 (0.67%)	Mean 0.67% SD 1.15%
.....							
*Pituitary Gland: Pars Nervosa:							
Craniopharyngioma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Prostate:							
Adenoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)			
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%			
.....							
*Prostate:							
Carcinoma or Adenoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)			
Overall Incidence	Total	0/149 (0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

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		Male			Female		
*Salivary Glands:							
 Carcinoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Salivary Glands:							
 Carcinoma or Adenoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Salivary Glands:							
 Sarcoma							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Salivary Glands:							
 Schwannoma Malignant							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Seminal Vesicle:							
 Adenoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)			
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%			
.....							
#Skeletal Muscle:							
 Fibrous Histiocytoma							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0% 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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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		Male			Female			
#Skeletal Muscle:								
Lipoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Basal Cell Adenoma								
		1/50 (2%)	2/49 (4%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	4/149 (2.68%)	Mean 2.69%	SD 1.2%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Basal Cell Adenoma or Basosquamous Tumor Benign								
		1/50 (2%)	2/49 (4%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	4/149 (2.68%)	Mean 2.69%	SD 1.2%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma								
		1/50 (2%)	2/49 (4%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	4/149 (2.68%)	Mean 2.69%	SD 1.2%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Basal Cell Carcinoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
#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%)	1/50 (2%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%

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

Version: Jun2013
 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: GAVAGE
 Vehicle: CORN OIL

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	Male					Female				
#Skin:										
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma										
Overall Incidence	Total	1/50 (2%)	2/49 (4%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	1/50 (2%)		
		4/149 (2.68%)	Mean 2.69%	SD 1.2%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%		
#Skin:										
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma										
Overall Incidence	Total	2/50 (4%)	2/49 (4%)	4/50 (8%)		1/50 (2%)	0/50 (0%)	2/50 (4%)		
		8/149 (5.37%)	Mean 5.36%	SD 2.29%	Total	3/150 (2%)	Mean 2%	SD 2%		
#Skin:										
Fibroma										
Overall Incidence	Total	1/50 (2%)	7/49 (14%)	6/50 (12%)		1/50 (2%)	1/50 (2%)	1/50 (2%)		
		14/149 (9.4%)	Mean 9.43%	SD 6.53%	Total	3/150 (2%)	Mean 2%	SD 0%		
#Skin:										
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma										
Overall Incidence	Total	2/50 (4%)	7/49 (14%)	6/50 (12%)		1/50 (2%)	1/50 (2%)	4/50 (8%)		
		15/149 (10.07%)	Mean 10.1%	SD 5.4%	Total	6/150 (4%)	Mean 4%	SD 3.46%		
#Skin:										
Fibrosarcoma										
Overall Incidence	Total	0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	3/50 (6%)		
		0/149 (0%)	Mean 0%	SD 0%	Total	3/150 (2%)	Mean 2%	SD 3.46%		
#Skin:										
Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma										
Overall Incidence	Total	1/50 (2%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	3/50 (6%)		
		1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	3/150 (2%)	Mean 2%	SD 3.46%		

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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
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		Male			Female			
#Skin:								
Fibrous Histiocytoma								
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Hemangiosarcoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Keratoacanthoma								
		2/50 (4%)	0/49 (0%)	3/50 (6%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	5/149 (3.36%)	Mean 3.33%	SD 3.06%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
#Skin:								
Lipoma								
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Liposarcoma								
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
#Skin:								
Neural Crest Tumor								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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		Male			Female		
#Skin:							
Neurofibroma or Schwannoma benign							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Skin:							
Neurofibrosarcoma or Schwannoma (malignant or NOS)							
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Skin:							
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)							
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (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%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Skin:							
Schwannoma Benign							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Skin:							
Schwannoma Malignant							
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% 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: F 344/N
 Length of Study: CHRONIC

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 Route: GAVAGE
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		Male				Female			
#Skin:									
Squamous Cell Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	
.....									
#Skin:									
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%	
.....									
#Skin:									
Squamous Cell Papilloma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Squamous Cell Papilloma or Papilloma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma									
		2/50 (4%)	0/49 (0%)	3/50 (6%)		1/50 (2%)	0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	5/149 (3.36%)	Mean 3.33%	SD 3.06%	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%	
.....									
#Skin:									
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma									
		2/50 (4%)	0/49 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	5/149 (3.36%)	Mean 3.33%	SD 3.06%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	

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

Version: Jun2013
 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: GAVAGE
 Vehicle: CORN OIL

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		Male			Female		
#Skin:							
Trichoepithelioma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Skin: Sebaceous Gland:							
Adenoma							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Skin: Sebaceous Gland:							
Carcinoma or Adenoma							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Spinal Cord:							
Glioma Malignant							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Stomach, Glandular:							
Carcinoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Stomach, Glandular:							
Carcinoma or Adenoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% 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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
 Vehicle: CORN OIL

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		Male			Female			
#Stomach, Glandular:								
Sarcoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
*Testes:								
Adenoma								
		37/50 (74%)	37/49 (76%)	40/50 (80%)				
Overall Incidence	Total	114/149 (76.51%)	Mean 76.5%	SD 3.12%				
.....								
*Testes:								
Hemangioma								
		0/50 (0%)	0/49 (0%)	1/50 (2%)				
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%				
.....								
*Thymus:								
Thymoma Benign								
		1/47 (2%)	0/48 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/47 (0%)	
Overall Incidence	Total	1/145 (0.69%)	Mean 0.71%	SD 1.23%	Total	1/147 (0.68%)	Mean 0.67%	SD 1.15%
.....								
*Thymus:								
Thymoma Malignant								
		0/47 (0%)	0/48 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/47 (0%)	
Overall Incidence	Total	0/145 (0%)	Mean 0%	SD 0%	Total	0/147 (0%)	Mean 0%	SD 0%
.....								
*Thymus:								
Thymoma NOS								
		0/47 (0%)	0/48 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/47 (0%)	
Overall Incidence	Total	0/145 (0%)	Mean 0%	SD 0%	Total	0/147 (0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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		Male			Female			
*Thymus:								
Thymoma: Benign, Malignant, NOS								
		1/47 (2%)	0/48 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/47 (0%)	
Overall Incidence	Total	1/145 (0.69%)	Mean 0.71%	SD 1.23%	Total	1/147 (0.68%)	Mean 0.67%	SD 1.15%
.....								
*Thyroid Gland: C-Cell:								
Adenoma								
		10/50 (20%)	8/49 (16%)	11/50 (22%)	11/49 (22%)	5/50 (10%)	9/49 (18%)	
Overall Incidence	Total	29/149 (19.46%)	Mean 19.44%	SD 2.88%	Total	25/148 (16.89%)	Mean 16.94%	SD 6.35%
.....								
*Thyroid Gland: C-Cell:								
Carcinoma								
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/49 (0%)	0/50 (0%)	0/49 (0%)	
Overall Incidence	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/148 (0%)	Mean 0%	SD 0%
.....								
*Thyroid Gland: C-Cell:								
Carcinoma or Adenoma								
		11/50 (22%)	8/49 (16%)	11/50 (22%)	11/49 (22%)	5/50 (10%)	9/49 (18%)	
Overall Incidence	Total	30/149 (20.13%)	Mean 20.11%	SD 3.28%	Total	25/148 (16.89%)	Mean 16.94%	SD 6.35%
.....								
*Thyroid Gland: Follicular Cell:								
Adenoma								
		2/50 (4%)	1/49 (2%)	1/50 (2%)	1/49 (2%)	1/50 (2%)	1/49 (2%)	
Overall Incidence	Total	4/149 (2.68%)	Mean 2.68%	SD 1.14%	Total	3/148 (2.03%)	Mean 2.03%	SD 0.02%
.....								
*Thyroid Gland: Follicular Cell:								
Carcinoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/49 (0%)	0/50 (0%)	0/49 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/148 (0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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		Male			Female			
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma								
		2/50 (4%)	1/49 (2%)	1/50 (2%)	1/49 (2%)	1/50 (2%)	1/49 (2%)	
Overall Incidence	Total	4/149 (2.68%)	Mean 2.68%	SD 1.14%	Total	3/148 (2.03%)	Mean 2.03%	SD 0.02%
.....								
#Tongue: Squamous Cell Carcinoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (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%)	1/50 (2%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
#Tongue: Squamous Cell Papilloma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
#Tooth: Adamantinoma Malignant								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
*Urinary Bladder: Carcinoma								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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		Male			Female		
*Urinary Bladder:							
 Carcinoma or Papilloma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67% SD 1.15%
.....							
*Urinary Bladder:							
 Hemangiosarcoma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
*Urinary Bladder:							
 Papilloma							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
Overall Incidence	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67% SD 1.15%
.....							
#Uterus:							
 Adenoma							
					0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence					Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Uterus:							
 Carcinoma							
					0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence					Total	0/150 (0%)	Mean 0% SD 0%
.....							
#Uterus:							
 Leiomyosarcoma							
					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

Version: Jun2013
 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: GAVAGE
 Vehicle: CORN OIL

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	Male	Female
#Uterus: Polyp Stromal		
	3/50 (6%)	7/50 (14%)
Overall Incidence	Total 13/150 (8.67%)	Mean 8.67% SD 4.62%
#Uterus: Sarcoma		
	0/50 (0%)	0/50 (0%)
Overall Incidence	Total 0/150 (0%)	Mean 0% SD 0%
#Uterus: Sarcoma Stromal		
	0/50 (0%)	1/50 (2%)
Overall Incidence	Total 1/150 (0.67%)	Mean 0.67% SD 1.15%
#Uterus: Sarcoma Stromal or Polyp Stromal		
	3/50 (6%)	7/50 (14%)
Overall Incidence	Total 13/150 (8.67%)	Mean 8.67% SD 4.62%
#Uterus: Schwannoma Malignant		
	1/50 (2%)	0/50 (0%)
Overall Incidence	Total 1/150 (0.67%)	Mean 0.67% SD 1.15%
#Vagina: Polyp		
	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

Version: Jun2013
 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: GAVAGE
 Vehicle: CORN OIL

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 Report Date: 06/05/2013

Male					Female						
#Vagina:											
Sarcoma											
					0/50	(0%)	0/50	(0%)	0/50	(0%)	
Overall Incidence					Total	0/150	(0%)	Mean 0%	SD 0%		
.....											
#Vagina:											
Schwannoma Malignant											
					0/50	(0%)	0/50	(0%)	1/50	(2%)	
Overall Incidence					Total	1/150	(0.67%)	Mean 0.67%	SD 1.15%		
.....											
#Zymbal's Gland:											
Adenoma											
		0/50	(0%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence		Total	0/149	(0%)	Mean 0%	SD 0%	Total	0/150	(0%)	Mean 0%	SD 0%
.....											
#Zymbal's Gland:											
Carcinoma											
		1/50	(2%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence		Total	1/149	(0.67%)	Mean 0.67%	SD 1.15%	Total	0/150	(0%)	Mean 0%	SD 0%
.....											
#Zymbal's Gland:											
Carcinoma or Adenoma											
		1/50	(2%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence		Total	1/149	(0.67%)	Mean 0.67%	SD 1.15%	Total	0/150	(0%)	Mean 0%	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: F 344/N
Length of Study: CHRONIC

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

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Report Date: 06/05/2013

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							
Southern Research Institute	059903705	06/09/03	729	50(3)	27(662)	523.0	alpha/beta Thujone mixture
Female							
Southern Research Institute	059903705	06/09/03	730	50(5)	35(689)	335.4	alpha/beta Thujone mixture

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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 Report Date: 06/05/2013

		Male			Female		
#All Organs:							
Benign Tumors							
		44/50 (88%)			46/50 (92%)		
Overall Incidence	Total	44/50 (88%)	Mean 88%	SD 0%	Total	46/50 (92%)	Mean 92% SD 0%
.....							
#All Organs:							
Malignant Tumors							
		31/50 (62%)			20/50 (40%)		
Overall Incidence	Total	31/50 (62%)	Mean 62%	SD 0%	Total	20/50 (40%)	Mean 40% SD 0%
.....							
#All Organs:							
Malignant and Benign Tumors							
		48/50 (96%)			49/50 (98%)		
Overall Incidence	Total	48/50 (96%)	Mean 96%	SD 0%	Total	49/50 (98%)	Mean 98% SD 0%
.....							
#All Organs:							
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%
.....							
#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							
		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: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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 Report Date: 06/05/2013

	Male				Female			
#All Organs:								
Histiocytic Sarcoma								
		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								
		22/50 (44%)			10/50 (20%)			
Overall Incidence	Total	22/50 (44%)	Mean 44%	SD 0%	Total	10/50 (20%)	Mean 20%	SD 0%
.....								
#All Organs:								
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type								
		0/50 (0%)			1/50 (2%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	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%
.....								
#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:								
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

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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 Report Date: 06/05/2013

	Male				Female			
#All Organs:								
Osteosarcoma								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
#All Organs:								
Osteosarcoma or Osteoma								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
*Adrenal Cortex:								
Adenoma								
		1/50	(2%)			1/47	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/47	(2.13%)
.....								
*Adrenal Cortex:								
Carcinoma								
		0/50	(0%)			0/47	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/47	(0%)
.....								
*Adrenal Medulla:								
Pheochromocytoma Benign								
		6/50	(12%)			2/48	(4%)	
Overall Incidence	Total	6/50	(12%)	Mean 12%	SD 0%	Total	2/48	(4.17%)
.....								
*Adrenal Medulla:								
Pheochromocytoma Complex								
		0/50	(0%)			1/48	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/48	(2.08%)
.....								

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

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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 Report Date: 06/05/2013

		Male			Female		
*Adrenal Medulla:							
Pheochromocytoma Malignant							
		0/50 (0%)			0/48 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/48 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
Pheochromocytoma: Benign, Complex, Malignant, NOS							
		6/50 (12%)			3/48 (6%)		
Overall Incidence	Total	6/50 (12%)	Mean 12%	SD 0%	Total	3/48 (6.25%)	Mean 6.25% SD 0%
.....							
#Blood Vessel:							
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%
.....							
#Bone:							
Chordoma							
		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:							
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%
.....							
#Bone:							
Osteosarcoma							
		1/50 (2%)			1/50 (2%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	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

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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 Report Date: 06/05/2013

	Male				Female			
#Bone:								
Osteosarcoma or Osteoma								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
*Brain:								
Glioma								
		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:								
Glioma 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:								
Glioma 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%
.....								
*Brain:								
Oligodendroglioma, Glioma, or Astrocytoma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
*Brain:								
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%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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 Report Date: 06/05/2013

	Male				Female			
*Clitoral/Preputial Gland: Adenoma								
Overall Incidence	Total	2/49 (4%)	Mean 4.08%	SD 0%	Total	12/50 (24%)	Mean 24%	SD 0%
.....								
*Clitoral/Preputial Gland: Carcinoma								
Overall Incidence	Total	1/49 (2.04%)	Mean 2.04%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
.....								
*Clitoral/Preputial Gland: Carcinoma or Adenoma								
Overall Incidence	Total	3/49 (6.12%)	Mean 6.12%	SD 0%	Total	14/50 (28%)	Mean 28%	SD 0%
.....								
*Clitoral/Preputial Gland: Sarcoma								
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Ear: Neural Crest Tumor								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Eye: Melanoma Benign								
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: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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		Male			Female		
#Eye:							
Melanoma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Harderian Gland:							
Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Harderian Gland:							
Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Harderian Gland:							
Carcinoma or Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Heart:							
Schwannoma Benign							
		2/50	(4%)		0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)
.....							
*Heart:							
Schwannoma Malignant							
		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

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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 Report Date: 06/05/2013

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

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

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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 Report Date: 06/05/2013

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

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

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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 Report Date: 06/05/2013

		Male			Female		
#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%)
.....							
#Intestine Small: Site Unspecified:							
Schwannoma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Islets, Pancreatic:							
Adenoma							
		1/50	(2%)		1/49	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/49 (2.04%)
.....							
*Islets, Pancreatic:							
Carcinoma							
		2/50	(4%)		0/49	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/49 (0%)
.....							
*Islets, Pancreatic:							
Carcinoma or Adenoma							
		3/50	(6%)		1/49	(2%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	1/49 (2.04%)
.....							
*Kidney: Pelvis and Transitional Epithelium:							
Papilloma							
		0/48	(0%)		0/44	(0%)	
Overall Incidence	Total	0/48	(0%)	Mean 0%	SD 0%	Total	0/44 (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: F 344/N
 Length of Study: CHRONIC

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

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		Male			Female		
*Kidney: Renal Tubule: Adenoma							
		0/48 (0%)			0/44 (0%)		
Overall Incidence	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/44 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Carcinoma							
		0/48 (0%)			0/44 (0%)		
Overall Incidence	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/44 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Carcinoma or Adenoma							
		0/48 (0%)			0/44 (0%)		
Overall Incidence	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/44 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Lipoma							
		0/48 (0%)			0/44 (0%)		
Overall Incidence	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/44 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Mesenchymal Tumor Malignant							
		0/48 (0%)			1/44 (2%)		
Overall Incidence	Total	0/48 (0%)	Mean 0%	SD 0%	Total	1/44 (2.27%)	Mean 2.27% SD 0%
.....							
*Kidney: Renal Tubule: Sarcoma							
		0/48 (0%)			0/44 (0%)		
Overall Incidence	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/44 (0%)	Mean 0% 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: F 344/N
 Length of Study: CHRONIC

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

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		Male			Female		
*Liver:							
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							
		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%)
.....							
*Liver:							
Ito Cell Tumor Benign							
		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

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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

Version: Jun2013
 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: GAVAGE
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		Male			Female		
#Mammary Gland:							
Carcinoma							
		0/50	(0%)			2/50	(4%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50 (4%)
							Mean 4%
							SD 0%
.....							
#Mammary Gland:							
Carcinoma or Adenoma							
		0/50	(0%)			3/50	(6%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	3/50 (6%)
							Mean 6%
							SD 0%
.....							
#Mammary Gland:							
Fibroadenoma							
		3/50	(6%)			26/50	(52%)
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	26/50 (52%)
							Mean 52%
							SD 0%
.....							
#Mammary Gland:							
Fibroma							
		0/50	(0%)			1/50	(2%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%
.....							
#Mammary Gland:							
Fibroma, Fibroadenoma or Adenoma							
		3/50	(6%)			28/50	(56%)
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	28/50 (56%)
							Mean 56%
							SD 0%
.....							
#Mammary Gland:							
Fibroma, Fibroadenoma, Carcinoma, or Adenoma							
		3/50	(6%)			30/50	(60%)
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	30/50 (60%)
							Mean 60%
							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: F 344/N
 Length of Study: CHRONIC

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

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	Male				Female			
#Mesentery:								
Fibrous Histiocytoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Mesentery:								
Schwannoma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Nose:								
Adenoma								
		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):								
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 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%)

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

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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	Male				Female			
#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%)
.....								
#Oral Mucosa:								
Squamous Cell Papilloma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Ovary:								
Cystadenoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Fibrosarcoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Granulosa Cell Tumor Benign								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Granulosa Cell Tumor Malignant								
						1/50	(2%)	
Overall Incidence						Total	1/50	(2%)
.....								

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

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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Male					Female					
*Ovary:										
Granulosa Cell Tumor: Benign, Malignant, NOS										
					1/50	(2%)				
Overall Incidence					Total	1/50 (2%)	Mean	2%	SD	0%
.....										
*Ovary:										
Granulosa-Theca Tumor Malignant										
					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 Malignant										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
*Ovary:										
Tubulostromal Adenoma										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
*Pancreas:										
Adenoma										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
					0/49	(0%)				
Overall Incidence					Total	0/49 (0%)	Mean	0%	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: F 344/N
 Length of Study: CHRONIC

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

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		Male			Female		
*Pancreas:							
Carcinoma or Adenoma							
		0/50 (0%)			0/49 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....							
*Pancreas:							
Mixed Tumor Benign							
		1/50 (2%)			0/49 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....							
*Parathyroid Gland:							
Adenoma							
		0/48 (0%)			0/47 (0%)		
Overall Incidence	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/47 (0%)	Mean 0% SD 0%
.....							
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Adenoma							
		24/50 (48%)			25/50 (50%)		
Overall Incidence	Total	24/50 (48%)	Mean 48%	SD 0%	Total	25/50 (50%)	Mean 50% SD 0%
.....							
*Pituitary Gland: Pars Distalis or Unspecified Site:							
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%
.....							
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Carcinoma or Adenoma							
		24/50 (48%)			26/50 (52%)		
Overall Incidence	Total	24/50 (48%)	Mean 48%	SD 0%	Total	26/50 (52%)	Mean 52% 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: F 344/N
 Length of Study: CHRONIC

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

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		Male				Female			
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Ganglioneuroma									
		0/50	(0%)			1/50	(2%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
*Pituitary Gland: Pars Intermedia:									
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%
.....									
*Pituitary Gland: Pars Intermedia:									
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%
.....									
*Pituitary Gland: Pars Nervosa:									
Craniopharyngioma									
		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									
		2/50	(4%)						
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%				
.....									
*Prostate:									
Carcinoma or Adenoma									
		2/50	(4%)						
Overall Incidence	Total	2/50	(4%)	Mean 4%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: GAVAGE
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		Male				Female			
*Salivary Glands:									
 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%
.....									
*Salivary Glands:									
 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%
.....									
*Salivary Glands:									
 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%
.....									
*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:									
 Adenoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
#Skeletal Muscle:									
 Fibrous Histiocytoma									
		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: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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	Male				Female			
#Skeletal Muscle:								
Lipoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Adenoma								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Basal Cell Adenoma or Basosquamous Tumor Benign								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma								
		3/50	(6%)			1/50	(2%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Basal Cell Carcinoma								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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	Male				Female			
#Skin:								
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma								
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	2/50 (4%)	Mean 4%	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	9/50 (18%)	Mean 18%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%

#Skin:								
Fibroma								
Overall Incidence	Total	11/50 (22%)	Mean 22%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%

#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma								
Overall Incidence	Total	16/50 (32%)	Mean 32%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%

#Skin:								
Fibrosarcoma								
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma								
Overall Incidence	Total	6/50 (12%)	Mean 12%	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: Jun2013
 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: GAVAGE
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		Male			Female		
#Skin:							
Fibrous Histiocytoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Hemangiosarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Keratoacanthoma							
		5/50	(10%)		0/50	(0%)	
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Lipoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Liposarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Neural Crest Tumor							
		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

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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	Male				Female			
#Skin:								
Neurofibroma or Schwannoma benign								
		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:								
Sarcoma								
		3/50	(6%)			0/50	(0%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Schwannoma Benign								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Schwannoma Malignant								
		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

Version: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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	Male				Female			
#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								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
#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								
		5/50	(10%)			0/50	(0%)	
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma								
		5/50	(10%)			0/50	(0%)	
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50	(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: F 344/N
 Length of Study: CHRONIC

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

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	Male				Female			
#Skin:								
Trichoepithelioma								
		2/50	(4%)			0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	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%
.....								
#Spinal Cord:								
Glioma 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%
.....								
#Stomach, Glandular:								
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%
.....								
#Stomach, Glandular:								
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: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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		Male			Female		
#Stomach, Glandular:							
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%
.....							
*Testes:							
Adenoma							
		35/50	(70%)				
Overall Incidence	Total	35/50	(70%)	Mean 70%	SD 0%		
.....							
*Testes:							
Hemangioma							
		0/50	(0%)				
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%		
.....							
*Thymus:							
Thymoma Benign							
		0/44	(0%)			0/48	(0%)
Overall Incidence	Total	0/44	(0%)	Mean 0%	SD 0%	Total	0/48 (0%)
							Mean 0%
							SD 0%
.....							
*Thymus:							
Thymoma Malignant							
		0/44	(0%)			0/48	(0%)
Overall Incidence	Total	0/44	(0%)	Mean 0%	SD 0%	Total	0/48 (0%)
							Mean 0%
							SD 0%
.....							
*Thymus:							
Thymoma NOS							
		0/44	(0%)			0/48	(0%)
Overall Incidence	Total	0/44	(0%)	Mean 0%	SD 0%	Total	0/48 (0%)
							Mean 0%
							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: F 344/N
 Length of Study: CHRONIC

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

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		Male			Female		
*Thymus:							
Thymoma: Benign, Malignant, NOS							
		0/44	(0%)		0/48	(0%)	
Overall Incidence	Total	0/44	(0%)	Mean 0%	SD 0%	Total	0/48 (0%)
							Mean 0%
							SD 0%
.....							
*Thyroid Gland: C-Cell:							
Adenoma							
		6/46	(13%)		4/42	(10%)	
Overall Incidence	Total	6/46	(13.04%)	Mean 13.04%	SD 0%	Total	4/42 (9.52%)
							Mean 9.52%
							SD 0%
.....							
*Thyroid Gland: C-Cell:							
Carcinoma							
		0/46	(0%)		3/42	(7%)	
Overall Incidence	Total	0/46	(0%)	Mean 0%	SD 0%	Total	3/42 (7.14%)
							Mean 7.14%
							SD 0%
.....							
*Thyroid Gland: C-Cell:							
Carcinoma or Adenoma							
		6/46	(13%)		7/42	(17%)	
Overall Incidence	Total	6/46	(13.04%)	Mean 13.04%	SD 0%	Total	7/42 (16.67%)
							Mean 16.67%
							SD 0%
.....							
*Thyroid Gland: Follicular Cell:							
Adenoma							
		0/46	(0%)		0/42	(0%)	
Overall Incidence	Total	0/46	(0%)	Mean 0%	SD 0%	Total	0/42 (0%)
							Mean 0%
							SD 0%
.....							
*Thyroid Gland: Follicular Cell:							
Carcinoma							
		0/46	(0%)		0/42	(0%)	
Overall Incidence	Total	0/46	(0%)	Mean 0%	SD 0%	Total	0/42 (0%)
							Mean 0%
							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: F 344/N
 Length of Study: CHRONIC

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

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		Male			Female		
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma							
		0/46 (0%)			0/42 (0%)		
Overall Incidence	Total	0/46 (0%)	Mean 0%	SD 0%	Total	0/42 (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%
.....							
#Tongue: 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%
.....							
#Tooth: Adamantinoma 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%
.....							
*Urinary Bladder: 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: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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	Male				Female			
*Urinary Bladder: Carcinoma or Papilloma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Urinary Bladder: Hemangiosarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Urinary Bladder: Papilloma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Uterus: Adenoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
#Uterus: Carcinoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
#Uterus: Leiomyosarcoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(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: F 344/N
 Length of Study: CHRONIC

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

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	Male	Female
#Uterus:		
Polyp Stromal		
Overall Incidence	Total 17/50 (34%)	Mean 34% 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 17/50 (34%)	Mean 34% SD 0%
.....		
#Uterus:		
Schwannoma Malignant		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
.....		
#Vagina:		
Polyp		
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: Jun2013
 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: GAVAGE
 Vehicle: METHYLCELLULOSE

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 Report Date: 06/05/2013

Male					Female			
#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%
.....								
#Zymbal's Gland:								
Adenoma								
					0/50	(0%)		
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Zymbal's Gland:								
Carcinoma								
					0/50	(0%)		
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Zymbal's Gland:								
Carcinoma or 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: Jun2013
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: GAVAGE
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	052000505	01/21/04	727	50(3)	30(679)	498.5	Ginseng
Female							
Battelle Columbus Laboratory	052000505	01/22/04	728	50(5)	36(700)	355.0	Ginseng

Version: Jun2013
 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: GAVAGE
 Vehicle: WATER

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 Report Date: 06/05/2013

	Male				Female			
#All Organs:								
Benign Tumors								
		49/50 (98%)			42/50 (84%)			
Overall Incidence	Total	49/50 (98%)	Mean 98%	SD 0%	Total	42/50 (84%)	Mean 84%	SD 0%
.....								
#All Organs:								
Malignant Tumors								
		26/50 (52%)			10/50 (20%)			
Overall Incidence	Total	26/50 (52%)	Mean 52%	SD 0%	Total	10/50 (20%)	Mean 20%	SD 0%
.....								
#All Organs:								
Malignant and Benign Tumors								
		49/50 (98%)			45/50 (90%)			
Overall Incidence	Total	49/50 (98%)	Mean 98%	SD 0%	Total	45/50 (90%)	Mean 90%	SD 0%
.....								
#All Organs:								
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%
.....								
#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								
		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: Jun2013
 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: GAVAGE
 Vehicle: WATER

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	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: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated								
		18/50 (36%)			6/50 (12%)			
Overall Incidence	Total	18/50 (36%)	Mean 36%	SD 0%	Total	6/50 (12%)	Mean 12%	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:								
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%
.....								
#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:								
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

Version: Jun2013
 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: GAVAGE
 Vehicle: WATER

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	Male				Female			
#All Organs:								
Osteosarcoma								
		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 or Osteoma								
		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:								
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%
.....								
*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:								
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%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: GAVAGE
 Vehicle: WATER

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		Male			Female		
*Adrenal Medulla:							
Pheochromocytoma 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%
.....							
*Adrenal Medulla:							
Pheochromocytoma: Benign, Complex, Malignant, NOS							
		4/50 (8%)			1/50 (2%)		
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
#Blood Vessel:							
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%
.....							
#Bone:							
Chordoma							
		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:							
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%
.....							
#Bone:							
Osteosarcoma							
		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: Jun2013
 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: GAVAGE
 Vehicle: WATER

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	Male				Female			
#Bone:								
Osteosarcoma or Osteoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
*Brain:								
Glioma								
		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:								
Glioma 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:								
Glioma 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								
		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:								
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%

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

Version: Jun2013
 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: GAVAGE
 Vehicle: WATER

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		Male				Female			
*Clitoral/Preputial Gland: 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%
.....									
*Clitoral/Preputial Gland: 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%
.....									
*Clitoral/Preputial Gland: Carcinoma or 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%
.....									
*Clitoral/Preputial Gland: 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%
.....									
#Ear: Neural Crest Tumor									
		0/50	(0%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Eye: Melanoma 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%

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

Version: Jun2013
 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: GAVAGE
 Vehicle: WATER

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		Male				Female			
#Eye:									
Melanoma 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%
.....									
#Harderian 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%
.....									
#Harderian 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%
.....									
#Harderian 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%
.....									
*Heart:									
Schwannoma 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%
.....									
*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%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: GAVAGE
 Vehicle: WATER

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		Male			Female		
#Intestine Large: Colon/Rectum:							
Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Intestine Large: Colon/Rectum:							
Carcinoma or Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Intestine Small: Duodenum:							
Leiomyoma							
		0/50	(0%)		1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
.....							
#Intestine Small: Duodenum:							
Schwannoma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Intestine Small: Ileum:							
Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Intestine Small: Jejunum:							
Carcinoma							
		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

Version: Jun2013
 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: GAVAGE
 Vehicle: WATER

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		Male			Female		
#Intestine Small: Jejunum:							
Leiomyoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	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:							
Adenoma							
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%
.....							
#Intestine Small: Site Unspecified:							
Carcinoma or Adenoma							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Intestine Small: Site Unspecified:							
Leiomyoma							
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

Version: Jun2013
 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: GAVAGE
 Vehicle: WATER

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		Male				Female			
#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%
.....									
#Intestine Small: Site Unspecified:									
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%
.....									
*Islets, Pancreatic:									
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%
.....									
*Islets, Pancreatic:									
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%
.....									
*Islets, Pancreatic:									
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: 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

Version: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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 Route: GAVAGE
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		Male			Female		
*Kidney: Renal Tubule: Adenoma							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Carcinoma							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Carcinoma or Adenoma							
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Lipoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Mesenchymal Tumor Malignant							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule: Sarcoma							
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: Jun2013
 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: GAVAGE
 Vehicle: WATER

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		Male			Female		
*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%
.....							
*Liver:							
Hepatocellular 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%
.....							
*Liver:							
Hepatocellular Carcinoma or Hepatoblastoma							
		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 Carcinoma or Hepatocellular 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%
.....							
*Liver:							
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma							
		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:							
Ito 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%
.....							

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

Version: Jun2013
 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: GAVAGE
 Vehicle: WATER

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		Male				Female			
*Lung:									
Alveolar/Bronchiolar 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%
.....									
*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%
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar 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%
.....									
*Lung:									
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%
.....									
#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%)			2/50	(4%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50	(4%)	Mean 4% 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: F 344/N
 Length of Study: CHRONIC

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

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	Male				Female			
#Mammary 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%
.....								
#Mammary Gland: Carcinoma or 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%
.....								
#Mammary Gland: Fibroadenoma								
		2/50 (4%)				32/50 (64%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	32/50 (64%)	Mean 64%	SD 0%
.....								
#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%)				33/50 (66%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	33/50 (66%)	Mean 66%	SD 0%
.....								
#Mammary Gland: Fibroma, Fibroadenoma, Carcinoma, or Adenoma								
		2/50 (4%)				33/50 (66%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	33/50 (66%)	Mean 66%	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: F 344/N
 Length of Study: CHRONIC

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

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		Male			Female		
#Mesentery:							
Fibrous Histiocytoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
#Mesentery:							
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%
*Nose:							
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%
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):							
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 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%

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

Version: Jun2013
 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: GAVAGE
 Vehicle: WATER

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	Male				Female			
#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%)
.....								
#Oral Mucosa:								
Squamous Cell Papilloma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Ovary:								
Cystadenoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Fibrosarcoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Granulosa Cell Tumor Benign								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Granulosa Cell Tumor Malignant								
						0/50	(0%)	
Overall Incidence						Total	0/50	(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: F 344/N
 Length of Study: CHRONIC

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

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Male					Female					
*Ovary:										
Granulosa Cell Tumor: Benign, Malignant, NOS										
					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%
.....										
*Ovary:										
Schwannoma Malignant										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
*Ovary:										
Sertoli Cell Tumor Malignant										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
*Ovary:										
Tubulostromal Adenoma										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
*Pancreas:										
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: Jun2013
 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: GAVAGE
 Vehicle: WATER

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		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%)	Mean 0% SD 0%
.....							
*Pancreas:							
Mixed 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%
.....							
*Parathyroid Gland:							
Adenoma							
		0/50 (0%)			0/48 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/48 (0%)	Mean 0% SD 0%
.....							
*Pituitary Gland: Pars Distalis or Unspecified Site:							
Adenoma							
		20/50 (40%)			16/50 (32%)		
Overall Incidence	Total	20/50 (40%)	Mean 40%	SD 0%	Total	16/50 (32%)	Mean 32% SD 0%
.....							
*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							
		20/50 (40%)			16/50 (32%)		
Overall Incidence	Total	20/50 (40%)	Mean 40%	SD 0%	Total	16/50 (32%)	Mean 32% 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: F 344/N
 Length of Study: CHRONIC

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 Tumor Incidence for Selected Control Animal Groups
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Male					Female				
*Pituitary Gland: Pars Distalis or Unspecified Site:									
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%
.....									
*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:									
Craniopharyngioma									
		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									
		1/50	(2%)						
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%				
.....									
*Prostate:									
Carcinoma or 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: Jun2013
 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: GAVAGE
 Vehicle: WATER

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		Male				Female			
*Salivary Glands:									
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%
.....									
*Salivary Glands:									
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%
.....									
*Salivary Glands:									
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%
.....									
*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:									
Adenoma									
		1/50	(2%)						
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%				
.....									
#Skeletal Muscle:									
Fibrous Histiocytoma									
		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: Jun2013
 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: GAVAGE
 Vehicle: WATER

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

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

Version: Jun2013
 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: GAVAGE
 Vehicle: WATER

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	Male				Female			
#Skin:								
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma								
Overall Incidence	Total	1/50 (2%)	Mean 2%	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								
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	3/50 (6%)	Mean 6%	SD 0%

#Skin:								
Fibroma								
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma								
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

#Skin:								
Fibrosarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma								
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: Jun2013
 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: GAVAGE
 Vehicle: WATER

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		Male				Female			
#Skin:									
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:									
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%
.....									
#Skin:									
Keratoacanthoma									
		0/50	(0%)			2/50	(4%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50	(4%)	Mean 4% SD 0%
.....									
#Skin:									
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%
.....									
#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%
.....									
#Skin:									
Neural Crest Tumor									
		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: Jun2013
 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: GAVAGE
 Vehicle: WATER

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	Male				Female			
#Skin:								
Neurofibroma or Schwannoma benign								
		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:								
Sarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Schwannoma Benign								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Schwannoma Malignant								
		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

Version: Jun2013
 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: GAVAGE
 Vehicle: WATER

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	Male				Female			
#Skin:								
Squamous Cell 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%
.....								
#Skin:								
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or 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%
.....								
#Skin:								
Squamous Cell Papilloma								
		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:								
Squamous Cell Papilloma or Papilloma								
		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:								
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma								
		1/50	(2%)			3/50	(6%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	3/50	(6%)
								Mean 6%
								SD 0%
.....								
#Skin:								
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma								
		0/50	(0%)			3/50	(6%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	3/50	(6%)
								Mean 6%
								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: F 344/N
 Length of Study: CHRONIC

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

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	Male				Female			
#Skin:								
Trichoepithelioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(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%)
.....								
#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%)
.....								
#Spinal Cord:								
Glioma Malignant								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
#Stomach, Glandular:								
Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Stomach, Glandular:								
Carcinoma or Adenoma								
		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

Version: Jun2013
 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: GAVAGE
 Vehicle: WATER

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		Male			Female		
#Stomach, Glandular:							
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%
.....							
*Testes:							
Adenoma							
		45/50	(90%)				
Overall Incidence	Total	45/50	(90%)	Mean 90%	SD 0%		
.....							
*Testes:							
Hemangioma							
		0/50	(0%)				
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%		
.....							
*Thymus:							
Thymoma Benign							
		0/50	(0%)			0/48	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/48 (0%)
						Mean 0%	SD 0%
.....							
*Thymus:							
Thymoma Malignant							
		0/50	(0%)			1/48	(2%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/48 (2.08%)
						Mean 2.08%	SD 0%
.....							
*Thymus:							
Thymoma NOS							
		0/50	(0%)			0/48	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/48 (0%)
						Mean 0%	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: F 344/N
 Length of Study: CHRONIC

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

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		Male			Female		
*Thymus:							
Thymoma: Benign, Malignant, NOS							
		0/50 (0%)			1/48 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/48 (2.08%)	Mean 2.08% SD 0%
.....							
*Thyroid Gland: C-Cell:							
Adenoma							
		11/50 (22%)			6/50 (12%)		
Overall Incidence	Total	11/50 (22%)	Mean 22%	SD 0%	Total	6/50 (12%)	Mean 12% SD 0%
.....							
*Thyroid Gland: C-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: C-Cell:							
Carcinoma or Adenoma							
		11/50 (22%)			6/50 (12%)		
Overall Incidence	Total	11/50 (22%)	Mean 22%	SD 0%	Total	6/50 (12%)	Mean 12% 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							
		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: Jun2013
 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: GAVAGE
 Vehicle: WATER

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		Male			Female		
*Thyroid Gland: Follicular Cell: 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%
.....							
#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%
.....							
#Tongue: 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%
.....							
#Tooth: Adamantinoma 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%
.....							
*Urinary Bladder: 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: Jun2013
 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: GAVAGE
 Vehicle: WATER

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	Male				Female			
*Urinary Bladder: Carcinoma or Papilloma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Urinary Bladder: Hemangiosarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Urinary Bladder: Papilloma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Uterus: Adenoma								
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Uterus: Carcinoma								
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Uterus: Leiomyosarcoma								
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: Jun2013
 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: GAVAGE
 Vehicle: WATER

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	Male	Female
#Uterus: Polyp Stromal		
Overall Incidence	Total 8/50 (16%)	Mean 16% 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 8/50 (16%)	Mean 16% SD 0%
#Uterus: Schwannoma Malignant		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
#Vagina: Polyp		
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: Jun2013
 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: GAVAGE
 Vehicle: WATER

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Male					Female						
#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%
.....											
#Zymbal's Gland:											
Adenoma											
					0/50 (0%)						
Overall Incidence		Total		0/50 (0%)		Mean 0%		SD 0%			
					0/50 (0%)						
Overall Incidence		Total		0/50 (0%)		Mean 0%		SD 0%			
.....											
#Zymbal's Gland:											
Carcinoma											
					0/50 (0%)						
Overall Incidence		Total		0/50 (0%)		Mean 0%		SD 0%			
					0/50 (0%)						
Overall Incidence		Total		0/50 (0%)		Mean 0%		SD 0%			
.....											
#Zymbal's Gland:											
Carcinoma or Adenoma											
					0/50 (0%)						
Overall Incidence		Total		0/50 (0%)		Mean 0%		SD 0%			
					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: Jun2013
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: INHALATION
Vehicle: AIR

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Report Date: 06/05/2013

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	052001105	07/14/03	729	50(5)	23(678)	526.9	1-Bromopropane
Battelle Northwest	059901705	08/25/03	729	50(5)	28(686)	525.6	Diethylamine
Battelle Northwest	059302507	06/16/03	729	50(5)	20(668)	536.2	Tetralin
Battelle Northwest	052030305	06/06/05	729	50(5)	25(680)	532.1	Vinylidene chloride
Female							
Battelle Northwest	052001105	07/14/03	730	50(5)	34(702)	386.5	1-Bromopropane
Battelle Northwest	059901705	08/25/03	730	50(5)	31(687)	378.3	Diethylamine
Battelle Northwest	059302507	06/16/03	730	50(5)	31(682)	370.8	Tetralin
Battelle Northwest	052030305	06/06/05	731	50(5)	30(705)	375.6	Vinylidene chloride

Version: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male			Female		
#All Organs:							
Benign Tumors							
		48/50 (96%)	44/50 (88%)	48/50 (96%)	45/50 (90%)	43/50 (86%)	40/50 (80%)
		47/50 (94%)			47/50 (94%)		
Overall Incidence	Total	187/200 (93.5%)	Mean 93.5%	SD 3.79%	Total	175/200 (87.5%)	Mean 87.5% SD 5.97%
.....							
#All Organs:							
Malignant Tumors							
		38/50 (76%)	31/50 (62%)	33/50 (66%)	26/50 (52%)	24/50 (48%)	25/50 (50%)
		27/50 (54%)			24/50 (48%)		
Overall Incidence	Total	129/200 (64.5%)	Mean 64.5%	SD 9.15%	Total	99/200 (49.5%)	Mean 49.5% SD 1.91%
.....							
#All Organs:							
Malignant and Benign Tumors							
		50/50 (100%)	49/50 (98%)	50/50 (100%)	49/50 (98%)	48/50 (96%)	46/50 (92%)
		50/50 (100%)			49/50 (98%)		
Overall Incidence	Total	199/200 (99.5%)	Mean 99.5%	SD 1%	Total	192/200 (96%)	Mean 96% SD 2.83%
.....							
#All Organs:							
Hemangioma							
		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma							
		0/50 (0%)	1/50 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)			0/50 (0%)		
Overall Incidence	Total	2/200 (1%)	Mean 1%	SD 1.15%	Total	0/200 (0%)	Mean 0% 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: F 344/N
 Length of Study: CHRONIC

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

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		Male				Female			
#All Organs:									
Hemangiosarcoma or Hemangioma									
		0/50 (0%)	1/50 (2%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/200 (1%)	Mean 1%	SD 1.15%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#All Organs:									
Histiocytic Sarcoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	2/50 (4%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	2/200 (1%)	Mean 1%	SD 2%	
.....									
#All Organs:									
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated									
		29/50 (58%)	25/50 (50%)	25/50 (50%)		16/50 (32%)	15/50 (30%)	17/50 (34%)	
		17/50 (34%)				10/50 (20%)			
Overall Incidence	Total	96/200 (48%)	Mean 48%	SD 10.07%	Total	58/200 (29%)	Mean 29%	SD 6.22%	
.....									
#All Organs:									
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#All Organs:									
Mesothelioma: Benign, Malignant, NOS									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	1/200 (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

Version: Jun2013
 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
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		Male				Female			
#All Organs:									
Mesothelioma: Malignant									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#All Organs:									
Osteoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#All Organs:									
Osteosarcoma									
		2/50 (4%)	0/50 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
Overall Incidence	Total	6/200 (3%)	Mean 3%	SD 2.58%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#All Organs:									
Osteosarcoma or Osteoma									
		2/50 (4%)	0/50 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		2/50 (4%)				1/50 (2%)			
Overall Incidence	Total	7/200 (3.5%)	Mean 3.5%	SD 2.52%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Adrenal Cortex:									
Adenoma									
		1/50 (2%)	1/50 (2%)	0/50 (0%)		3/50 (6%)	4/50 (8%)	8/50 (16%)	
		4/49 (8%)				2/50 (4%)			
Overall Incidence	Total	6/199 (3.02%)	Mean 3.04%	SD 3.54%	Total	17/200 (8.5%)	Mean 8.5%	SD 5.26%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male				Female			
*Adrenal Cortex:									
 Carcinoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/49 (0%)				1/50 (2%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Adrenal Medulla:									
 Pheochromocytoma Benign									
		10/50 (20%)	7/50 (14%)	9/50 (18%)		2/50 (4%)	0/50 (0%)	2/50 (4%)	
		5/49 (10%)				0/50 (0%)			
Overall Incidence	Total	31/199 (15.58%)	Mean 15.55%	SD 4.35%	Total	4/200 (2%)	Mean 2%	SD 2.31%	
.....									
*Adrenal Medulla:									
 Pheochromocytoma Complex									
		1/50 (2%)	2/50 (4%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/49 (0%)				0/50 (0%)			
Overall Incidence	Total	3/199 (1.51%)	Mean 1.5%	SD 1.91%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Adrenal Medulla:									
 Pheochromocytoma Malignant									
		0/50 (0%)	1/50 (2%)	4/50 (8%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
		2/49 (4%)				1/50 (2%)			
Overall Incidence	Total	7/199 (3.52%)	Mean 3.52%	SD 3.42%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
*Adrenal Medulla:									
 Pheochromocytoma: Benign, Complex, Malignant, NOS									
		11/50 (22%)	10/50 (20%)	12/50 (24%)		3/50 (6%)	0/50 (0%)	3/50 (6%)	
		6/49 (12%)				1/50 (2%)			
Overall Incidence	Total	39/199 (19.6%)	Mean 19.56%	SD 5.14%	Total	7/200 (3.5%)	Mean 3.5%	SD 3%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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
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		Male				Female			
#Blood Vessel:									
Leiomyosarcoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Bone:									
Chordoma									
		1/50 (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	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Bone:									
Osteoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Bone:									
Osteosarcoma									
		1/50 (2%)	0/50 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
Overall Incidence	Total	5/200 (2.5%)	Mean 2.5%	SD 2.52%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Bone:									
Osteosarcoma or Osteoma									
		1/50 (2%)	0/50 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		2/50 (4%)				1/50 (2%)			
Overall Incidence	Total	6/200 (3%)	Mean 3%	SD 2.58%	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: Jun2013
 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: INHALATION
 Vehicle: AIR

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		Male				Female			
*Brain:									
Glioma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Brain:									
Glioma Benign									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Brain:									
Glioma Malignant									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Brain:									
Oligodendroglioma, Glioma, or Astrocytoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Brain:									
Osteosarcoma									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/200 (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

Version: Jun2013
 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
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Vehicle: AIR

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		Male				Female			
*Clitoral/Preputial Gland:									
Adenoma									
		4/50 (8%)	0/50 (0%)	0/50 (0%)		3/49 (6%)	1/50 (2%)	0/50 (0%)	
		2/50 (4%)				4/47 (9%)			
Overall Incidence	Total	6/200 (3%)	Mean 3%	SD 3.83%	Total	8/196 (4.08%)	Mean 4.16%	SD 3.86%	
.....									
*Clitoral/Preputial Gland:									
Carcinoma									
		2/50 (4%)	1/50 (2%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	4/50 (8%)	
		2/50 (4%)				1/47 (2%)			
Overall Incidence	Total	5/200 (2.5%)	Mean 2.5%	SD 1.91%	Total	6/196 (3.06%)	Mean 3.04%	SD 3.45%	
.....									
*Clitoral/Preputial Gland:									
Carcinoma or Adenoma									
		6/50 (12%)	1/50 (2%)	0/50 (0%)		4/49 (8%)	1/50 (2%)	4/50 (8%)	
		4/50 (8%)				5/47 (11%)			
Overall Incidence	Total	11/200 (5.5%)	Mean 5.5%	SD 5.51%	Total	14/196 (7.14%)	Mean 7.2%	SD 3.67%	
.....									
*Clitoral/Preputial Gland:									
Sarcoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/47 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/196 (0%)	Mean 0%	SD 0%	
.....									
#Ear:									
Neural Crest Tumor									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (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: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male				Female			
#Eye:									
Melanoma Benign									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Eye:									
Melanoma Malignant									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Harderian Gland:									
Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Harderian Gland:									
Carcinoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Harderian Gland:									
Carcinoma or Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (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: Jun2013
 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: INHALATION
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		Male				Female			
*Heart:									
Schwannoma Benign									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Heart:									
Schwannoma Malignant									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Large: Colon/Rectum:									
Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Large: Colon/Rectum:									
Carcinoma or Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Small: Duodenum:									
Leiomyoma									
		0/50 (0%)	1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/200 (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

Version: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male				Female			
#Intestine Small: Duodenum:									
Schwannoma Malignant									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Small: Ileum:									
Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Small: Jejunum:									
Carcinoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Small: Jejunum:									
Leiomyoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Small: Jejunum:									
Leiomyosarcoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (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: Jun2013
 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: INHALATION
 Vehicle: AIR

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		Male				Female			
#Intestine Small: Site Unspecified:									
Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Small: Site Unspecified:									
Carcinoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Small: Site Unspecified:									
Carcinoma or Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Small: Site Unspecified:									
Leiomyoma									
		0/50 (0%)	1/50 (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	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Intestine Small: Site Unspecified:									
Leiomyosarcoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (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: Jun2013
 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: INHALATION
Vehicle: AIR

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 Report Date: 06/05/2013

		Male				Female			
#Intestine Small: Site Unspecified:									
Schwannoma Malignant									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Islets, Pancreatic:									
Adenoma									
		0/50 (0%)	6/50 (12%)	3/50 (6%)		0/50 (0%)	2/50 (4%)	0/50 (0%)	
		2/50 (4%)				0/50 (0%)			
Overall Incidence	Total	11/200 (5.5%)	Mean 5.5%	SD 5%	Total	2/200 (1%)	Mean 1%	SD 2%	
.....									
*Islets, Pancreatic:									
Carcinoma									
		3/50 (6%)	1/50 (2%)	1/50 (2%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		2/50 (4%)				0/50 (0%)			
Overall Incidence	Total	7/200 (3.5%)	Mean 3.5%	SD 1.91%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Islets, Pancreatic:									
Carcinoma or Adenoma									
		3/50 (6%)	7/50 (14%)	4/50 (8%)		1/50 (2%)	2/50 (4%)	0/50 (0%)	
		4/50 (8%)				0/50 (0%)			
Overall Incidence	Total	18/200 (9%)	Mean 9%	SD 3.46%	Total	3/200 (1.5%)	Mean 1.5%	SD 1.91%	
.....									
*Kidney: Pelvis and Transitional Epithelium:									
Papilloma									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/199 (0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

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

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		Male				Female			
*Kidney: Renal Tubule: Adenoma									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Carcinoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	
.....									
*Kidney: Renal Tubule: Carcinoma or Adenoma									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	
.....									
*Kidney: Renal Tubule: Lipoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Mesenchymal Tumor Malignant									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/199 (0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

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

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		Male				Female			
*Kidney: Renal Tubule:									
Sarcoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Liver:									
Hepatocellular Adenoma									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	1/50 (2%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
Overall Incidence	Total	2/200 (1%)	Mean 1%	SD 1.15%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
*Liver:									
Hepatocellular Carcinoma									
		2/50 (4%)	0/50 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/200 (1%)	Mean 1%	SD 2%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatoblastoma									
		2/50 (4%)	0/50 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/200 (1%)	Mean 1%	SD 2%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Liver:									
Hepatocellular Carcinoma or Hepatocellular Adenoma									
		2/50 (4%)	0/50 (0%)	1/50 (2%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
Overall Incidence	Total	4/200 (2%)	Mean 2%	SD 1.63%	Total	3/200 (1.5%)	Mean 1.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male				Female			
*Liver:									
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma									
		2/50 (4%)	0/50 (0%)	1/50 (2%)	1/50 (2%)	1/50 (2%)	0/50 (0%)		
		1/50 (2%)			1/50 (2%)				
Overall Incidence	Total	4/200 (2%)	Mean 2%	SD 1.63%	Total	3/200 (1.5%)	Mean 1.5%	SD 1%	
.....									
*Liver:									
Ito Cell Tumor Benign									
		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)			0/50 (0%)				
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Lung:									
Alveolar/Bronchiolar Adenoma									
		2/50 (4%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)		
		3/50 (6%)			1/50 (2%)				
Overall Incidence	Total	5/200 (2.5%)	Mean 2.5%	SD 3%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma									
		1/50 (2%)	1/50 (2%)	1/50 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)		
		0/50 (0%)			0/50 (0%)				
Overall Incidence	Total	3/200 (1.5%)	Mean 1.5%	SD 1%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma									
		3/50 (6%)	1/50 (2%)	1/50 (2%)	2/50 (4%)	0/50 (0%)	0/50 (0%)		
		3/50 (6%)			1/50 (2%)				
Overall Incidence	Total	8/200 (4%)	Mean 4%	SD 2.31%	Total	3/200 (1.5%)	Mean 1.5%	SD 1.91%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male				Female			
*Lung:									
Fibrosarcoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Mammary Gland:									
Adenolipoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Mammary Gland:									
Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Mammary Gland:									
Carcinoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		4/50 (8%)	9/50 (18%)	3/50 (6%)	3/50 (6%)
		0/50 (0%)				5/50 (10%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	21/200 (10.5%)	Mean 10.5%	SD 5.26%	
.....									
#Mammary Gland:									
Carcinoma or Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		4/50 (8%)	10/50 (20%)	3/50 (6%)	3/50 (6%)
		0/50 (0%)				5/50 (10%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	22/200 (11%)	Mean 11%	SD 6.22%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: INHALATION
 Vehicle: AIR

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		Male				Female			
#Mammary Gland:									
Fibroadenoma									
		2/50 (4%)	2/50 (4%)	1/50 (2%)		25/50 (50%)	27/50 (54%)	14/50 (28%)	
		1/50 (2%)				37/50 (74%)			
Overall Incidence	Total	6/200 (3%)	Mean 3%	SD 1.15%	Total	103/200 (51.5%)	Mean 51.5%	SD 18.86%	
.....									
#Mammary Gland:									
Fibroma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Mammary Gland:									
Fibroma, Fibroadenoma or Adenoma									
		2/50 (4%)	2/50 (4%)	1/50 (2%)		25/50 (50%)	27/50 (54%)	14/50 (28%)	
		1/50 (2%)				37/50 (74%)			
Overall Incidence	Total	6/200 (3%)	Mean 3%	SD 1.15%	Total	103/200 (51.5%)	Mean 51.5%	SD 18.86%	
.....									
#Mammary Gland:									
Fibroma, Fibroadenoma, Carcinoma, or Adenoma									
		2/50 (4%)	2/50 (4%)	1/50 (2%)		27/50 (54%)	30/50 (60%)	16/50 (32%)	
		1/50 (2%)				38/50 (76%)			
Overall Incidence	Total	6/200 (3%)	Mean 3%	SD 1.15%	Total	111/200 (55.5%)	Mean 55.5%	SD 18.21%	
.....									
#Mesentery:									
Fibrous Histiocytoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (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: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male				Female			
#Mesentery:									
Schwannoma Malignant									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Nose:									
Adenoma									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/49 (0%)				0/50 (0%)			
Overall Incidence	Total	0/198 (0%)	Mean 0%	SD 0%	Total	0/200 (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%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Squamous Cell Carcinoma									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):									
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	2/200 (1%)	Mean 1%	SD 1.15%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: INHALATION
 Vehicle: AIR

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 Report Date: 06/05/2013

		Male				Female			
#Oral Mucosa:									
Squamous Cell Carcinoma									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Oral Mucosa:									
Squamous Cell Papilloma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Ovary:									
Cystadenoma									
						0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
						0/50 (0%)			
Overall Incidence	Total				Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Ovary:									
Fibrosarcoma									
						0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
						0/50 (0%)			
Overall Incidence	Total				Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Ovary:									
Granulosa Cell Tumor Benign									
						0/50 (0%)	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

Version: Jun2013
 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: INHALATION
Vehicle: AIR

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	Male	Female
*Ovary:		
Granulosa Cell Tumor Malignant		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
Overall Incidence	Total 0/200 (0%)	Mean 0% SD 0%
.....		
*Ovary:		
Granulosa Cell Tumor: Benign, Malignant, NOS		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
Overall Incidence	Total 0/200 (0%)	Mean 0% SD 0%
.....		
*Ovary:		
Granulosa-Theca Tumor Malignant		
	2/50 (4%)	0/50 (0%)
	1/50 (2%)	0/50 (0%)
Overall Incidence	Total 3/200 (1.5%)	Mean 1.5% SD 1.91%
.....		
*Ovary:		
Schwannoma Malignant		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
Overall Incidence	Total 0/200 (0%)	Mean 0% SD 0%
.....		
*Ovary:		
Sertoli Cell Tumor Malignant		
	0/50 (0%)	0/50 (0%)
	1/50 (2%)	0/50 (0%)
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: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male			Female		
*Ovary:							
Tubulostromal Adenoma							
					0/50 (0%)	0/50 (0%)	0/50 (0%)
					0/50 (0%)		
Overall Incidence					Total 0/200 (0%)	Mean 0%	SD 0%
.....							
*Pancreas:							
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%
.....							
*Pancreas:							
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%
.....							
*Pancreas:							
Mixed 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%
.....							
*Parathyroid Gland:							
Adenoma							
		0/46 (0%)	0/48 (0%)	0/48 (0%)	0/47 (0%)	1/43 (2%)	0/49 (0%)
		0/50 (0%)			0/49 (0%)		
Overall Incidence	Total	0/192 (0%)	Mean 0%	SD 0%	Total 1/188 (0.53%)	Mean 0.58%	SD 1.16%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: INHALATION
 Vehicle: AIR

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		Male				Female			
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Adenoma									
		37/50 (74%)	31/50 (62%)	36/50 (72%)		35/50 (70%)	29/50 (58%)	36/49 (73%)	
		34/50 (68%)				32/50 (64%)			
Overall Incidence	Total	138/200 (69%)	Mean 69%	SD 5.29%	Total	132/199 (66.33%)	Mean 66.37%	SD 6.81%	
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Carcinoma									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	2/50 (4%)	0/49 (0%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	3/199 (1.51%)	Mean 1.5%	SD 1.91%	
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Carcinoma or Adenoma									
		37/50 (74%)	31/50 (62%)	37/50 (74%)		35/50 (70%)	31/50 (62%)	36/49 (73%)	
		34/50 (68%)				33/50 (66%)			
Overall Incidence	Total	139/200 (69.5%)	Mean 69.5%	SD 5.74%	Total	135/199 (67.84%)	Mean 67.87%	SD 4.96%	
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Ganglioneuroma									
		0/50 (0%)	1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/49 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Pituitary Gland: Pars Intermedia:									
Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/49 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (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

Version: Jun2013
 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: INHALATION
 Vehicle: AIR

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		Male				Female			
*Pituitary Gland: Pars Intermedia:									
 Carcinoma or Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/49 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Pituitary Gland: Pars Nervosa:									
 Craniopharyngioma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/49 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
*Prostate:									
 Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)					
		0/50 (0%)							
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%					
.....									
*Prostate:									
 Carcinoma or Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)					
		0/50 (0%)							
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%					
.....									
*Salivary Glands:									
 Carcinoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (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: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male				Female			
*Salivary Glands:									
 Carcinoma or Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Salivary Glands:									
 Sarcoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Salivary Glands:									
 Schwannoma Malignant									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Seminal Vesicle:									
 Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)					
		0/50 (0%)							
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%					
.....									
#Skeletal Muscle:									
 Fibrous Histiocytoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (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: Jun2013
 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: INHALATION
 Vehicle: AIR

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		Male				Female			
#Skeletal Muscle:									
Lipoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal Cell Adenoma									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		1/50 (2%)				1/50 (2%)			
Overall Incidence	Total	2/200 (1%)	Mean 1%	SD 1.15%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Basal Cell Adenoma or Basosquamous Tumor Benign									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		1/50 (2%)				1/50 (2%)			
Overall Incidence	Total	2/200 (1%)	Mean 1%	SD 1.15%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		2/50 (4%)				1/50 (2%)			
Overall Incidence	Total	3/200 (1.5%)	Mean 1.5%	SD 1.91%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Basal Cell Carcinoma									
		0/50 (0%)	1/50 (2%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	5/200 (2.5%)	Mean 2.5%	SD 2.52%	Total	0/200 (0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

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

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		Male				Female			
#Skin:									
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)									
		0/50 (0%)	1/50 (2%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	5/200 (2.5%)	Mean 2.5%	SD 2.52%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma									
		0/50 (0%)	1/50 (2%)	4/50 (8%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		3/50 (6%)				1/50 (2%)			
Overall Incidence	Total	8/200 (4%)	Mean 4%	SD 3.65%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma									
		1/50 (2%)	1/50 (2%)	5/50 (10%)		1/50 (2%)	1/50 (2%)	1/50 (2%)	
		9/50 (18%)				2/50 (4%)			
Overall Incidence	Total	16/200 (8%)	Mean 8%	SD 7.66%	Total	5/200 (2.5%)	Mean 2.5%	SD 1%	
.....									
#Skin:									
Fibroma									
		3/50 (6%)	1/50 (2%)	3/50 (6%)		2/50 (4%)	1/50 (2%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
Overall Incidence	Total	8/200 (4%)	Mean 4%	SD 2.31%	Total	4/200 (2%)	Mean 2%	SD 1.63%	
.....									
#Skin:									
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma									
		3/50 (6%)	2/50 (4%)	6/50 (12%)		2/50 (4%)	1/50 (2%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
Overall Incidence	Total	12/200 (6%)	Mean 6%	SD 4.32%	Total	4/200 (2%)	Mean 2%	SD 1.63%	

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

Version: Jun2013
 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: INHALATION
 Vehicle: AIR

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		Male				Female			
#Skin:									
Fibrosarcoma									
		0/50 (0%)	0/50 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	3/200 (1.5%)	Mean 1.5%	SD 3%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma									
		0/50 (0%)	1/50 (2%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	4/200 (2%)	Mean 2%	SD 2.83%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Fibrous Histiocytoma									
		0/50 (0%)	1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Hemangiosarcoma									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Keratoacanthoma									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
		3/50 (6%)				1/50 (2%)			
Overall Incidence	Total	4/200 (2%)	Mean 2%	SD 2.83%	Total	3/200 (1.5%)	Mean 1.5%	SD 1%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male				Female			
#Skin:									
Lipoma									
		2/50 (4%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/200 (1%)	Mean 1%	SD 2%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Liposarcoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Neural Crest Tumor									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Neurofibroma or Schwannoma benign									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Neurofibrosarcoma or Schwannoma (malignant or NOS)									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/200 (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

Version: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male				Female					
#Skin:											
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)											
		0/50	(0%)	0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
		0/50	(0%)					0/50	(0%)		
Overall Incidence	Total	1/200 (0.5%)		Mean 0.5%		SD 1%		Total 0/200 (0%)		Mean 0%	
										SD 0%	
.....											
#Skin:											
Sarcoma											
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
		0/50	(0%)					0/50	(0%)		
Overall Incidence	Total	0/200 (0%)		Mean 0%		SD 0%		Total 0/200 (0%)		Mean 0%	
										SD 0%	
.....											
#Skin:											
Schwannoma Benign											
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
		0/50	(0%)					0/50	(0%)		
Overall Incidence	Total	0/200 (0%)		Mean 0%		SD 0%		Total 0/200 (0%)		Mean 0%	
										SD 0%	
.....											
#Skin:											
Schwannoma Malignant											
		0/50	(0%)	0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
		0/50	(0%)					0/50	(0%)		
Overall Incidence	Total	1/200 (0.5%)		Mean 0.5%		SD 1%		Total 0/200 (0%)		Mean 0%	
										SD 0%	
.....											
#Skin:											
Squamous Cell Carcinoma											
		1/50	(2%)	0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
		0/50	(0%)					0/50	(0%)	1/50	(2%)
Overall Incidence	Total	1/200 (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

Version: Jun2013
 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: INHALATION
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		Male				Female			
#Skin:									
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma									
		1/50 (2%)	1/50 (2%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	6/200 (3%)	Mean 3%	SD 2%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Skin:									
Squamous Cell Papilloma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		3/50 (6%)				0/50 (0%)			
Overall Incidence	Total	3/200 (1.5%)	Mean 1.5%	SD 3%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Squamous Cell Papilloma or Papilloma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		3/50 (6%)				0/50 (0%)			
Overall Incidence	Total	3/200 (1.5%)	Mean 1.5%	SD 3%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma									
		1/50 (2%)	0/50 (0%)	1/50 (2%)		1/50 (2%)	1/50 (2%)	1/50 (2%)	
		6/50 (12%)				1/50 (2%)			
Overall Incidence	Total	8/200 (4%)	Mean 4%	SD 5.42%	Total	4/200 (2%)	Mean 2%	SD 0%	
.....									
#Skin:									
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
		6/50 (12%)				1/50 (2%)			
Overall Incidence	Total	7/200 (3.5%)	Mean 3.5%	SD 5.74%	Total	3/200 (1.5%)	Mean 1.5%	SD 1%	

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

Version: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male				Female			
#Skin:									
Trichoepithelioma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin: Sebaceous Gland:									
Adenoma									
		0/50 (0%)	1/50 (2%)	2/50 (4%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	3/200 (1.5%)	Mean 1.5%	SD 1.91%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Skin: Sebaceous Gland:									
Carcinoma or Adenoma									
		0/50 (0%)	1/50 (2%)	2/50 (4%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	3/200 (1.5%)	Mean 1.5%	SD 1.91%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Spinal Cord:									
Glioma Malignant									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Stomach, Glandular:									
Carcinoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (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: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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 Tumor Incidence for Selected Control Animal Groups
 Route: INHALATION
 Vehicle: AIR

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		Male				Female			
#Stomach, Glandular:									
Carcinoma or Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Stomach, Glandular:									
Sarcoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Testes:									
Adenoma									
		34/50 (68%)	36/50 (72%)	29/50 (58%)					
		32/50 (64%)							
Overall Incidence	Total	131/200 (65.5%)	Mean 65.5%	SD 5.97%					
.....									
*Testes:									
Hemangioma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)					
		0/50 (0%)							
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%					
.....									
*Thymus:									
Thymoma Benign									
		0/43 (0%)	0/44 (0%)	0/47 (0%)		1/46 (2%)	0/48 (0%)	0/44 (0%)	
		0/42 (0%)				0/46 (0%)			
Overall Incidence	Total	0/176 (0%)	Mean 0%	SD 0%	Total	1/184 (0.54%)	Mean 0.54%	SD 1.09%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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 Tumor Incidence for Selected Control Animal Groups
 Route: INHALATION
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		Male				Female			
*Thymus:									
Thymoma Malignant									
		0/43 (0%)	0/44 (0%)	0/47 (0%)		0/46 (0%)	0/48 (0%)	0/44 (0%)	
		0/42 (0%)				0/46 (0%)			
Overall Incidence	Total	0/176 (0%)	Mean 0%	SD 0%	Total	0/184 (0%)	Mean 0%	SD 0%	
.....									
*Thymus:									
Thymoma NOS									
		0/43 (0%)	0/44 (0%)	0/47 (0%)		0/46 (0%)	1/48 (2%)	0/44 (0%)	
		0/42 (0%)				0/46 (0%)			
Overall Incidence	Total	0/176 (0%)	Mean 0%	SD 0%	Total	1/184 (0.54%)	Mean 0.52%	SD 1.04%	
.....									
*Thymus:									
Thymoma: Benign, Malignant, NOS									
		0/43 (0%)	0/44 (0%)	0/47 (0%)		1/46 (2%)	1/48 (2%)	0/44 (0%)	
		0/42 (0%)				0/46 (0%)			
Overall Incidence	Total	0/176 (0%)	Mean 0%	SD 0%	Total	2/184 (1.09%)	Mean 1.06%	SD 1.23%	
.....									
*Thyroid Gland: C-Cell:									
Adenoma									
		5/50 (10%)	7/50 (14%)	5/50 (10%)		3/50 (6%)	4/50 (8%)	3/50 (6%)	
		4/50 (8%)				3/50 (6%)			
Overall Incidence	Total	21/200 (10.5%)	Mean 10.5%	SD 2.52%	Total	13/200 (6.5%)	Mean 6.5%	SD 1%	
.....									
*Thyroid Gland: C-Cell:									
Carcinoma									
		4/50 (8%)	1/50 (2%)	2/50 (4%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		3/50 (6%)				0/50 (0%)			
Overall Incidence	Total	10/200 (5%)	Mean 5%	SD 2.58%	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: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male				Female			
*Thyroid Gland: C-Cell: Carcinoma or Adenoma									
		9/50 (18%)	8/50 (16%)	6/50 (12%)		4/50 (8%)	4/50 (8%)	3/50 (6%)	
		7/50 (14%)				3/50 (6%)			
Overall Incidence	Total	30/200 (15%)	Mean 15%	SD 2.58%	Total	14/200 (7%)	Mean 7%	SD 1.15%	
.....									
*Thyroid Gland: Follicular Cell: Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Thyroid Gland: Follicular Cell: Carcinoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Tongue: Squamous Cell Carcinoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	2/200 (1%)	Mean 1%	SD 1.15%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: INHALATION
 Vehicle: AIR

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 Report Date: 06/05/2013

		Male				Female			
#Tongue:									
Squamous Cell Carcinoma or Papilloma Squamous									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
		0/50 (0%)				1/50 (2%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
#Tongue:									
Squamous Cell Papilloma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Tooth:									
Adamantinoma Malignant									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Urinary Bladder:									
Carcinoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/49 (0%)				0/50 (0%)			
Overall Incidence	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Urinary Bladder:									
Carcinoma or Papilloma									
		0/50 (0%)	1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/49 (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

Version: Jun2013
 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: INHALATION
 Vehicle: AIR

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 Report Date: 06/05/2013

		Male				Female			
*Urinary Bladder:									
Hemangiosarcoma									
		0/50 (0%)	1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/49 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
*Urinary Bladder:									
Papilloma									
		0/50 (0%)	1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/49 (0%)				0/50 (0%)			
Overall Incidence	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
#Uterus:									
Adenoma									
						0/50 (0%)	1/50 (2%)	1/50 (2%)	
						0/50 (0%)			
Overall Incidence					Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
#Uterus:									
Carcinoma									
						0/50 (0%)	0/50 (0%)	1/50 (2%)	
						0/50 (0%)			
Overall Incidence					Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
#Uterus:									
Leiomyosarcoma									
						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

Version: Jun2013
 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: INHALATION
 Vehicle: AIR

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	Male	Female
#Uterus: Polyp Stromal		
	8/50 (16%) 11/50 (22%)	8/50 (16%) 6/50 (12%)
Overall Incidence	Total 33/200 (16.5%)	Mean 16.5% SD 4.12%
#Uterus: Sarcoma		
	0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)
Overall Incidence	Total 0/200 (0%)	Mean 0% SD 0%
#Uterus: Sarcoma Stromal		
	2/50 (4%) 0/50 (0%)	0/50 (0%) 0/50 (0%)
Overall Incidence	Total 2/200 (1%)	Mean 1% SD 2%
#Uterus: Sarcoma Stromal or Polyp Stromal		
	10/50 (20%) 11/50 (22%)	8/50 (16%) 6/50 (12%)
Overall Incidence	Total 35/200 (17.5%)	Mean 17.5% SD 4.43%
#Uterus: Schwannoma 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

Version: Jun2013
 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: INHALATION
Vehicle: AIR

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		Male				Female			
#Vagina:									
Polyp									
			0/50 (0%)		0/50 (0%)		0/50 (0%)		0/50 (0%)
			0/50 (0%)						
Overall Incidence				Total	0/200 (0%)		Mean 0%		SD 0%
.....									
#Vagina:									
Sarcoma									
			1/50 (2%)		0/50 (0%)		0/50 (0%)		0/50 (0%)
			0/50 (0%)						
Overall Incidence				Total	1/200 (0.5%)		Mean 0.5%		SD 1%
.....									
#Vagina:									
Schwannoma Malignant									
			0/50 (0%)		0/50 (0%)		0/50 (0%)		0/50 (0%)
			0/50 (0%)						
Overall Incidence				Total	0/200 (0%)		Mean 0%		SD 0%
.....									
#Zymbal's Gland:									
Adenoma									
		0/50 (0%)	2/50 (4%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	2/200 (1%)	Mean 1%	SD 2%	Total	0/200 (0%)	Mean 0%		SD 0%
.....									
#Zymbal's Gland:									
Carcinoma									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	1/50 (2%)	
		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/200 (0%)	Mean 0%	SD 0%	Total	2/200 (1%)	Mean 1%		SD 1.15%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: INHALATION
 Vehicle: AIR

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 Report Date: 06/05/2013

		Male				Female								
#Zymbal's Gland:														
Carcinoma or Adenoma														
		0/50	(0%)	2/50	(4%)	0/50	(0%)	1/50	(2%)	0/50	(0%)	1/50	(2%)	
		0/50	(0%)					0/50	(0%)					
Overall Incidence	Total	2/200 (1%)		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

Version: Jun2013
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: 06/05/2013

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
Female							
Battelle Columbus Laboratory	052000903	11/19/04	727	50(5)	30(688)	352.7	beta-Picoline

Version: Jun2013
 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: 06/05/2013

		Male			Female		
#All Organs:							
Benign Tumors							
		45/50 (90%)			47/50 (94%)		
Overall Incidence	Total	45/50 (90%)	Mean 90%	SD 0%	Total	47/50 (94%)	Mean 94% SD 0%
.....							
#All Organs:							
Malignant Tumors							
		23/50 (46%)			17/50 (34%)		
Overall Incidence	Total	23/50 (46%)	Mean 46%	SD 0%	Total	17/50 (34%)	Mean 34% SD 0%
.....							
#All Organs:							
Malignant and Benign Tumors							
		48/50 (96%)			49/50 (98%)		
Overall Incidence	Total	48/50 (96%)	Mean 96%	SD 0%	Total	49/50 (98%)	Mean 98% SD 0%
.....							
#All Organs:							
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%
.....							
#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							
		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: Jun2013
 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: 06/05/2013

	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: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated								
		14/50 (28%)			12/50 (24%)			
Overall Incidence	Total	14/50 (28%)	Mean 28%	SD 0%	Total	12/50 (24%)	Mean 24%	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:								
Mesothelioma: Benign, Malignant, NOS								
		4/50 (8%)			0/50 (0%)			
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#All Organs:								
Mesothelioma: 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%
.....								
#All Organs:								
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

Version: Jun2013
 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: 06/05/2013

		Male			Female		
#All Organs:							
Osteosarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (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%)
.....							
*Adrenal Cortex:							
Adenoma							
		1/50	(2%)		2/50	(4%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	2/50 (4%)
.....							
*Adrenal Cortex:							
Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Adrenal Medulla:							
Pheochromocytoma Benign							
		5/50	(10%)		2/50	(4%)	
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	2/50 (4%)
.....							
*Adrenal Medulla:							
Pheochromocytoma Complex							
		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

Version: Jun2013
 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: 06/05/2013

	Male				Female			
*Adrenal Medulla:								
Pheochromocytoma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Adrenal Medulla:								
Pheochromocytoma: Benign, Complex, Malignant, NOS								
		6/50	(12%)			2/50	(4%)	
Overall Incidence	Total	6/50	(12%)	Mean 12%	SD 0%	Total	2/50	(4%)
.....								
#Blood Vessel:								
Leiomyosarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Bone:								
Chordoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Bone:								
Osteoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Bone:								
Osteosarcoma								
		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

Version: Jun2013
 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: 06/05/2013

		Male				Female			
#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%
.....									
*Brain:									
Glioma									
		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:									
Glioma Benign									
		0/50	(0%)			1/50	(2%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
*Brain:									
Glioma 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									
		0/50	(0%)			1/50	(2%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
*Brain:									
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%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: 06/05/2013

		Male			Female			
*Clitoral/Preputial Gland: Adenoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	7/50 (14%)	Mean 14%	SD 0%
.....								
*Clitoral/Preputial Gland: Carcinoma								
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Clitoral/Preputial Gland: Carcinoma or Adenoma								
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	7/50 (14%)	Mean 14%	SD 0%
.....								
*Clitoral/Preputial Gland: Sarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
#Ear: Neural Crest Tumor								
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Eye: Melanoma Benign								
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: Jun2013
 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: 06/05/2013

		Male			Female		
#Eye:							
Melanoma 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%
.....							
#Harderian 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%
.....							
#Harderian 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%
.....							
#Harderian 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%
.....							
*Heart:							
Schwannoma 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%
.....							
*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%
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: 06/05/2013

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

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: 06/05/2013

		Male			Female		
#Intestine Small: Jejunum:							
Leiomyoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Intestine Small: Jejunum:							
Leiomyosarcoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Intestine Small: Site Unspecified:							
Adenoma							
		0/50	(0%)			0/50	(0%)
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (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%)
.....							
#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%)
.....							
#Intestine Small: Site Unspecified:							
Leiomyoma							
		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

Version: Jun2013
 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: 06/05/2013

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

Version: Jun2013
 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: 06/05/2013

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

Version: Jun2013
 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: 06/05/2013

	Male				Female			
*Liver:								
Hepatocellular Adenoma								
		3/50	(6%)			2/50	(4%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	2/50	(4%)
								Mean 4%
								SD 0%
.....								
*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								
		3/50	(6%)			2/50	(4%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	2/50	(4%)
								Mean 4%
								SD 0%
.....								
*Liver:								
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma								
		3/50	(6%)			2/50	(4%)	
Overall Incidence	Total	3/50	(6%)	Mean 6%	SD 0%	Total	2/50	(4%)
								Mean 4%
								SD 0%
.....								
*Liver:								
Ito 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%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: 06/05/2013

	Male				Female			
*Lung:								
Alveolar/Bronchiolar 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%
.....								
*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%
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar 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%
.....								
*Lung:								
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%
.....								
#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%

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

Version: Jun2013
 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: 06/05/2013

		Male			Female		
#Mammary Gland:							
Carcinoma							
		0/50	(0%)		2/50	(4%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50 (4%)
						Mean 4%	SD 0%
.....							
#Mammary Gland:							
Carcinoma or 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%
.....							
#Mammary Gland:							
Fibroadenoma							
		1/50	(2%)		34/50	(68%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	34/50 (68%)
						Mean 68%	SD 0%
.....							
#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							
		1/50	(2%)		34/50	(68%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	34/50 (68%)
						Mean 68%	SD 0%
.....							
#Mammary Gland:							
Fibroma, Fibroadenoma, Carcinoma, or Adenoma							
		1/50	(2%)		34/50	(68%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	34/50 (68%)
						Mean 68%	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: 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: 06/05/2013

	Male				Female			
#Mesentery:								
Fibrous Histiocytoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Mesentery:								
Schwannoma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Nose:								
Adenoma								
		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):								
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 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%)
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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

Page: 159
 Report Date: 06/05/2013

	Male				Female			
#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%)
.....								
#Oral Mucosa:								
Squamous Cell Papilloma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Ovary:								
Cystadenoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Fibrosarcoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Granulosa Cell Tumor Benign								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Granulosa Cell Tumor Malignant								
						0/50	(0%)	
Overall Incidence						Total	0/50	(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: 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: 06/05/2013

Male					Female					
*Ovary:										
Granulosa Cell Tumor: Benign, Malignant, NOS										
					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%
.....										
*Ovary:										
Schwannoma Malignant										
					1/50	(2%)				
Overall Incidence					Total	1/50 (2%)	Mean	2%	SD	0%
.....										
*Ovary:										
Sertoli Cell Tumor Malignant										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
*Ovary:										
Tubulostromal Adenoma										
					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%
.....										

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: 06/05/2013

	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%
.....									
*Pancreas:									
Mixed Tumor Benign									
		0/49	(0%)			0/50	(0%)		
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....									
*Parathyroid Gland:									
Adenoma									
		0/50	(0%)			0/47	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/47 (0%)	Mean 0%	SD 0%
.....									
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Adenoma									
		28/50	(56%)			30/50	(60%)		
Overall Incidence	Total	28/50	(56%)	Mean 56%	SD 0%	Total	30/50 (60%)	Mean 60%	SD 0%
.....									
*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									
		28/50	(56%)			30/50	(60%)		
Overall Incidence	Total	28/50	(56%)	Mean 56%	SD 0%	Total	30/50 (60%)	Mean 60%	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: 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: 06/05/2013

Male					Female				
*Pituitary Gland: Pars Distalis or Unspecified Site:									
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%
.....									
*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:									
Craniopharyngioma									
		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									
		0/49	(0%)						
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%				
.....									
*Prostate:									
Carcinoma or Adenoma									
		0/49	(0%)						
Overall Incidence	Total	0/49	(0%)	Mean 0%	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: 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: 06/05/2013

		Male				Female			
*Salivary Glands:									
 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%
.....									
*Salivary Glands:									
 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%
.....									
*Salivary Glands:									
 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%
.....									
*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:									
 Adenoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
#Skeletal Muscle:									
 Fibrous Histiocytoma									
		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: Jun2013
 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:								
Lipoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Basal Cell Adenoma								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Basal Cell Adenoma or Basosquamous Tumor Benign								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Basal Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(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%)

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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 Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma								
Overall Incidence	Total	1/50 (2%)	Mean 2%	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								
Overall Incidence	Total	6/50 (12%)	Mean 12%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%

#Skin:								
Fibroma								
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%

#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma								
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%

#Skin:								
Fibrosarcoma								
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma								
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: Jun2013
 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:									
Fibrous Histiocytoma									
		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:									
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%
.....									
#Skin:									
Keratoacanthoma									
		5/50	(10%)			0/50	(0%)		
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
#Skin:									
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%
.....									
#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%
.....									
#Skin:									
Neural Crest Tumor									
		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: Jun2013
 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:									
Neurofibroma or Schwannoma 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:									
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%)	Mean 0% SD 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%)	Mean 0% SD 0%
.....									
#Skin:									
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:									
Schwannoma 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:									
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%
.....									

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

Version: Jun2013
 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								
		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								
		5/50	(10%)			0/50	(0%)	
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma								
		5/50	(10%)			0/50	(0%)	
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50	(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: 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:									
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%
.....									
#Spinal Cord:									
Glioma 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%
.....									
#Stomach, Glandular:									
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%
.....									
#Stomach, Glandular:									
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: Jun2013
 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: 06/05/2013

		Male			Female		
#Stomach, Glandular:							
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%
*Testes:							
Adenoma							
		35/50	(70%)				
Overall Incidence	Total	35/50	(70%)	Mean 70%	SD 0%		
*Testes:							
Hemangioma							
		0/50	(0%)				
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%		
*Thymus:							
Thymoma Benign							
		0/49	(0%)			0/49	(0%)
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)
							Mean 0%
							SD 0%
*Thymus:							
Thymoma Malignant							
		0/49	(0%)			0/49	(0%)
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)
							Mean 0%
							SD 0%
*Thymus:							
Thymoma NOS							
		0/49	(0%)			0/49	(0%)
Overall Incidence	Total	0/49	(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

Version: Jun2013
 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: 06/05/2013

		Male			Female		
*Thymus:							
Thymoma: Benign, Malignant, NOS							
		0/49	(0%)		0/49	(0%)	
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)
						Mean 0%	SD 0%
.....							
*Thyroid Gland: C-Cell:							
Adenoma							
		12/50	(24%)		10/50	(20%)	
Overall Incidence	Total	12/50	(24%)	Mean 24%	SD 0%	Total	10/50 (20%)
						Mean 20%	SD 0%
.....							
*Thyroid Gland: C-Cell:							
Carcinoma							
		1/50	(2%)		1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
.....							
*Thyroid Gland: C-Cell:							
Carcinoma or Adenoma							
		13/50	(26%)		11/50	(22%)	
Overall Incidence	Total	13/50	(26%)	Mean 26%	SD 0%	Total	11/50 (22%)
						Mean 22%	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							
		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: Jun2013
 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: Follicular Cell:							
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%
.....							
#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%
.....							
#Tongue:							
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%
.....							
#Tooth:							
Adamantinoma 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%
.....							
*Urinary Bladder:							
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: Jun2013
 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 or Papilloma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Urinary Bladder: Hemangiosarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Urinary Bladder: Papilloma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Uterus: Adenoma								
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Uterus: Carcinoma								
Overall Incidence					Total	1/50 (2%)	Mean 2%	SD 0%
.....								
#Uterus: Leiomyosarcoma								
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: Jun2013
 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:		
Polyp Stromal		
Overall Incidence	Total 8/50 (16%)	Mean 16% 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 8/50 (16%)	Mean 16% SD 0%
#Uterus:		
Schwannoma Malignant		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
#Vagina:		
Polyp		
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: Jun2013
 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						
#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%
.....											
#Zymbal's Gland:											
Adenoma											
					0/50 (0%)						
Overall Incidence		Total		0/50 (0%)		Mean 0%		SD 0%			
.....											
#Zymbal's Gland:											
Carcinoma											
					0/50 (0%)						
Overall Incidence		Total		1/50 (2%)		Mean 2%		SD 0%			
.....											
#Zymbal's Gland:											
Carcinoma or Adenoma											
					0/50 (0%)						
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: Jun2013
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: PERINATAL AND POSTNATAL
Vehicle: FEED

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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	059901305	05/12/05	726	50(3)	36(685)	522.7	Styrene-acrylonitrile trimer
Female							
Battelle Columbus Laboratory	059901305	05/13/05	727	50(5)	41(699)	371.2	Styrene-acrylonitrile trimer

Version: Jun2013
 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: PERINATAL AND POSTNATAL
 Vehicle: FEED

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 Report Date: 06/05/2013

		Male			Female		
#All Organs:							
Benign Tumors							
		46/50 (92%)			42/50 (84%)		
Overall Incidence	Total	46/50 (92%)	Mean 92%	SD 0%	Total	42/50 (84%)	Mean 84% SD 0%
.....							
#All Organs:							
Malignant Tumors							
		22/50 (44%)			19/50 (38%)		
Overall Incidence	Total	22/50 (44%)	Mean 44%	SD 0%	Total	19/50 (38%)	Mean 38% SD 0%
.....							
#All Organs:							
Malignant and Benign Tumors							
		49/50 (98%)			44/50 (88%)		
Overall Incidence	Total	49/50 (98%)	Mean 98%	SD 0%	Total	44/50 (88%)	Mean 88% SD 0%
.....							
#All Organs:							
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%
.....							
#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							
		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: Jun2013
 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: PERINATAL AND POSTNATAL
 Vehicle: FEED

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 Report Date: 06/05/2013

	Male				Female			
#All Organs:								
Histiocytic Sarcoma								
		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								
		15/50 (30%)			13/50 (26%)			
Overall Incidence	Total	15/50 (30%)	Mean 30%	SD 0%	Total	13/50 (26%)	Mean 26%	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:								
Mesothelioma: Benign, Malignant, NOS								
		4/50 (8%)			0/50 (0%)			
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#All Organs:								
Mesothelioma: 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%
.....								
#All Organs:								
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

Version: Jun2013
 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: PERINATAL AND POSTNATAL
 Vehicle: FEED

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		Male				Female			
#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									
		0/50	(0%)			1/50	(2%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% 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:									
Pheochromocytoma Benign									
		4/50	(8%)			0/50	(0%)		
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	0/50	(0%)	Mean 0% 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%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: PERINATAL AND POSTNATAL
 Vehicle: FEED

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		Male			Female		
*Adrenal Medulla:							
Pheochromocytoma 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%
.....							
*Adrenal Medulla:							
Pheochromocytoma: Benign, Complex, Malignant, NOS							
		4/50 (8%)			1/50 (2%)		
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
#Blood Vessel:							
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%
.....							
#Bone:							
Chordoma							
		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:							
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%
.....							
#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%

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

Version: Jun2013
 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: PERINATAL AND POSTNATAL
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	Male				Female			
#Bone:								
Osteosarcoma or Osteoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Brain:								
Glioma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
*Brain:								
Glioma Benign								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Brain:								
Glioma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Brain:								
Oligodendroglioma, Glioma, or Astrocytoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Brain:								
Osteosarcoma								
		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

Version: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
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		Male			Female		
*Clitoral/Preputial Gland: Adenoma							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	3/50 (6%)	Mean 6% SD 0%
.....							
*Clitoral/Preputial Gland: Carcinoma							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Clitoral/Preputial Gland: Carcinoma or Adenoma							
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	3/50 (6%)	Mean 6% SD 0%
.....							
*Clitoral/Preputial Gland: Sarcoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Ear: Neural Crest Tumor							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Eye: Melanoma Benign							
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: Jun2013
 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: PERINATAL AND POSTNATAL
 Vehicle: FEED

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		Male			Female		
#Eye:							
Melanoma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Harderian Gland:							
Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Harderian Gland:							
Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Harderian Gland:							
Carcinoma or Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Heart:							
Schwannoma Benign							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Heart:							
Schwannoma Malignant							
		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

Version: Jun2013
 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: PERINATAL AND POSTNATAL
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	Male				Female			
#Intestine Large: Colon/Rectum: 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 Large: Colon/Rectum: 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: Duodenum: 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%
.....								
#Intestine Small: Duodenum: 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 Small: Ileum: 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: 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%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: PERINATAL AND POSTNATAL
 Vehicle: FEED

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		Male			Female		
#Intestine Small: Jejunum:							
Leiomyoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Intestine Small: Jejunum:							
Leiomyosarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Intestine Small: Site Unspecified:							
Adenoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (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%)
.....							
#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%)
.....							
#Intestine Small: Site Unspecified:							
Leiomyoma							
		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

Version: Jun2013
 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: PERINATAL AND POSTNATAL
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		Male			Female		
#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%)
.....							
#Intestine Small: Site Unspecified:							
Schwannoma Malignant							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Islets, Pancreatic:							
Adenoma							
		0/50	(0%)		1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
.....							
*Islets, Pancreatic:							
Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
*Islets, Pancreatic:							
Carcinoma or Adenoma							
		0/50	(0%)		1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
.....							
*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%)
.....							

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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
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		Male			Female		
*Kidney: Renal Tubule: 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%
.....							
*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							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	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: Mesenchymal 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%
.....							
*Kidney: Renal Tubule: 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: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
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Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
 Route: PERINATAL AND POSTNATAL
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		Male				Female			
*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%
.....									
*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%)			0/50	(0%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 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%)	Mean 0% SD 0%
.....									
*Liver:									
Ito 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%

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

Version: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
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Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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	Male				Female			
*Lung:								
Alveolar/Bronchiolar 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%
.....								
*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%
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar 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%
.....								
*Lung:								
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%
.....								
#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%

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

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		Male			Female		
#Mammary Gland: Carcinoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/50 (4%)	Mean 4% SD 0%
.....							
#Mammary Gland: Carcinoma or Adenoma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/50 (4%)	Mean 4% SD 0%
.....							
#Mammary Gland: Fibroadenoma							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	36/50 (72%)	Mean 72% SD 0%
.....							
#Mammary Gland: Fibroma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Mammary Gland: Fibroma, Fibroadenoma or Adenoma							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	36/50 (72%)	Mean 72% SD 0%
.....							
#Mammary Gland: Fibroma, Fibroadenoma, Carcinoma, or Adenoma							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	36/50 (72%)	Mean 72% SD 0%

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

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	Male				Female			
#Mesentery:								
Fibrous Histiocytoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Mesentery:								
Schwannoma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Nose:								
Adenoma								
		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):								
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 Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):								
Squamous Cell Carcinoma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):								
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma								
		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

Version: Jun2013
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	Male				Female			
#Oral Mucosa:								
Squamous 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%
.....								
#Oral Mucosa:								
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%
.....								
*Ovary:								
Cystadenoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
*Ovary:								
Fibrosarcoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
*Ovary:								
Granulosa Cell Tumor Benign								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
*Ovary:								
Granulosa Cell 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

Version: Jun2013
 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
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				Male					Female	
*Ovary:										
Granulosa Cell Tumor: Benign, Malignant, NOS										
					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%
.....										
*Ovary:										
Schwannoma Malignant										
					0/50	(0%)				
Overall Incidence				Total	0/50	(0%)	Mean	0%	SD	0%
.....										
*Ovary:										
Sertoli Cell Tumor Malignant										
					0/50	(0%)				
Overall Incidence				Total	0/50	(0%)	Mean	0%	SD	0%
.....										
*Ovary:										
Tubulostromal Adenoma										
					0/50	(0%)				
Overall Incidence				Total	0/50	(0%)	Mean	0%	SD	0%
.....										
*Pancreas:										
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: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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	Male				Female			
*Pancreas:								
Carcinoma or Adenoma								
		1/50	(2%)			1/50	(2%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
*Pancreas:								
Mixed Tumor Benign								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								
*Parathyroid Gland:								
Adenoma								
		0/35	(0%)			0/48	(0%)	
Overall Incidence	Total	0/35	(0%)	Mean 0%	SD 0%	Total	0/48	(0%)
								Mean 0%
								SD 0%
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Adenoma								
		16/50	(32%)			22/50	(44%)	
Overall Incidence	Total	16/50	(32%)	Mean 32%	SD 0%	Total	22/50	(44%)
								Mean 44%
								SD 0%
.....								
*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								
		16/50	(32%)			22/50	(44%)	
Overall Incidence	Total	16/50	(32%)	Mean 32%	SD 0%	Total	22/50	(44%)
								Mean 44%
								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: F 344/N
 Length of Study: CHRONIC

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Male					Female				
*Pituitary Gland: Pars Distalis or Unspecified Site:									
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%
.....									
*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:									
Craniopharyngioma									
		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%				
.....									
*Prostate:									
Carcinoma or 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: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
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		Male				Female			
*Salivary Glands:									
 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%
.....									
*Salivary Glands:									
 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%
.....									
*Salivary Glands:									
 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%
.....									
*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:									
 Adenoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
#Skeletal Muscle:									
 Fibrous Histiocytoma									
		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: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
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		Male			Female		
#Skeletal Muscle:							
Lipoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (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%)
.....							
#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%)
.....							
#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%)
.....							
#Skin:							
Basal Cell Carcinoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (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%)

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

Version: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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	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	4/50 (8%)	Mean 8%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
#Skin:								
Fibroma								
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma								
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Fibrosarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma								
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: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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 Tumor Incidence for Selected Control Animal Groups
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	Male				Female			
#Skin:								
Fibrous Histiocytoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Hemangiosarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Keratoacanthoma								
		2/50	(4%)			1/50	(2%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Lipoma								
		1/50	(2%)			0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Liposarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Neural Crest Tumor								
		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

Version: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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 Tumor Incidence for Selected Control Animal Groups
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	Male				Female			
#Skin:								
Neurofibroma or Schwannoma benign								
		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%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Sarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Schwannoma Benign								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Schwannoma Malignant								
		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

Version: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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 Tumor Incidence for Selected Control Animal Groups
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	Male				Female			
#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								
		2/50	(4%)			0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Squamous Cell Papilloma or Papilloma								
		2/50	(4%)			0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma								
		4/50	(8%)			1/50	(2%)	
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	1/50	(2%)
.....								
#Skin:								
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma								
		4/50	(8%)			1/50	(2%)	
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	1/50	(2%)

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

Version: Jun2013
 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
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	Male				Female			
#Skin:								
Trichoepithelioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Skin: Sebaceous Gland:								
Adenoma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
#Skin: Sebaceous Gland:								
Carcinoma or Adenoma								
		0/50	(0%)			1/50	(2%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
#Spinal Cord:								
Glioma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Stomach, Glandular:								
Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Stomach, Glandular:								
Carcinoma or Adenoma								
		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

Version: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
 Length of Study: CHRONIC

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 Tumor Incidence for Selected Control Animal Groups
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	Male				Female			
#Stomach, Glandular:								
Sarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Testes:								
Adenoma								
		41/50	(82%)					
Overall Incidence	Total	41/50	(82%)	Mean 82%	SD 0%			
.....								
*Testes:								
Hemangioma								
		0/50	(0%)					
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%			
.....								
*Thymus:								
Thymoma Benign								
		1/48	(2%)			0/50	(0%)	
Overall Incidence	Total	1/48	(2.08%)	Mean 2.08%	SD 0%	Total	0/50	(0%)
.....								
*Thymus:								
Thymoma Malignant								
		1/48	(2%)			1/50	(2%)	
Overall Incidence	Total	1/48	(2.08%)	Mean 2.08%	SD 0%	Total	1/50	(2%)
.....								
*Thymus:								
Thymoma 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

Version: Jun2013
 Contract/Lab: All Laboratories
 Species: RATS
 Strain: F 344/N
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Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
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	Male				Female			
*Thymus:								
Thymoma: Benign, Malignant, NOS								
		2/48 (4%)			1/50 (2%)			
Overall Incidence	Total	2/48 (4.17%)	Mean 4.17%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
*Thyroid Gland: C-Cell:								
Adenoma								
		12/50 (24%)			6/50 (12%)			
Overall Incidence	Total	12/50 (24%)	Mean 24%	SD 0%	Total	6/50 (12%)	Mean 12%	SD 0%
.....								
*Thyroid Gland: C-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: C-Cell:								
Carcinoma or Adenoma								
		12/50 (24%)			6/50 (12%)			
Overall Incidence	Total	12/50 (24%)	Mean 24%	SD 0%	Total	6/50 (12%)	Mean 12%	SD 0%
.....								
*Thyroid Gland: Follicular Cell:								
Adenoma								
		1/50 (2%)			1/50 (2%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	1/50 (2%)	Mean 2%	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%

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

Version: Jun2013
 Contract/Lab: All Laboratories
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		Male			Female		
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
#Tongue: Squamous Cell Carcinoma							
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							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Tongue: Squamous Cell Papilloma							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Tooth: Adamantinoma Malignant							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
*Urinary Bladder: 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

Version: Jun2013
 Contract/Lab: All Laboratories
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 Strain: F 344/N
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Toxicology Data Management System
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	Male				Female			
*Urinary Bladder: Carcinoma or Papilloma								
		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: 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%
.....								
*Urinary Bladder: 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%
.....								
#Uterus: Adenoma								
					0/50 (0%)			
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Uterus: Carcinoma								
					0/50 (0%)			
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Uterus: Leiomyosarcoma								
					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: Jun2013
 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: PERINATAL AND POSTNATAL
 Vehicle: FEED

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	Male	Female
#Uterus:		
Polyp Stromal		
Overall Incidence	Total 6/50 (12%)	Mean 12% 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 6/50 (12%)	Mean 12% SD 0%
#Uterus:		
Schwannoma Malignant		
Overall Incidence	Total 1/50 (2%)	Mean 2% SD 0%
#Vagina:		
Polyp		
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: Jun2013
 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: PERINATAL AND POSTNATAL
 Vehicle: FEED

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 Report Date: 06/05/2013

Male					Female						
#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%		
.....											
#Zymbal's Gland:											
Adenoma											
					0/50 (0%)						
Overall Incidence		Total		0/50 (0%)		Mean 0%		SD 0%			
					0/50 (0%)						
Overall Incidence		Total		0/50 (0%)		Mean 0%		SD 0%			
.....											
#Zymbal's Gland:											
Carcinoma											
					0/50 (0%)						
Overall Incidence		Total		1/50 (2%)		Mean 2%		SD 0%			
					0/50 (0%)						
Overall Incidence		Total		1/50 (2%)		Mean 2%		SD 0%			
.....											
#Zymbal's Gland:											
Carcinoma or Adenoma											
					0/50 (0%)						
Overall Incidence		Total		1/50 (2%)		Mean 2%		SD 0%			
					0/50 (0%)						
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: Jun2013
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: SKIN
Vehicle: ACETONE

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Report Date: 06/05/2013

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							
Southern Research Institute	058813307	01/18/05	729	50(1)	23(681)	516.1	Trimethylolpropane triacrylate
Female							
Southern Research Institute	058813307	01/18/05	731	50(1)	27(688)	352.8	Trimethylolpropane triacrylate

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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	Male				Female			
#All Organs:								
Benign Tumors								
		48/50 (96%)			43/50 (86%)			
Overall Incidence	Total	48/50 (96%)	Mean 96%	SD 0%	Total	43/50 (86%)	Mean 86%	SD 0%
.....								
#All Organs:								
Malignant Tumors								
		30/50 (60%)			21/50 (42%)			
Overall Incidence	Total	30/50 (60%)	Mean 60%	SD 0%	Total	21/50 (42%)	Mean 42%	SD 0%
.....								
#All Organs:								
Malignant and Benign Tumors								
		50/50 (100%)			47/50 (94%)			
Overall Incidence	Total	50/50 (100%)	Mean 100%	SD 0%	Total	47/50 (94%)	Mean 94%	SD 0%
.....								
#All Organs:								
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%
.....								
#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								
		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: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

	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: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated								
		26/50 (52%)			12/50 (24%)			
Overall Incidence	Total	26/50 (52%)	Mean 52%	SD 0%	Total	12/50 (24%)	Mean 24%	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:								
Mesothelioma: 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%
.....								
#All Organs:								
Mesothelioma: 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%
.....								
#All Organs:								
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

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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	Male				Female			
#All Organs:								
Osteosarcoma								
		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 or Osteoma								
		2/50	(4%)			0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	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:								
Pheochromocytoma Benign								
		11/49	(22%)			0/48	(0%)	
Overall Incidence	Total	11/49	(22.45%)	Mean 22.45%	SD 0%	Total	0/48	(0%)
							Mean 0%	SD 0%
.....								
*Adrenal Medulla:								
Pheochromocytoma Complex								
		0/49	(0%)			0/48	(0%)	
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/48	(0%)
							Mean 0%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

		Male			Female		
*Adrenal Medulla:							
 Pheochromocytoma Malignant							
		1/49 (2%)			0/48 (0%)		
Overall Incidence	Total	1/49 (2.04%)	Mean 2.04%	SD 0%	Total	0/48 (0%)	Mean 0% SD 0%
.....							
*Adrenal Medulla:							
 Pheochromocytoma: Benign, Complex, Malignant, NOS							
		12/49 (24%)			0/48 (0%)		
Overall Incidence	Total	12/49 (24.49%)	Mean 24.49%	SD 0%	Total	0/48 (0%)	Mean 0% SD 0%
.....							
#Blood Vessel:							
 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%
.....							
#Bone:							
 Chordoma							
		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:							
 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%
.....							
#Bone:							
 Osteosarcoma							
		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

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

	Male				Female			
#Bone:								
Osteosarcoma or Osteoma								
		2/50	(4%)			0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
*Brain:								
Glioma								
		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:								
Glioma 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:								
Glioma 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								
		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:								
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%
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

	Male				Female			
*Clitoral/Preputial Gland: Adenoma								
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	4/50 (8%)	Mean 8%	SD 0%
.....								
*Clitoral/Preputial Gland: Carcinoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	7/50 (14%)	Mean 14%	SD 0%
.....								
*Clitoral/Preputial Gland: Carcinoma or Adenoma								
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	10/50 (20%)	Mean 20%	SD 0%
.....								
*Clitoral/Preputial Gland: Sarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Ear: Neural Crest Tumor								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Eye: Melanoma Benign								
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: Jun2013
 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: SKIN
Vehicle: ACETONE

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		Male				Female			
#Eye:									
Melanoma 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%
.....									
#Harderian 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%
.....									
#Harderian 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%
.....									
#Harderian 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%
.....									
*Heart:									
Schwannoma 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%
.....									
*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%
.....									

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

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

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

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

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

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

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

		Male			Female		
#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%
#Intestine Small: Site Unspecified:							
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%
*Islets, Pancreatic:							
Adenoma							
		18/50	(36%)		3/50	(6%)	
Overall Incidence	Total	18/50	(36%)	Mean 36%	SD 0%	Total	3/50 (6%)
							Mean 6%
							SD 0%
*Islets, Pancreatic:							
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%
*Islets, Pancreatic:							
Carcinoma or Adenoma							
		18/50	(36%)		3/50	(6%)	
Overall Incidence	Total	18/50	(36%)	Mean 36%	SD 0%	Total	3/50 (6%)
							Mean 6%
							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

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

		Male				Female			
*Kidney: Renal Tubule: Adenoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Carcinoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Carcinoma or Adenoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Lipoma									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Mesenchymal Tumor Malignant									
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
.....									
*Kidney: Renal Tubule: Sarcoma									
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

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

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

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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

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

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

	Male				Female				
#Mammary Gland:									
Carcinoma									
		0/50	(0%)			3/50	(6%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	3/50 (6%)	Mean 6%	SD 0%
.....									
#Mammary Gland:									
Carcinoma or Adenoma									
		0/50	(0%)			6/50	(12%)		
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	6/50 (12%)	Mean 12%	SD 0%
.....									
#Mammary Gland:									
Fibroadenoma									
		1/50	(2%)			22/50	(44%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	22/50 (44%)	Mean 44%	SD 0%
.....									
#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									
		1/50	(2%)			25/50	(50%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	25/50 (50%)	Mean 50%	SD 0%
.....									
#Mammary Gland:									
Fibroma, Fibroadenoma, Carcinoma, or Adenoma									
		1/50	(2%)			25/50	(50%)		
Overall Incidence	Total	1/50	(2%)	Mean 2%	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

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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		Male			Female		
#Mesentery:							
Fibrous Histiocytoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
#Mesentery:							
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%
*Nose:							
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%
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):							
Papilloma Squamous or Papilloma							
		1/50	(2%)		0/50	(0%)	
Overall Incidence	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							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							
		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: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

	Male				Female			
#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%)
.....								
#Oral Mucosa:								
Squamous Cell Papilloma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Ovary:								
Cystadenoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Fibrosarcoma								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Granulosa Cell Tumor Benign								
						0/50	(0%)	
Overall Incidence						Total	0/50	(0%)
.....								
*Ovary:								
Granulosa Cell Tumor Malignant								
						1/50	(2%)	
Overall Incidence						Total	1/50	(2%)
.....								

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: SKIN
 Vehicle: ACETONE

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 Report Date: 06/05/2013

				Male					Female	
*Ovary:										
Granulosa Cell Tumor: Benign, Malignant, NOS										
					1/50	(2%)				
Overall Incidence				Total	1/50	(2%)	Mean	2%	SD	0%
.....										
*Ovary:										
Granulosa-Theca Tumor Malignant										
					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 Malignant										
					0/50	(0%)				
Overall Incidence				Total	0/50	(0%)	Mean	0%	SD	0%
.....										
*Ovary:										
Tubulostromal Adenoma										
					0/50	(0%)				
Overall Incidence				Total	0/50	(0%)	Mean	0%	SD	0%
.....										
*Pancreas:										
Adenoma										
				1/50	(2%)					
Overall Incidence				Total	1/50	(2%)	Mean	2%	SD	0%
					0/50	(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: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

	Male				Female			
*Pancreas:								
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%
.....								
*Pancreas:								
Mixed Tumor Benign								
		1/50 (2%)			0/50 (0%)			
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Parathyroid Gland:								
Adenoma								
		0/45 (0%)			0/45 (0%)			
Overall Incidence	Total	0/45 (0%)	Mean 0%	SD 0%	Total	0/45 (0%)	Mean 0%	SD 0%
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Adenoma								
		34/49 (69%)			36/50 (72%)			
Overall Incidence	Total	34/49 (69.39%)	Mean 69.39%	SD 0%	Total	36/50 (72%)	Mean 72%	SD 0%
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Carcinoma								
		0/49 (0%)			2/50 (4%)			
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
.....								
*Pituitary Gland: Pars Distalis or Unspecified Site:								
Carcinoma or Adenoma								
		34/49 (69%)			38/50 (76%)			
Overall Incidence	Total	34/49 (69.39%)	Mean 69.39%	SD 0%	Total	38/50 (76%)	Mean 76%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: SKIN
Vehicle: ACETONE

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Male					Female				
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Ganglioneuroma									
		0/49	(0%)			0/50	(0%)		
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
*Pituitary Gland: Pars Intermedia:									
Adenoma									
		0/49	(0%)			1/50	(2%)		
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
*Pituitary Gland: Pars Intermedia:									
Carcinoma or Adenoma									
		0/49	(0%)			1/50	(2%)		
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
*Pituitary Gland: Pars Nervosa:									
Craniopharyngioma									
		0/49	(0%)			1/50	(2%)		
Overall Incidence	Total	0/49	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
*Prostate:									
Adenoma									
		0/50	(0%)						
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
*Prostate:									
Carcinoma or 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: Jun2013
 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: SKIN
Vehicle: ACETONE

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		Male			Female		
*Salivary Glands:							
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%
.....							
*Salivary Glands:							
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%
.....							
*Salivary Glands:							
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%
.....							
*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:							
Adenoma							
		0/50	(0%)				
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%		
.....							
#Skeletal Muscle:							
Fibrous Histiocytoma							
		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: Jun2013
 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: SKIN
Vehicle: ACETONE

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

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

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

	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	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								
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%

#Skin:								
Fibroma								
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

#Skin:								
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma								
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

#Skin:								
Fibrosarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

#Skin:								
Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma								
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: Jun2013
 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: SKIN
Vehicle: ACETONE

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		Male			Female		
#Skin:							
Fibrous Histiocytoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Hemangiosarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Keratoacanthoma							
		4/50	(8%)		0/50	(0%)	
Overall Incidence	Total	4/50	(8%)	Mean 8%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Lipoma							
		2/50	(4%)		0/50	(0%)	
Overall Incidence	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Liposarcoma							
		0/50	(0%)		0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
#Skin:							
Neural Crest Tumor							
		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

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

	Male				Female			
#Skin:								
Neurofibroma or Schwannoma benign								
		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:								
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%)
							Mean 0%	SD 0%
.....								
#Skin:								
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, 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%
.....								
#Skin:								
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:								
Schwannoma Benign								
		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:								
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%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

	Male				Female			
#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								
		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								
		5/50	(10%)			0/50	(0%)	
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50	(0%)
.....								
#Skin:								
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma								
		5/50	(10%)			0/50	(0%)	
Overall Incidence	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50	(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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: SKIN
Vehicle: ACETONE

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	Male				Female			
#Skin:								
Trichoepithelioma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(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%)
.....								
#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%)
.....								
#Spinal Cord:								
Glioma Malignant								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Stomach, Glandular:								
Carcinoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
#Stomach, Glandular:								
Carcinoma or Adenoma								
		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

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

	Male				Female			
#Stomach, Glandular:								
Sarcoma								
		0/50	(0%)			0/50	(0%)	
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
*Testes:								
Adenoma								
		27/50	(54%)					
Overall Incidence	Total	27/50	(54%)	Mean 54%	SD 0%			
.....								
*Testes:								
Hemangioma								
		0/50	(0%)					
Overall Incidence	Total	0/50	(0%)	Mean 0%	SD 0%			
.....								
*Thymus:								
Thymoma Benign								
		0/45	(0%)			0/47	(0%)	
Overall Incidence	Total	0/45	(0%)	Mean 0%	SD 0%	Total	0/47	(0%)
.....								
*Thymus:								
Thymoma Malignant								
		0/45	(0%)			0/47	(0%)	
Overall Incidence	Total	0/45	(0%)	Mean 0%	SD 0%	Total	0/47	(0%)
.....								
*Thymus:								
Thymoma NOS								
		0/45	(0%)			0/47	(0%)	
Overall Incidence	Total	0/45	(0%)	Mean 0%	SD 0%	Total	0/47	(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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

		Male			Female		
*Thymus:							
Thymoma: Benign, Malignant, NOS							
		0/45 (0%)			0/47 (0%)		
Overall Incidence	Total	0/45 (0%)	Mean 0%	SD 0%	Total	0/47 (0%)	Mean 0% SD 0%
.....							
*Thyroid Gland: C-Cell:							
Adenoma							
		8/50 (16%)			3/50 (6%)		
Overall Incidence	Total	8/50 (16%)	Mean 16%	SD 0%	Total	3/50 (6%)	Mean 6% SD 0%
.....							
*Thyroid Gland: C-Cell:							
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%
.....							
*Thyroid Gland: C-Cell:							
Carcinoma or Adenoma							
		8/50 (16%)			3/50 (6%)		
Overall Incidence	Total	8/50 (16%)	Mean 16%	SD 0%	Total	3/50 (6%)	Mean 6% 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%
.....							

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

Version: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

		Male			Female		
*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%
.....							
#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							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Tongue: Squamous Cell Papilloma							
		1/50 (2%)			0/50 (0%)		
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
#Tooth: Adamantinoma 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%
.....							
*Urinary Bladder: 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: Jun2013
 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: SKIN
 Vehicle: ACETONE

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	Male				Female			
*Urinary Bladder: Carcinoma or Papilloma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Urinary Bladder: Hemangiosarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
*Urinary Bladder: Papilloma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Uterus: Adenoma								
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Uterus: Carcinoma								
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
#Uterus: Leiomyosarcoma								
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: Jun2013
 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: SKIN
Vehicle: ACETONE

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	Male	Female
#Uterus:		
Polyp Stromal		
Overall Incidence	Total 9/50 (18%)	Mean 18% 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 9/50 (18%)	Mean 18% SD 0%
#Uterus:		
Schwannoma Malignant		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
#Vagina:		
Polyp		
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: Jun2013
 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: SKIN
Vehicle: ACETONE

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 Report Date: 06/05/2013

Male					Female				
#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%
.....									
#Zymbal's Gland:									
Adenoma									
					1/50	(2%)			
Overall Incidence					Total	1/50	(2%)	Mean 2%	SD 0%
					Total	0/50	(0%)	Mean 0%	SD 0%
.....									
#Zymbal's Gland:									
Carcinoma									
					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									
					1/50	(2%)			
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: Jun2013
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: SKIN
Vehicle: ETHANOL

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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							
Southern Research Institute	059500305	04/05/04	729	50(1)	27(683)	508.5	Methyl trans-styryl ketone
Battelle Columbus Laboratory	059903203	09/15/04	727	50(1)	23(651)	510.1	Pyrogallol
Female							
Southern Research Institute	059500305	04/05/04	732	50(1)	30(685)	356.2	Methyl trans-styryl ketone
Battelle Columbus Laboratory	059903203	09/16/04	728	50(1)	29(670)	351.0	Pyrogallol

Version: Jun2013
 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: SKIN
 Vehicle: ETHANOL

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		Male				Female			
#All Organs:									
Benign Tumors									
		46/50 (92%)	47/50 (94%)		47/50 (94%)	43/50 (86%)			
Overall Incidence	Total	93/100 (93%)	Mean 93%	SD 1.41%	Total	90/100 (90%)	Mean 90%	SD 5.66%	
.....									
#All Organs:									
Malignant Tumors									
		33/50 (66%)	22/50 (44%)		22/50 (44%)	12/50 (24%)			
Overall Incidence	Total	55/100 (55%)	Mean 55%	SD 15.56%	Total	34/100 (34%)	Mean 34%	SD 14.14%	
.....									
#All Organs:									
Malignant and Benign Tumors									
		48/50 (96%)	49/50 (98%)		49/50 (98%)	45/50 (90%)			
Overall Incidence	Total	97/100 (97%)	Mean 97%	SD 1.41%	Total	94/100 (94%)	Mean 94%	SD 5.66%	
.....									
#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

Version: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

		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: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated									
		26/50 (52%)	11/50 (22%)		18/50 (36%)	8/50 (16%)			
Overall Incidence	Total	37/100 (37%)	Mean 37%	SD 21.21%	Total	26/100 (26%)	Mean 26%	SD 14.14%	
.....									
#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, 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%	
.....									
#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%)	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: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male				Female					
#All Organs:											
Osteosarcoma											
		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:											
Osteosarcoma or Osteoma											
		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%	
.....											
*Adrenal Cortex:											
Adenoma											
		0/50	(0%)	0/50	(0%)			4/50	(8%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	5/100	(5%)	Mean 5%	SD 4.24%	
.....											
*Adrenal Cortex:											
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%	
.....											
*Adrenal Medulla:											
Pheochromocytoma Benign											
		11/49	(22%)	4/50	(8%)			1/49	(2%)	1/50	(2%)
Overall Incidence	Total	15/99	(15.15%)	Mean 15.22%	SD 10.22%	Total	2/99	(2.02%)	Mean 2.02%	SD 0.03%	
.....											
*Adrenal Medulla:											
Pheochromocytoma Complex											
		0/49	(0%)	0/50	(0%)			0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/99	(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: Jun2013
 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: SKIN
 Vehicle: ETHANOL

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	Male				Female			
*Adrenal Medulla:								
Pheochromocytoma Malignant								
		0/49 (0%)	1/50 (2%)		0/49 (0%)	0/50 (0%)		
Overall Incidence	Total	1/99 (1.01%)	Mean 1%	SD 1.41%	Total	0/99 (0%)	Mean 0%	SD 0%
.....								
*Adrenal Medulla:								
Pheochromocytoma: Benign, Complex, Malignant, NOS								
		11/49 (22%)	5/50 (10%)		1/49 (2%)	1/50 (2%)		
Overall Incidence	Total	16/99 (16.16%)	Mean 16.22%	SD 8.8%	Total	2/99 (2.02%)	Mean 2.02%	SD 0.03%
.....								
#Blood Vessel:								
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%
.....								
#Bone:								
Chordoma								
		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:								
Osteoma								
		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%
.....								
#Bone:								
Osteosarcoma								
		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: Jun2013
 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: SKIN
 Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male				Female					
#Bone:											
Osteosarcoma or Osteoma											
		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%	
.....											
*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%)			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 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%)			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:											
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%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: SKIN
Vehicle: ETHANOL

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		Male				Female					
*Clitoral/Preputial Gland:											
Adenoma											
		1/50	(2%)	0/50	(0%)			6/50	(12%)	3/50	(6%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	9/100	(9%)	Mean 9%	SD 4.24%	
.....											
*Clitoral/Preputial Gland:											
Carcinoma											
		3/50	(6%)	0/50	(0%)			3/50	(6%)	1/50	(2%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 4.24%	Total	4/100	(4%)	Mean 4%	SD 2.83%	
.....											
*Clitoral/Preputial Gland:											
Carcinoma or Adenoma											
		4/50	(8%)	0/50	(0%)			9/50	(18%)	4/50	(8%)
Overall Incidence	Total	4/100	(4%)	Mean 4%	SD 5.66%	Total	13/100	(13%)	Mean 13%	SD 7.07%	
.....											
*Clitoral/Preputial Gland:											
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%	
.....											
#Ear:											
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%	
.....											
#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%	

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

Version: Jun2013
 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: SKIN
Vehicle: ETHANOL

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		Male				Female			
#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%
.....									
#Harderian Gland:									
Adenoma									
		0/50	(0%)	0/50	(0%)	2/50	(4%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	2/100	(2%)	Mean 2%
									SD 2.83%
.....									
#Harderian 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%
.....									
#Harderian Gland:									
Carcinoma or Adenoma									
		0/50	(0%)	0/50	(0%)	2/50	(4%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	2/100	(2%)	Mean 2%
									SD 2.83%
.....									
*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%)	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

Version: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male				Female					
#Intestine Large: Colon/Rectum:											
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 Large: Colon/Rectum:											
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: Duodenum:											
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: 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%	
.....											
#Intestine Small: Ileum:											
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%	
.....											
#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%	Total	0/100	(0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male				Female			
#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%	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:									
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%
.....									
#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%)	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:									
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%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male			Female		
#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%
*Islets, Pancreatic:							
Adenoma							
		5/49 (10%)	3/50 (6%)		3/49 (6%)	2/50 (4%)	
Overall Incidence	Total	8/99 (8.08%)	Mean 8.1%	SD 2.97%	Total	5/99 (5.05%)	Mean 5.06% SD 1.5%
*Islets, Pancreatic:							
Carcinoma							
		3/49 (6%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	
Overall Incidence	Total	3/99 (3.03%)	Mean 3.06%	SD 4.33%	Total	0/99 (0%)	Mean 0% SD 0%
*Islets, Pancreatic:							
Carcinoma or Adenoma							
		8/49 (16%)	3/50 (6%)		3/49 (6%)	2/50 (4%)	
Overall Incidence	Total	11/99 (11.11%)	Mean 11.16%	SD 7.3%	Total	5/99 (5.05%)	Mean 5.06% SD 1.5%
*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

Version: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

		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%	Total	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%	Total	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%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
*Kidney: Renal Tubule: Lipoma									
		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%
.....									
*Kidney: Renal Tubule: Mesenchymal 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%
.....									
*Kidney: Renal Tubule: 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: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male				Female			
*Liver:									
Hepatocellular Adenoma									
		2/50	(4%)	1/50	(2%)	0/50	(0%)	2/50	(4%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	2/100	(2%)	Mean 2% SD 2.83%
.....									
*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									
		2/50	(4%)	1/50	(2%)	0/50	(0%)	2/50	(4%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	2/100	(2%)	Mean 2% SD 2.83%
.....									
*Liver:									
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma									
		2/50	(4%)	1/50	(2%)	0/50	(0%)	2/50	(4%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	2/100	(2%)	Mean 2% SD 2.83%
.....									
*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%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

	Male				Female			
*Lung:								
Alveolar/Bronchiolar Adenoma								
		2/50 (4%)	1/50 (2%)		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%
.....								
*Lung:								
Alveolar/Bronchiolar 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%
.....								
*Lung:								
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma								
		2/50 (4%)	4/50 (8%)		1/50 (2%)	0/50 (0%)		
Overall Incidence	Total	6/100 (6%)	Mean 6%	SD 2.83%	Total	1/100 (1%)	Mean 1%	SD 1.41%
.....								
*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%
.....								
#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%)	2/50 (4%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	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: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male				Female					
#Mammary Gland:											
Carcinoma											
		0/50	(0%)	1/50	(2%)			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%	
.....											
#Mammary Gland:											
Carcinoma or Adenoma											
		0/50	(0%)	1/50	(2%)			3/50	(6%)	3/50	(6%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	6/100	(6%)	Mean 6%	SD 0%	
.....											
#Mammary Gland:											
Fibroadenoma											
		2/50	(4%)	0/50	(0%)			19/50	(38%)	24/50	(48%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	43/100	(43%)	Mean 43%	SD 7.07%	
.....											
#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											
		2/50	(4%)	0/50	(0%)			19/50	(38%)	25/50	(50%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	44/100	(44%)	Mean 44%	SD 8.49%	
.....											
#Mammary Gland:											
Fibroma, Fibroadenoma, Carcinoma, or Adenoma											
		2/50	(4%)	1/50	(2%)			21/50	(42%)	26/50	(52%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	47/100	(47%)	Mean 47%	SD 7.07%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male				Female					
#Mesentery:											
Fibrous Histiocytoma											
		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%	
.....											
#Mesentery:											
Schwannoma Malignant											
		1/50	(2%)	0/50	(0%)			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%	
.....											
*Nose:											
Adenoma											
		0/50	(0%)	0/50	(0%)			0/48	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/98	(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%)	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											
		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%	
.....											
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):											
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma											
		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

Version: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

	Male					Female				
#Oral Mucosa:										
Squamous 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%
.....										
#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%)	0/50	(0%)
Overall Incidence						Total	0/100	(0%)	Mean 0%	SD 0%
.....										
*Ovary:										
Fibrosarcoma										
							0/50	(0%)	0/50	(0%)
Overall Incidence						Total	0/100	(0%)	Mean 0%	SD 0%
.....										
*Ovary:										
Granulosa Cell Tumor Benign										
							1/50	(2%)	1/50	(2%)
Overall Incidence						Total	2/100	(2%)	Mean 2%	SD 0%
.....										
*Ovary:										
Granulosa Cell 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

Version: Jun2013
 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: SKIN
 Vehicle: ETHANOL

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 Report Date: 06/05/2013

Male					Female							
*Ovary:												
Granulosa Cell Tumor: Benign, Malignant, NOS												
					1/50	(2%)	1/50	(2%)				
Overall Incidence					Total	2/100	(2%)	Mean	2%	SD 0%		
.....												
*Ovary:												
Granulosa-Theca Tumor Malignant												
					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 Malignant												
					0/50	(0%)	0/50	(0%)				
Overall Incidence					Total	0/100	(0%)	Mean	0%	SD 0%		
.....												
*Ovary:												
Tubulostromal Adenoma												
					0/50	(0%)	0/50	(0%)				
Overall Incidence					Total	0/100	(0%)	Mean	0%	SD 0%		
.....												
*Pancreas:												
Adenoma												
		0/49	(0%)	0/50	(0%)			0/49	(0%)	0/50	(0%)	
Overall Incidence		Total	0/99	(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: Jun2013
 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: SKIN
Vehicle: ETHANOL

Page: 260
 Report Date: 06/05/2013

		Male				Female			
*Pancreas:									
Carcinoma or Adenoma									
		0/49	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/99	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
*Pancreas:									
Mixed Tumor Benign									
		0/49	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/99	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
*Parathyroid Gland:									
Adenoma									
		0/49	(0%)	0/50	(0%)	1/50	(2%)	0/49	(0%)
Overall Incidence	Total	0/99	(0%)	Mean 0%	SD 0%	Total	1/99	(1.01%)	Mean 1%
									SD 1.41%
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Adenoma									
		33/50	(66%)	33/50	(66%)	31/50	(62%)	25/50	(50%)
Overall Incidence	Total	66/100	(66%)	Mean 66%	SD 0%	Total	56/100	(56%)	Mean 56%
									SD 8.49%
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Carcinoma									
		2/50	(4%)	0/50	(0%)	2/50	(4%)	0/50	(0%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	2/100	(2%)	Mean 2%
									SD 2.83%
*Pituitary Gland: Pars Distalis or Unspecified Site:									
Carcinoma or Adenoma									
		35/50	(70%)	33/50	(66%)	33/50	(66%)	25/50	(50%)
Overall Incidence	Total	68/100	(68%)	Mean 68%	SD 2.83%	Total	58/100	(58%)	Mean 58%
									SD 11.31%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: SKIN
Vehicle: ETHANOL

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		Male			Female		
*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%)	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%
.....							
*Pituitary Gland: Pars Intermedia:							
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%
.....							
*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							
		0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%			
.....							
*Prostate:							
Carcinoma or 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: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male				Female					
*Salivary Glands:											
 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%	
.....											
*Salivary Glands:											
 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%	
.....											
*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%)	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%	
.....											
#Seminal Vesicle:											
 Adenoma											
		0/50	(0%)	0/50	(0%)						
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%						
.....											
#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%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: SKIN
Vehicle: ETHANOL

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		Male				Female			
#Skeletal Muscle:									
Lipoma									
		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:									
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%	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%	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%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Skin:									
Basal Cell Carcinoma									
		1/50	(2%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	1/100	(1%)	Mean 1%	SD 1.41%
.....									
#Skin:									
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)									
		1/50	(2%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	1/100	(1%)	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

	Male					Female				
#Skin:										
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma										
		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%		
#Skin:										
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma										
		7/50 (14%)	3/50 (6%)			0/50 (0%)	1/50 (2%)			
Overall Incidence	Total	10/100 (10%)	Mean 10%	SD 5.66%	Total	1/100 (1%)	Mean 1%	SD 1.41%		
#Skin:										
Fibroma										
		5/50 (10%)	1/50 (2%)			3/50 (6%)	1/50 (2%)			
Overall Incidence	Total	6/100 (6%)	Mean 6%	SD 5.66%	Total	4/100 (4%)	Mean 4%	SD 2.83%		
#Skin:										
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma										
		7/50 (14%)	1/50 (2%)			3/50 (6%)	1/50 (2%)			
Overall Incidence	Total	8/100 (8%)	Mean 8%	SD 8.49%	Total	4/100 (4%)	Mean 4%	SD 2.83%		
#Skin:										
Fibrosarcoma										
		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%		
#Skin:										
Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma										
		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%		

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: SKIN
 Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male				Female					
#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:											
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%	
.....											
#Skin:											
Keratoacanthoma											
		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:											
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%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

	Male				Female			
#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%
.....								
#Skin:								
Neurofibrosarcoma or Schwannoma (malignant or NOS)								
		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:								
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)								
		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:								
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:								
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%)	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: Jun2013
 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: SKIN
 Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male				Female					
#Skin:											
Squamous 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%	
.....											
#Skin:											
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma											
		2/50	(4%)	0/50	(0%)			0/50	(0%)	1/50	(2%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	1/100	(1%)	Mean 1%	SD 1.41%	
.....											
#Skin:											
Squamous Cell Papilloma											
		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:											
Squamous Cell Papilloma or Papilloma											
		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:											
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma											
		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:											
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma											
		5/50	(10%)	3/50	(6%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	8/100	(8%)	Mean 8%	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: Jun2013
 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: SKIN
 Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male				Female			
#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%
.....									
#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%
.....									
#Stomach, Glandular:									
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%
.....									
#Stomach, Glandular:									
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%

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

Version: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male			Female		
#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%
.....							
*Testes:							
Adenoma							
		34/50 (68%)	37/50 (74%)				
Overall Incidence	Total	71/100 (71%)	Mean 71%	SD 4.24%			
.....							
*Testes:							
Hemangioma							
		0/50 (0%)	1/50 (2%)				
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%			
.....							
*Thymus:							
Thymoma Benign							
		0/50 (0%)	0/47 (0%)		1/50 (2%)	1/50 (2%)	
Overall Incidence	Total	0/97 (0%)	Mean 0%	SD 0%	Total	2/100 (2%)	Mean 2% SD 0%
.....							
*Thymus:							
Thymoma Malignant							
		0/50 (0%)	0/47 (0%)		0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/97 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0% SD 0%
.....							
*Thymus:							
Thymoma NOS							
		0/50 (0%)	0/47 (0%)		0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/97 (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: Jun2013
 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: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male				Female			
*Thymus:									
Thymoma: Benign, Malignant, NOS									
		0/50 (0%)	0/47 (0%)		1/50 (2%)	1/50 (2%)			
Overall Incidence	Total	0/97 (0%)	Mean 0%	SD 0%	Total	2/100 (2%)	Mean 2%	SD 0%	
.....									
*Thyroid Gland: C-Cell:									
Adenoma									
		6/46 (13%)	9/50 (18%)		7/50 (14%)	7/50 (14%)			
Overall Incidence	Total	15/96 (15.62%)	Mean 15.52%	SD 3.5%	Total	14/100 (14%)	Mean 14%	SD 0%	
.....									
*Thyroid Gland: C-Cell:									
Carcinoma									
		0/46 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)			
Overall Incidence	Total	0/96 (0%)	Mean 0%	SD 0%	Total	1/100 (1%)	Mean 1%	SD 1.41%	
.....									
*Thyroid Gland: C-Cell:									
Carcinoma or Adenoma									
		6/46 (13%)	9/50 (18%)		8/50 (16%)	7/50 (14%)			
Overall Incidence	Total	15/96 (15.62%)	Mean 15.52%	SD 3.5%	Total	15/100 (15%)	Mean 15%	SD 1.41%	
.....									
*Thyroid Gland: Follicular Cell:									
Adenoma									
		0/46 (0%)	0/50 (0%)		1/50 (2%)	1/50 (2%)			
Overall Incidence	Total	0/96 (0%)	Mean 0%	SD 0%	Total	2/100 (2%)	Mean 2%	SD 0%	
.....									
*Thyroid Gland: Follicular Cell:									
Carcinoma									
		2/46 (4%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	2/96 (2.08%)	Mean 2.17%	SD 3.07%	Total	0/100 (0%)	Mean 0%	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: F 344/N
 Length of Study: CHRONIC

Toxicology Data Management System
 Tumor Incidence for Selected Control Animal Groups
Route: SKIN
Vehicle: ETHANOL

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 Report Date: 06/05/2013

		Male			Female		
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma							
		2/46 (4%)	0/50 (0%)		1/50 (2%)	1/50 (2%)	
Overall Incidence	Total	2/96 (2.08%)	Mean 2.17%	SD 3.07%	Total	2/100 (2%)	Mean 2% SD 0%
.....							
#Tongue: 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%
.....							
#Tongue: Squamous Cell Carcinoma or Papilloma Squamous							
		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%
.....							
#Tongue: 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%
.....							
#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%
.....							
*Urinary Bladder: 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: Jun2013
 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: SKIN
Vehicle: ETHANOL

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		Male				Female				
*Urinary Bladder:										
 Carcinoma 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%
.....										
*Urinary Bladder:										
 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%
.....										
*Urinary Bladder:										
 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%
.....										
#Uterus:										
 Adenoma										
							0/50	(0%)	0/50	(0%)
Overall Incidence						Total	0/100	(0%)	Mean 0%	SD 0%
.....										
#Uterus:										
 Carcinoma										
							0/50	(0%)	0/50	(0%)
Overall Incidence						Total	0/100	(0%)	Mean 0%	SD 0%
.....										
#Uterus:										
 Leiomyosarcoma										
							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: Jun2013
 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
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	Male	Female
#Uterus: Polyp Stromal		
Overall Incidence	Total 10/50 (20%) 17/100 (17%)	7/50 (14%) Mean 17% SD 4.24%
#Uterus: Sarcoma		
Overall Incidence	Total 0/50 (0%) 1/100 (1%)	1/50 (2%) Mean 1% SD 1.41%
#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 10/50 (20%) 17/100 (17%)	7/50 (14%) Mean 17% SD 4.24%
#Uterus: Schwannoma Malignant		
Overall Incidence	Total 0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0% SD 0%
#Vagina: Polyp		
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: Jun2013
 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: SKIN
Vehicle: ETHANOL

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Male					Female										
#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	0/100	(0%)	Mean	0%	SD	0%
.....															
#Zymbal's Gland:															
Carcinoma															
		1/50	(2%)	1/50	(2%)			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															
		1/50	(2%)	1/50	(2%)			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