



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:

<b>Male</b>			<b>Female</b>		
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
<b>Male</b>							
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
<b>Female</b>							
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

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 Report Date: 06/05/2013

		Male			Female		
<b>#All Organs:</b>							
<b>Benign Tumors</b>							
		50/50 (100%)	49/49 (100%)	48/50 (96%)	47/50 (94%)	43/50 (86%)	46/50 (92%)
<b>Overall Incidence</b>	Total	147/149 (98.66%)	Mean 98.67%	SD 2.31%	Total	136/150 (90.67%)	Mean 90.67% SD 4.16%
.....							
<b>#All Organs:</b>							
<b>Malignant Tumors</b>							
		13/50 (26%)	17/49 (35%)	20/50 (40%)	12/50 (24%)	11/50 (22%)	23/50 (46%)
<b>Overall Incidence</b>	Total	50/149 (33.56%)	Mean 33.56%	SD 7.07%	Total	46/150 (30.67%)	Mean 30.67% SD 13.32%
.....							
<b>#All Organs:</b>							
<b>Malignant and Benign Tumors</b>							
		50/50 (100%)	49/49 (100%)	49/50 (98%)	49/50 (98%)	46/50 (92%)	49/50 (98%)
<b>Overall Incidence</b>	Total	148/149 (99.33%)	Mean 99.33%	SD 1.15%	Total	144/150 (96%)	Mean 96% SD 3.46%
.....							
<b>#All Organs:</b>							
<b>Hemangioma</b>							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#All Organs:</b>							
<b>Hemangiosarcoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#All Organs:</b>							
<b>Hemangiosarcoma or Hemangioma</b>							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	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			
<b>#All Organs:</b>								
<b>Histiocytic Sarcoma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated</b>								
		9/50 (18%)	7/49 (14%)	14/50 (28%)	8/50 (16%)	5/50 (10%)	15/50 (30%)	
<b>Overall Incidence</b>	Total	30/149 (20.13%)	Mean 20.1%	SD 7.09%	Total	28/150 (18.67%)	Mean 18.67%	SD 10.26%
.....								
<b>#All Organs:</b>								
<b>Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type</b>								
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Benign, Malignant, NOS</b>								
		3/50 (6%)	3/49 (6%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	7/149 (4.7%)	Mean 4.71%	SD 2.35%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Malignant</b>								
		3/50 (6%)	3/49 (6%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	7/149 (4.7%)	Mean 4.71%	SD 2.35%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Osteoma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	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		
<b>#All Organs:</b>							
<b>Osteosarcoma</b>							
		0/50 (0%)	1/49 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	2/149 (1.34%)	Mean 1.35%	SD 1.17%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#All Organs:</b>							
<b>Osteosarcoma or Osteoma</b>							
		0/50 (0%)	1/49 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	2/149 (1.34%)	Mean 1.35%	SD 1.17%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Adrenal Cortex:</b>							
<b>Adenoma</b>							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	3/50 (6%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	3/150 (2%)	Mean 2% SD 3.46%
.....							
<b>*Adrenal Cortex:</b>							
<b>Carcinoma</b>							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Adrenal Medulla:</b>							
<b>Pheochromocytoma Benign</b>							
		11/50 (22%)	5/49 (10%)	6/50 (12%)	2/50 (4%)	3/50 (6%)	2/50 (4%)
<b>Overall Incidence</b>	Total	22/149 (14.77%)	Mean 14.73%	SD 6.36%	Total	7/150 (4.67%)	Mean 4.67% SD 1.15%
.....							
<b>*Adrenal Medulla:</b>							
<b>Pheochromocytoma Complex</b>							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	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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		Male			Female			
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma Malignant</b>								
		2/50 (4%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	3/149 (2.01%)	Mean 2%	SD 2%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma: Benign, Complex, Malignant, NOS</b>								
		12/50 (24%)	5/49 (10%)	8/50 (16%)	2/50 (4%)	3/50 (6%)	2/50 (4%)	
<b>Overall Incidence</b>	Total	25/149 (16.78%)	Mean 16.73%	SD 6.93%	Total	7/150 (4.67%)	Mean 4.67%	SD 1.15%
.....								
<b>#Blood Vessel:</b>								
<b>Leiomyosarcoma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>#Bone:</b>								
<b>Chordoma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>#Bone:</b>								
<b>Osteoma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>#Bone:</b>								
<b>Osteosarcoma</b>								
		0/50 (0%)	1/49 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	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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		Male			Female		
<b>#Bone:</b>							
<b>Osteosarcoma or Osteoma</b>							
		0/50 (0%)	1/49 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	2/149 (1.34%)	Mean 1.35%	SD 1.17%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Brain:</b>							
<b>Glioma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Brain:</b>							
<b>Glioma Benign</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Brain:</b>							
<b>Glioma Malignant</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Brain:</b>							
<b>Oligodendroglioma, Glioma, or Astrocytoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Brain:</b>							
<b>Osteosarcoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	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		
<b>*Clitoral/Preputial Gland:</b>							
<b>Adenoma</b>							
		4/50 (8%)	0/49 (0%)	0/50 (0%)	5/50 (10%)	2/50 (4%)	5/50 (10%)
<b>Overall Incidence</b>	Total	4/149 (2.68%)	Mean 2.67%	SD 4.62%	Total	12/150 (8%)	Mean 8% SD 3.46%
.....							
<b>*Clitoral/Preputial Gland:</b>							
<b>Carcinoma</b>							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	2/50 (4%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	2/150 (1.33%)	Mean 1.33% SD 2.31%
.....							
<b>*Clitoral/Preputial Gland:</b>							
<b>Carcinoma or Adenoma</b>							
		4/50 (8%)	1/49 (2%)	0/50 (0%)	5/50 (10%)	4/50 (8%)	5/50 (10%)
<b>Overall Incidence</b>	Total	5/149 (3.36%)	Mean 3.35%	SD 4.16%	Total	14/150 (9.33%)	Mean 9.33% SD 1.15%
.....							
<b>*Clitoral/Preputial Gland:</b>							
<b>Sarcoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Ear:</b>							
<b>Neural Crest Tumor</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	1/50 (2%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	2/150 (1.33%)	Mean 1.33% SD 1.15%
.....							
<b>#Eye:</b>							
<b>Melanoma Benign</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
<b>Overall Incidence</b>	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			
<b>#Eye:</b>								
<b>Melanoma Malignant</b>								
<b>Overall Incidence</b>	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%
<b>#Harderian Gland:</b>								
<b>Adenoma</b>								
<b>Overall Incidence</b>	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%
<b>#Harderian Gland:</b>								
<b>Carcinoma</b>								
<b>Overall Incidence</b>	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%
<b>#Harderian Gland:</b>								
<b>Carcinoma or Adenoma</b>								
<b>Overall Incidence</b>	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%
<b>*Heart:</b>								
<b>Schwannoma Benign</b>								
<b>Overall Incidence</b>	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%
<b>*Heart:</b>								
<b>Schwannoma Malignant</b>								
<b>Overall Incidence</b>	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			
<b>#Intestine Large: Colon/Rectum:</b>									
<b>Adenoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
<b>#Intestine Large: Colon/Rectum:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
<b>#Intestine Small: Duodenum:</b>									
<b>Leiomyoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
<b>#Intestine Small: Duodenum:</b>									
<b>Schwannoma Malignant</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	
.....									
<b>#Intestine Small: Ileum:</b>									
<b>Adenoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
<b>#Intestine Small: Jejunum:</b>									
<b>Carcinoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	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			
<b>#Intestine Small: Jejunum:</b>								
<b>Leiomyoma</b>								
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>#Intestine Small: Jejunum:</b>								
<b>Leiomyosarcoma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
<b>#Intestine Small: Site Unspecified:</b>								
<b>Adenoma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>#Intestine Small: Site Unspecified:</b>								
<b>Carcinoma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>#Intestine Small: Site Unspecified:</b>								
<b>Carcinoma or Adenoma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>#Intestine Small: Site Unspecified:</b>								
<b>Leiomyoma</b>								
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	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			
<b>#Intestine Small: Site Unspecified:</b>								
<b>Leiomyosarcoma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
<b>#Intestine Small: Site Unspecified:</b>								
<b>Schwannoma Malignant</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
<b>*Islets, Pancreatic:</b>								
<b>Adenoma</b>								
		4/50 (8%)	4/49 (8%)	2/50 (4%)	1/50 (2%)	1/50 (2%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	10/149 (6.71%)	Mean 6.72%	SD 2.36%	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%
.....								
<b>*Islets, Pancreatic:</b>								
<b>Carcinoma</b>								
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>*Islets, Pancreatic:</b>								
<b>Carcinoma or Adenoma</b>								
		4/50 (8%)	4/49 (8%)	3/50 (6%)	1/50 (2%)	1/50 (2%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	11/149 (7.38%)	Mean 7.39%	SD 1.2%	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%
.....								
<b>*Kidney: Pelvis and Transitional Epithelium:</b>								
<b>Papilloma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	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		
<b>*Kidney: Renal Tubule: Adenoma</b>							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Carcinoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Carcinoma or Adenoma</b>							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Lipoma</b>							
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Mesenchymal Tumor Malignant</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Sarcoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	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		
<b>*Liver:</b>							
<b>Hepatocellular Adenoma</b>							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma or Hepatoblastoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma or Hepatocellular Adenoma</b>							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma</b>							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Liver:</b>							
<b>Ito Cell Tumor Benign</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	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			
<b>*Lung:</b>									
<b>Alveolar/Bronchiolar Adenoma</b>									
		1/50 (2%)	2/49 (4%)	0/50 (0%)		4/50 (8%)	0/50 (0%)	1/50 (2%)	
<b>Overall Incidence</b>	Total	3/149 (2.01%)	Mean 2.03%	SD 2.04%	Total	5/150 (3.33%)	Mean 3.33%	SD 4.16%	
.....									
<b>*Lung:</b>									
<b>Alveolar/Bronchiolar Carcinoma</b>									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
<b>*Lung:</b>									
<b>Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma</b>									
		1/50 (2%)	2/49 (4%)	0/50 (0%)		4/50 (8%)	0/50 (0%)	1/50 (2%)	
<b>Overall Incidence</b>	Total	3/149 (2.01%)	Mean 2.03%	SD 2.04%	Total	5/150 (3.33%)	Mean 3.33%	SD 4.16%	
.....									
<b>*Lung:</b>									
<b>Fibrosarcoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	
.....									
<b>#Mammary Gland:</b>									
<b>Adenolipoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	
.....									
<b>#Mammary Gland:</b>									
<b>Adenoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	2/50 (4%)	0/50 (0%)	
<b>Overall Incidence</b>	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**  
 Tumor Incidence for Selected Control Animal Groups  
 Route: GAVAGE  
 Vehicle: CORN OIL

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

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

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		Male				Female			
<b>#Mesentery:</b>									
<b>Fibrous Histiocytoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
<b>#Mesentery:</b>									
<b>Schwannoma Malignant</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
<b>*Nose:</b>									
<b>Adenoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/149 (0%)	Mean 0%	SD 0%	
.....									
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>									
<b>Papilloma Squamous or Papilloma</b>									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	
.....									
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>									
<b>Squamous Cell Carcinoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>									
<b>Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma</b>									
		0/50 (0%)	1/49 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
<b>Overall Incidence</b>	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  
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		Male			Female			
<b>#Oral Mucosa:</b>								
<b>Squamous Cell Carcinoma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>#Oral Mucosa:</b>								
<b>Squamous Cell Papilloma</b>								
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>*Ovary:</b>								
<b>Cystadenoma</b>								
					0/50 (0%)	1/50 (2%)	0/50 (0%)	
<b>Overall Incidence</b>	Total				1/150 (0.67%)	Mean 0.67%	SD 1.15%	
.....								
<b>*Ovary:</b>								
<b>Fibrosarcoma</b>								
					0/50 (0%)	0/50 (0%)	1/50 (2%)	
<b>Overall Incidence</b>	Total				1/150 (0.67%)	Mean 0.67%	SD 1.15%	
.....								
<b>*Ovary:</b>								
<b>Granulosa Cell Tumor Benign</b>								
					0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total				0/150 (0%)	Mean 0%	SD 0%	
.....								
<b>*Ovary:</b>								
<b>Granulosa Cell Tumor Malignant</b>								
					0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	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	
<b>*Ovary:</b>										
Granulosa Cell Tumor: Benign, Malignant, NOS										
				0/50 (0%)	0/50 (0%)	0/50 (0%)				
<b>Overall Incidence</b>				Total	0/150 (0%)	Mean 0%	SD 0%			
.....										
<b>*Ovary:</b>										
Granulosa-Theca Tumor Malignant										
				0/50 (0%)	0/50 (0%)	0/50 (0%)				
<b>Overall Incidence</b>				Total	0/150 (0%)	Mean 0%	SD 0%			
.....										
<b>*Ovary:</b>										
Schwannoma Malignant										
				0/50 (0%)	0/50 (0%)	0/50 (0%)				
<b>Overall Incidence</b>				Total	0/150 (0%)	Mean 0%	SD 0%			
.....										
<b>*Ovary:</b>										
Sertoli Cell Tumor Malignant										
				0/50 (0%)	0/50 (0%)	0/50 (0%)				
<b>Overall Incidence</b>				Total	0/150 (0%)	Mean 0%	SD 0%			
.....										
<b>*Ovary:</b>										
Tubulostromal Adenoma										
				1/50 (2%)	0/50 (0%)	0/50 (0%)				
<b>Overall Incidence</b>				Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%			
.....										
<b>*Pancreas:</b>										
Adenoma										
		0/50 (0%)	1/49 (2%)	0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>		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			
<b>*Pancreas:</b>								
<b>Carcinoma or Adenoma</b>								
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>*Pancreas:</b>								
<b>Mixed Tumor Benign</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
.....								
<b>*Parathyroid Gland:</b>								
<b>Adenoma</b>								
		0/47 (0%)	1/49 (2%)	0/49 (0%)	1/38 (3%)	0/44 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	1/145 (0.69%)	Mean 0.68%	SD 1.18%	Total	1/132 (0.76%)	Mean 0.88%	SD 1.52%
.....								
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>								
<b>Adenoma</b>								
		38/50 (76%)	21/49 (43%)	23/50 (46%)	34/50 (68%)	29/50 (58%)	31/50 (62%)	
<b>Overall Incidence</b>	Total	82/149 (55.03%)	Mean 54.95%	SD 18.3%	Total	94/150 (62.67%)	Mean 62.67%	SD 5.03%
.....								
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>								
<b>Carcinoma</b>								
		0/50 (0%)	0/49 (0%)	1/50 (2%)	2/50 (4%)	1/50 (2%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	3/150 (2%)	Mean 2%	SD 2%
.....								
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>								
<b>Carcinoma or Adenoma</b>								
		38/50 (76%)	21/49 (43%)	24/50 (48%)	36/50 (72%)	30/50 (60%)	31/50 (62%)	
<b>Overall Incidence</b>	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  
 Route: GAVAGE  
 Vehicle: CORN OIL

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		Male			Female		
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>							
<b>Ganglioneuroma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Pituitary Gland: Pars Intermedia:</b>							
<b>Adenoma</b>							
		1/50 (2%)	0/49 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	1/150 (0.67%)	Mean 0.67% SD 1.15%
.....							
<b>*Pituitary Gland: Pars Intermedia:</b>							
<b>Carcinoma or Adenoma</b>							
		1/50 (2%)	0/49 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	1/150 (0.67%)	Mean 0.67% SD 1.15%
.....							
<b>*Pituitary Gland: Pars Nervosa:</b>							
<b>Craniopharyngioma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Prostate:</b>							
<b>Adenoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)			
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%			
.....							
<b>*Prostate:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)			
<b>Overall Incidence</b>	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

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

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		Male			Female		
<b>*Salivary Glands:</b>							
<b>Carcinoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Salivary Glands:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Salivary Glands:</b>							
<b>Sarcoma</b>							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Salivary Glands:</b>							
<b>Schwannoma Malignant</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Seminal Vesicle:</b>							
<b>Adenoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)			
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%			
.....							
<b>#Skeletal Muscle:</b>							
<b>Fibrous Histiocytoma</b>							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	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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 Report Date: 06/05/2013

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

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		Male			Female		
<b>#Skin:</b>							
<b>Fibrous Histiocytoma</b>							
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Skin:</b>							
<b>Hemangiosarcoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Skin:</b>							
<b>Keratoacanthoma</b>							
		2/50 (4%)	0/49 (0%)	3/50 (6%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
<b>Overall Incidence</b>	Total	5/149 (3.36%)	Mean 3.33%	SD 3.06%	Total	1/150 (0.67%)	Mean 0.67% SD 1.15%
.....							
<b>#Skin:</b>							
<b>Lipoma</b>							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Skin:</b>							
<b>Liposarcoma</b>							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	1/150 (0.67%)	Mean 0.67% SD 1.15%
.....							
<b>#Skin:</b>							
<b>Neural Crest Tumor</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	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		
<b>#Skin:</b>							
<b>Neurofibroma or Schwannoma benign</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Skin:</b>							
<b>Neurofibrosarcoma or Schwannoma (malignant or NOS)</b>							
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Skin:</b>							
<b>Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)</b>							
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Skin:</b>							
<b>Sarcoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Skin:</b>							
<b>Schwannoma Benign</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Skin:</b>							
<b>Schwannoma Malignant</b>							
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	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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		Male				Female			
<b>#Skin:</b>									
<b>Squamous Cell Carcinoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	
.....									
<b>#Skin:</b>									
<b>Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	1/50 (2%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%	
.....									
<b>#Skin:</b>									
<b>Squamous Cell Papilloma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Squamous Cell Papilloma or Papilloma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma</b>									
		2/50 (4%)	0/49 (0%)	3/50 (6%)		1/50 (2%)	0/50 (0%)	1/50 (2%)	
<b>Overall Incidence</b>	Total	5/149 (3.36%)	Mean 3.33%	SD 3.06%	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%	
.....									
<b>#Skin:</b>									
<b>Squamous Cell Papilloma, Papilloma, or Keratoacanthoma</b>									
		2/50 (4%)	0/49 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
<b>Overall Incidence</b>	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		
<b>#Skin:</b>							
<b>Trichoepithelioma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Skin: Sebaceous Gland:</b>							
<b>Adenoma</b>							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Skin: Sebaceous Gland:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50 (0%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Spinal Cord:</b>							
<b>Glioma Malignant</b>							
		0/50 (0%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Stomach, Glandular:</b>							
<b>Carcinoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Stomach, Glandular:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	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			
<b>#Stomach, Glandular:</b>								
<b>Sarcoma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
.....								
<b>*Testes:</b>								
<b>Adenoma</b>								
		37/50 (74%)	37/49 (76%)	40/50 (80%)				
<b>Overall Incidence</b>	Total	114/149 (76.51%)	Mean 76.5%	SD 3.12%				
.....								
<b>*Testes:</b>								
<b>Hemangioma</b>								
		0/50 (0%)	0/49 (0%)	1/50 (2%)				
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%				
.....								
<b>*Thymus:</b>								
<b>Thymoma Benign</b>								
		1/47 (2%)	0/48 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/47 (0%)	
<b>Overall Incidence</b>	Total	1/145 (0.69%)	Mean 0.71%	SD 1.23%	Total	1/147 (0.68%)	Mean 0.67%	SD 1.15%
.....								
<b>*Thymus:</b>								
<b>Thymoma Malignant</b>								
		0/47 (0%)	0/48 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/47 (0%)	
<b>Overall Incidence</b>	Total	0/145 (0%)	Mean 0%	SD 0%	Total	0/147 (0%)	Mean 0%	SD 0%
.....								
<b>*Thymus:</b>								
<b>Thymoma NOS</b>								
		0/47 (0%)	0/48 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/47 (0%)	
<b>Overall Incidence</b>	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  
 Route: GAVAGE  
 Vehicle: CORN OIL

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		Male			Female			
<b>*Thymus:</b>								
<b>Thymoma: Benign, Malignant, NOS</b>								
		1/47 (2%)	0/48 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/47 (0%)	
<b>Overall Incidence</b>	Total	1/145 (0.69%)	Mean 0.71%	SD 1.23%	Total	1/147 (0.68%)	Mean 0.67%	SD 1.15%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Adenoma</b>								
		10/50 (20%)	8/49 (16%)	11/50 (22%)	11/49 (22%)	5/50 (10%)	9/49 (18%)	
<b>Overall Incidence</b>	Total	29/149 (19.46%)	Mean 19.44%	SD 2.88%	Total	25/148 (16.89%)	Mean 16.94%	SD 6.35%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Carcinoma</b>								
		1/50 (2%)	0/49 (0%)	0/50 (0%)	0/49 (0%)	0/50 (0%)	0/49 (0%)	
<b>Overall Incidence</b>	Total	1/149 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/148 (0%)	Mean 0%	SD 0%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Carcinoma or Adenoma</b>								
		11/50 (22%)	8/49 (16%)	11/50 (22%)	11/49 (22%)	5/50 (10%)	9/49 (18%)	
<b>Overall Incidence</b>	Total	30/149 (20.13%)	Mean 20.11%	SD 3.28%	Total	25/148 (16.89%)	Mean 16.94%	SD 6.35%
.....								
<b>*Thyroid Gland: Follicular Cell:</b>								
<b>Adenoma</b>								
		2/50 (4%)	1/49 (2%)	1/50 (2%)	1/49 (2%)	1/50 (2%)	1/49 (2%)	
<b>Overall Incidence</b>	Total	4/149 (2.68%)	Mean 2.68%	SD 1.14%	Total	3/148 (2.03%)	Mean 2.03%	SD 0.02%
.....								
<b>*Thyroid Gland: Follicular Cell:</b>								
<b>Carcinoma</b>								
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/49 (0%)	0/50 (0%)	0/49 (0%)	
<b>Overall Incidence</b>	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  
 Route: GAVAGE  
 Vehicle: CORN OIL

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		Male			Female			
<b>*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma</b>								
<b>Overall Incidence</b>	Total	2/50 (4%) 4/149 (2.68%)	1/49 (2%) Mean 2.68%	1/50 (2%) SD 1.14%	Total	1/49 (2%) 3/148 (2.03%)	1/50 (2%) Mean 2.03%	1/49 (2%) SD 0.02%
.....								
<b>#Tongue: Squamous Cell Carcinoma</b>								
<b>Overall Incidence</b>	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%
.....								
<b>#Tongue: Squamous Cell Carcinoma or Papilloma Squamous</b>								
<b>Overall Incidence</b>	Total	0/50 (0%) 0/149 (0%)	0/49 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 1/150 (0.67%)	0/50 (0%) Mean 0.67%	1/50 (2%) SD 1.15%
.....								
<b>#Tongue: Squamous Cell Papilloma</b>								
<b>Overall Incidence</b>	Total	0/50 (0%) 0/149 (0%)	0/49 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 1/150 (0.67%)	0/50 (0%) Mean 0.67%	1/50 (2%) SD 1.15%
.....								
<b>#Tooth: Adamantinoma Malignant</b>								
<b>Overall Incidence</b>	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%
.....								
<b>*Urinary Bladder: Carcinoma</b>								
<b>Overall Incidence</b>	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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		Male			Female		
<b>*Urinary Bladder:</b>							
<b>  Carcinoma or Papilloma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67% SD 1.15%
.....							
<b>*Urinary Bladder:</b>							
<b>  Hemangiosarcoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>*Urinary Bladder:</b>							
<b>  Papilloma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
<b>Overall Incidence</b>	Total	0/149 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67% SD 1.15%
.....							
<b>#Uterus:</b>							
<b>  Adenoma</b>							
					0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>					Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Uterus:</b>							
<b>  Carcinoma</b>							
					0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>					Total	0/150 (0%)	Mean 0% SD 0%
.....							
<b>#Uterus:</b>							
<b>  Leiomyosarcoma</b>							
					0/50 (0%)	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>					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
<b>#Uterus:</b> <b>Polyp Stromal</b>		
	3/50 (6%)	7/50 (14%)
<b>Overall Incidence</b>	Total 13/150 (8.67%)	Mean 8.67% SD 4.62%
<b>#Uterus:</b> <b>Sarcoma</b>		
	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	Total 0/150 (0%)	Mean 0% SD 0%
<b>#Uterus:</b> <b>Sarcoma Stromal</b>		
	0/50 (0%)	1/50 (2%)
<b>Overall Incidence</b>	Total 1/150 (0.67%)	Mean 0.67% SD 1.15%
<b>#Uterus:</b> <b>Sarcoma Stromal or Polyp Stromal</b>		
	3/50 (6%)	7/50 (14%)
<b>Overall Incidence</b>	Total 13/150 (8.67%)	Mean 8.67% SD 4.62%
<b>#Uterus:</b> <b>Schwannoma Malignant</b>		
	1/50 (2%)	0/50 (0%)
<b>Overall Incidence</b>	Total 1/150 (0.67%)	Mean 0.67% SD 1.15%
<b>#Vagina:</b> <b>Polyp</b>		
	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	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						
<b>#Vagina:</b>											
Sarcoma											
					0/50	(0%)	0/50	(0%)	0/50	(0%)	
<b>Overall Incidence</b>					Total	0/150	(0%)	Mean 0%	SD 0%		
.....											
<b>#Vagina:</b>											
Schwannoma Malignant											
					0/50	(0%)	0/50	(0%)	1/50	(2%)	
<b>Overall Incidence</b>					Total	1/150	(0.67%)	Mean 0.67%	SD 1.15%		
.....											
<b>#Zymbal's Gland:</b>											
Adenoma											
		0/50	(0%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>		Total	0/149	(0%)	Mean 0%	SD 0%	Total	0/150	(0%)	Mean 0%	SD 0%
.....											
<b>#Zymbal's Gland:</b>											
Carcinoma											
		1/50	(2%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>		Total	1/149	(0.67%)	Mean 0.67%	SD 1.15%	Total	0/150	(0%)	Mean 0%	SD 0%
.....											
<b>#Zymbal's Gland:</b>											
Carcinoma or Adenoma											
		1/50	(2%)	0/49	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>		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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**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
<b>Male</b>							
Southern Research Institute	059903705	06/09/03	729	50(3)	27(662)	523.0	alpha/beta Thujone mixture
<b>Female</b>							
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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	Male				Female			
<b>#All Organs:</b>								
<b>Benign Tumors</b>								
		44/50 (88%)			46/50 (92%)			
<b>Overall Incidence</b>	Total	44/50 (88%)	Mean 88%	SD 0%	Total	46/50 (92%)	Mean 92%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Malignant Tumors</b>								
		31/50 (62%)			20/50 (40%)			
<b>Overall Incidence</b>	Total	31/50 (62%)	Mean 62%	SD 0%	Total	20/50 (40%)	Mean 40%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Malignant and Benign Tumors</b>								
		48/50 (96%)			49/50 (98%)			
<b>Overall Incidence</b>	Total	48/50 (96%)	Mean 96%	SD 0%	Total	49/50 (98%)	Mean 98%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Hemangioma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Hemangiosarcoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Hemangiosarcoma or Hemangioma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#All Organs:</b>								
<b>Histiocytic Sarcoma</b>								
		1/50 (2%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated</b>								
		22/50 (44%)			10/50 (20%)			
<b>Overall Incidence</b>	Total	22/50 (44%)	Mean 44%	SD 0%	Total	10/50 (20%)	Mean 20%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type</b>								
		0/50 (0%)			1/50 (2%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Benign, Malignant, NOS</b>								
		2/50 (4%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Malignant</b>								
		2/50 (4%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Osteoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#All Organs:</b>								
<b>Osteosarcoma</b>								
		1/50	(2%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
<b>#All Organs:</b>								
<b>Osteosarcoma or Osteoma</b>								
		1/50	(2%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
<b>*Adrenal Cortex:</b>								
<b>Adenoma</b>								
		1/50	(2%)			1/47	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/47	(2.13%)
								Mean 2.13%
								SD 0%
.....								
<b>*Adrenal Cortex:</b>								
<b>Carcinoma</b>								
		0/50	(0%)			0/47	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/47	(0%)
								Mean 0%
								SD 0%
.....								
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma Benign</b>								
		6/50	(12%)			2/48	(4%)	
<b>Overall Incidence</b>	Total	6/50	(12%)	Mean 12%	SD 0%	Total	2/48	(4.17%)
								Mean 4.17%
								SD 0%
.....								
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma Complex</b>								
		0/50	(0%)			1/48	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/48	(2.08%)
								Mean 2.08%
								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		
<b>*Adrenal Medulla:</b>							
<b>Pheochromocytoma Malignant</b>							
		0/50 (0%)			0/48 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/48 (0%)	Mean 0% SD 0%
.....							
<b>*Adrenal Medulla:</b>							
<b>Pheochromocytoma: Benign, Complex, Malignant, NOS</b>							
		6/50 (12%)			3/48 (6%)		
<b>Overall Incidence</b>	Total	6/50 (12%)	Mean 12%	SD 0%	Total	3/48 (6.25%)	Mean 6.25% SD 0%
.....							
<b>#Blood Vessel:</b>							
<b>Leiomyosarcoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Bone:</b>							
<b>Chordoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Bone:</b>							
<b>Osteoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Bone:</b>							
<b>Osteosarcoma</b>							
		1/50 (2%)			1/50 (2%)		
<b>Overall Incidence</b>	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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	Male				Female			
<b>#Bone:</b>								
<b>Osteosarcoma or Osteoma</b>								
		1/50	(2%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
<b>*Brain:</b>								
<b>Glioma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								
<b>*Brain:</b>								
<b>Glioma Benign</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								
<b>*Brain:</b>								
<b>Glioma Malignant</b>								
		0/50	(0%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
<b>*Brain:</b>								
<b>Oligodendroglioma, Glioma, or Astrocytoma</b>								
		0/50	(0%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
<b>*Brain:</b>								
<b>Osteosarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>*Clitoral/Preputial Gland: Adenoma</b>								
Overall Incidence	Total	2/49 (4%)	Mean 4.08%	SD 0%	Total	12/50 (24%)	Mean 24%	SD 0%
.....								
<b>*Clitoral/Preputial Gland: Carcinoma</b>								
Overall Incidence	Total	1/49 (2.04%)	Mean 2.04%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
.....								
<b>*Clitoral/Preputial Gland: Carcinoma or Adenoma</b>								
Overall Incidence	Total	3/49 (6.12%)	Mean 6.12%	SD 0%	Total	14/50 (28%)	Mean 28%	SD 0%
.....								
<b>*Clitoral/Preputial Gland: Sarcoma</b>								
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Ear: Neural Crest Tumor</b>								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Eye: Melanoma Benign</b>								
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		
<b>#Eye:</b>							
<b>Melanoma Malignant</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>#Harderian Gland:</b>							
<b>Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>#Harderian Gland:</b>							
<b>Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>#Harderian Gland:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Heart:</b>							
<b>Schwannoma Benign</b>							
		2/50	(4%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Heart:</b>							
<b>Schwannoma Malignant</b>							
		1/50	(2%)		0/50	(0%)	
<b>Overall Incidence</b>	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: METHYLCELLULOSE

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 Report Date: 06/05/2013

		Male			Female		
<b>#Intestine Large: Colon/Rectum:</b>							
<b>Adenoma</b>							
		0/50	(0%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
.....							
<b>#Intestine Large: Colon/Rectum:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50	(0%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
.....							
<b>#Intestine Small: Duodenum:</b>							
<b>Leiomyoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>#Intestine Small: Duodenum:</b>							
<b>Schwannoma Malignant</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>#Intestine Small: Ileum:</b>							
<b>Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>#Intestine Small: Jejunum:</b>							
<b>Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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		
<b>#Intestine Small: Jejunum:</b>							
<b>Leiomyoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Jejunum:</b>							
<b>Leiomyosarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Leiomyoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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		
<b>#Intestine Small: Site Unspecified:</b>							
<b>Leiomyosarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Schwannoma Malignant</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>*Islets, Pancreatic:</b>							
<b>Adenoma</b>							
		1/50	(2%)		1/49	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/49 (2.04%)
.....							
<b>*Islets, Pancreatic:</b>							
<b>Carcinoma</b>							
		2/50	(4%)		0/49	(0%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/49 (0%)
.....							
<b>*Islets, Pancreatic:</b>							
<b>Carcinoma or Adenoma</b>							
		3/50	(6%)		1/49	(2%)	
<b>Overall Incidence</b>	Total	3/50	(6%)	Mean 6%	SD 0%	Total	1/49 (2.04%)
.....							
<b>*Kidney: Pelvis and Transitional Epithelium:</b>							
<b>Papilloma</b>							
		0/48	(0%)		0/44	(0%)	
<b>Overall Incidence</b>	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		
<b>*Kidney: Renal Tubule: Adenoma</b>							
		0/48 (0%)			0/44 (0%)		
<b>Overall Incidence</b>	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/44 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Carcinoma</b>							
		0/48 (0%)			0/44 (0%)		
<b>Overall Incidence</b>	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/44 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Carcinoma or Adenoma</b>							
		0/48 (0%)			0/44 (0%)		
<b>Overall Incidence</b>	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/44 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Lipoma</b>							
		0/48 (0%)			0/44 (0%)		
<b>Overall Incidence</b>	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/44 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Mesenchymal Tumor Malignant</b>							
		0/48 (0%)			1/44 (2%)		
<b>Overall Incidence</b>	Total	0/48 (0%)	Mean 0%	SD 0%	Total	1/44 (2.27%)	Mean 2.27% SD 0%
.....							
<b>*Kidney: Renal Tubule: Sarcoma</b>							
		0/48 (0%)			0/44 (0%)		
<b>Overall Incidence</b>	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		
<b>*Liver:</b>							
<b>Hepatocellular Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma or Hepatoblastoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma or Hepatocellular Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>*Liver:</b>							
<b>Ito Cell Tumor Benign</b>							
		1/50	(2%)		0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>*Lung:</b>								
<b>Alveolar/Bronchiolar Adenoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>*Lung:</b>								
<b>Alveolar/Bronchiolar Carcinoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>*Lung:</b>								
<b>Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma</b>								
		2/50	(4%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>*Lung:</b>								
<b>Fibrosarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>#Mammary Gland:</b>								
<b>Adenolipoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>#Mammary Gland:</b>								
<b>Adenoma</b>								
		0/50	(0%)			1/50	(2%)	
<b>Overall Incidence</b>	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: METHYLCELLULOSE

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 Report Date: 06/05/2013

		Male			Female		
<b>#Mammary Gland:</b>							
<b>Carcinoma</b>							
		0/50 (0%)			2/50 (4%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/50 (4%)	Mean 4% SD 0%
.....							
<b>#Mammary Gland:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50 (0%)			3/50 (6%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	3/50 (6%)	Mean 6% SD 0%
.....							
<b>#Mammary Gland:</b>							
<b>Fibroadenoma</b>							
		3/50 (6%)			26/50 (52%)		
<b>Overall Incidence</b>	Total	3/50 (6%)	Mean 6%	SD 0%	Total	26/50 (52%)	Mean 52% SD 0%
.....							
<b>#Mammary Gland:</b>							
<b>Fibroma</b>							
		0/50 (0%)			1/50 (2%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
<b>#Mammary Gland:</b>							
<b>Fibroma, Fibroadenoma or Adenoma</b>							
		3/50 (6%)			28/50 (56%)		
<b>Overall Incidence</b>	Total	3/50 (6%)	Mean 6%	SD 0%	Total	28/50 (56%)	Mean 56% SD 0%
.....							
<b>#Mammary Gland:</b>							
<b>Fibroma, Fibroadenoma, Carcinoma, or Adenoma</b>							
		3/50 (6%)			30/50 (60%)		
<b>Overall Incidence</b>	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		
<b>#Mesentery:</b>							
<b>Fibrous Histiocytoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>#Mesentery:</b>							
<b>Schwannoma Malignant</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Nose:</b>							
<b>Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>							
<b>Papilloma Squamous or Papilloma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>							
<b>Squamous Cell Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>							
<b>Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Oral Mucosa:</b>								
<b>Squamous Cell Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Oral Mucosa:</b>								
<b>Squamous Cell Papilloma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Cystadenoma</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Fibrosarcoma</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Granulosa Cell Tumor Benign</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Granulosa Cell Tumor Malignant</b>								
						1/50	(2%)	
<b>Overall Incidence</b>						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					
<b>*Ovary:</b>										
Granulosa Cell Tumor: Benign, Malignant, NOS										
					1/50	(2%)				
<b>Overall Incidence</b>					Total	1/50 (2%)	Mean	2%	SD	0%
.....										
<b>*Ovary:</b>										
Granulosa-Theca Tumor Malignant										
					0/50	(0%)				
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Schwannoma Malignant										
					0/50	(0%)				
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Sertoli Cell Tumor Malignant										
					0/50	(0%)				
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Tubulostromal Adenoma										
					0/50	(0%)				
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Pancreas:</b>										
Adenoma										
					0/50	(0%)				
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%
					0/49	(0%)				
<b>Overall Incidence</b>					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		
<b>*Pancreas:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50 (0%)			0/49 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....							
<b>*Pancreas:</b>							
<b>Mixed Tumor Benign</b>							
		1/50 (2%)			0/49 (0%)		
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....							
<b>*Parathyroid Gland:</b>							
<b>Adenoma</b>							
		0/48 (0%)			0/47 (0%)		
<b>Overall Incidence</b>	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/47 (0%)	Mean 0% SD 0%
.....							
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>							
<b>Adenoma</b>							
		24/50 (48%)			25/50 (50%)		
<b>Overall Incidence</b>	Total	24/50 (48%)	Mean 48%	SD 0%	Total	25/50 (50%)	Mean 50% SD 0%
.....							
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>							
<b>Carcinoma</b>							
		0/50 (0%)			1/50 (2%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>							
<b>Carcinoma or Adenoma</b>							
		24/50 (48%)			26/50 (52%)		
<b>Overall Incidence</b>	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		
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>							
<b>  Ganglioneuroma</b>							
		0/50	(0%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
<b>*Pituitary Gland: Pars Intermedia:</b>							
<b>  Adenoma</b>							
		0/50	(0%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
<b>*Pituitary Gland: Pars Intermedia:</b>							
<b>  Carcinoma or Adenoma</b>							
		0/50	(0%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
<b>*Pituitary Gland: Pars Nervosa:</b>							
<b>  Craniopharyngioma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
<b>*Prostate:</b>							
<b>  Adenoma</b>							
		2/50	(4%)				
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%		
<b>*Prostate:</b>							
<b>  Carcinoma or Adenoma</b>							
		2/50	(4%)				
<b>Overall Incidence</b>	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: METHYLCELLULOSE

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		Male				Female			
<b>*Salivary Glands:</b>									
<b>  Carcinoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Salivary Glands:</b>									
<b>  Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Salivary Glands:</b>									
<b>  Sarcoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Salivary Glands:</b>									
<b>  Schwannoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Seminal Vesicle:</b>									
<b>  Adenoma</b>									
		0/50	(0%)						
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
<b>#Skeletal Muscle:</b>									
<b>  Fibrous Histiocytoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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			
<b>#Skeletal Muscle:</b>								
Lipoma								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
Basal Cell Adenoma								
		1/50	(2%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
Basal Cell Adenoma or Basosquamous Tumor Benign								
		1/50	(2%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma								
		3/50	(6%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	3/50	(6%)	Mean 6%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
Basal Cell Carcinoma								
		1/50	(2%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)								
		1/50	(2%)			1/50	(2%)	
<b>Overall Incidence</b>	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			
<b>#Skin:</b>								
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%
-----								
<b>#Skin:</b>								
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%
-----								
<b>#Skin:</b>								
Fibroma								
Overall Incidence	Total	11/50 (22%)	Mean 22%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
-----								
<b>#Skin:</b>								
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%
-----								
<b>#Skin:</b>								
Fibrosarcoma								
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
-----								
<b>#Skin:</b>								
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			
<b>#Skin:</b>								
<b>Fibrous Histiocytoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Hemangiosarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Keratoacanthoma</b>								
		5/50	(10%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Lipoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Liposarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Neural Crest Tumor</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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  
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	Male				Female			
<b>#Skin:</b>								
<b>Neurofibroma or Schwannoma benign</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Neurofibrosarcoma or Schwannoma (malignant or NOS)</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Sarcoma</b>								
		3/50	(6%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	3/50	(6%)	Mean 6%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Schwannoma Benign</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Schwannoma Malignant</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Skin:</b>								
<b>Squamous Cell Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma</b>								
		1/50	(2%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma or Papilloma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma</b>								
		5/50	(10%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma, Papilloma, or Keratoacanthoma</b>								
		5/50	(10%)			0/50	(0%)	
<b>Overall Incidence</b>	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  
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	Male				Female			
<b>#Skin:</b>								
<b>Trichoepithelioma</b>								
		2/50	(4%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Skin: Sebaceous Gland:</b>								
<b>Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Skin: Sebaceous Gland:</b>								
<b>Carcinoma or Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Spinal Cord:</b>								
<b>Glioma Malignant</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Stomach, Glandular:</b>								
<b>Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Stomach, Glandular:</b>								
<b>Carcinoma or Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Stomach, Glandular:</b>								
<b>Sarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>*Testes:</b>								
<b>Adenoma</b>								
		35/50	(70%)					
<b>Overall Incidence</b>	Total	35/50	(70%)	Mean 70%	SD 0%			
.....								
<b>*Testes:</b>								
<b>Hemangioma</b>								
		0/50	(0%)					
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%			
.....								
<b>*Thymus:</b>								
<b>Thymoma Benign</b>								
		0/44	(0%)			0/48	(0%)	
<b>Overall Incidence</b>	Total	0/44	(0%)	Mean 0%	SD 0%	Total	0/48	(0%)
.....								
<b>*Thymus:</b>								
<b>Thymoma Malignant</b>								
		0/44	(0%)			0/48	(0%)	
<b>Overall Incidence</b>	Total	0/44	(0%)	Mean 0%	SD 0%	Total	0/48	(0%)
.....								
<b>*Thymus:</b>								
<b>Thymoma NOS</b>								
		0/44	(0%)			0/48	(0%)	
<b>Overall Incidence</b>	Total	0/44	(0%)	Mean 0%	SD 0%	Total	0/48	(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			
<b>*Thymus:</b>								
<b>Thymoma: Benign, Malignant, NOS</b>								
		0/44	(0%)			0/48	(0%)	
<b>Overall Incidence</b>	Total	0/44	(0%)	Mean 0%	SD 0%	Total	0/48	(0%)
								Mean 0%
								SD 0%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Adenoma</b>								
		6/46	(13%)			4/42	(10%)	
<b>Overall Incidence</b>	Total	6/46	(13.04%)	Mean 13.04%	SD 0%	Total	4/42	(9.52%)
								Mean 9.52%
								SD 0%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Carcinoma</b>								
		0/46	(0%)			3/42	(7%)	
<b>Overall Incidence</b>	Total	0/46	(0%)	Mean 0%	SD 0%	Total	3/42	(7.14%)
								Mean 7.14%
								SD 0%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Carcinoma or Adenoma</b>								
		6/46	(13%)			7/42	(17%)	
<b>Overall Incidence</b>	Total	6/46	(13.04%)	Mean 13.04%	SD 0%	Total	7/42	(16.67%)
								Mean 16.67%
								SD 0%
.....								
<b>*Thyroid Gland: Follicular Cell:</b>								
<b>Adenoma</b>								
		0/46	(0%)			0/42	(0%)	
<b>Overall Incidence</b>	Total	0/46	(0%)	Mean 0%	SD 0%	Total	0/42	(0%)
								Mean 0%
								SD 0%
.....								
<b>*Thyroid Gland: Follicular Cell:</b>								
<b>Carcinoma</b>								
		0/46	(0%)			0/42	(0%)	
<b>Overall Incidence</b>	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		
<b>*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma</b>							
		0/46 (0%)			0/42 (0%)		
<b>Overall Incidence</b>	Total	0/46 (0%)	Mean 0%	SD 0%	Total	0/42 (0%)	Mean 0% SD 0%
.....							
<b>#Tongue: Squamous Cell Carcinoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tongue: Squamous Cell Carcinoma or Papilloma Squamous</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tongue: Squamous Cell Papilloma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tooth: Adamantinoma Malignant</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Urinary Bladder: Carcinoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	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			
<b>*Urinary Bladder: Carcinoma or Papilloma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>*Urinary Bladder: Hemangiosarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>*Urinary Bladder: Papilloma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Uterus: Adenoma</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>#Uterus: Carcinoma</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>#Uterus: Leiomyosarcoma</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						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
<b>#Uterus:</b>		
<b>Polyp Stromal</b>		
Overall Incidence	Total 17/50 (34%)	Mean 34% SD 0%
.....		
<b>#Uterus:</b>		
<b>Sarcoma</b>		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
.....		
<b>#Uterus:</b>		
<b>Sarcoma Stromal</b>		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
.....		
<b>#Uterus:</b>		
<b>Sarcoma Stromal or Polyp Stromal</b>		
Overall Incidence	Total 17/50 (34%)	Mean 34% SD 0%
.....		
<b>#Uterus:</b>		
<b>Schwannoma Malignant</b>		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
.....		
<b>#Vagina:</b>		
<b>Polyp</b>		
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				
<b>#Vagina:</b>									
Sarcoma									
					0/50	(0%)			
<b>Overall Incidence</b>					Total	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Vagina:</b>									
Schwannoma Malignant									
					0/50	(0%)			
<b>Overall Incidence</b>					Total	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Zymbal's Gland:</b>									
Adenoma									
					0/50	(0%)			
<b>Overall Incidence</b>					Total	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Zymbal's Gland:</b>									
Carcinoma									
					0/50	(0%)			
<b>Overall Incidence</b>					Total	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Zymbal's Gland:</b>									
Carcinoma or Adenoma									
					0/50	(0%)			
<b>Overall Incidence</b>					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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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	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		
<b>#All Organs:</b>							
<b>Benign Tumors</b>							
		49/50 (98%)			42/50 (84%)		
<b>Overall Incidence</b>	Total	49/50 (98%)	Mean 98%	SD 0%	Total	42/50 (84%)	Mean 84% SD 0%
.....							
<b>#All Organs:</b>							
<b>Malignant Tumors</b>							
		26/50 (52%)			10/50 (20%)		
<b>Overall Incidence</b>	Total	26/50 (52%)	Mean 52%	SD 0%	Total	10/50 (20%)	Mean 20% SD 0%
.....							
<b>#All Organs:</b>							
<b>Malignant and Benign Tumors</b>							
		49/50 (98%)			45/50 (90%)		
<b>Overall Incidence</b>	Total	49/50 (98%)	Mean 98%	SD 0%	Total	45/50 (90%)	Mean 90% SD 0%
.....							
<b>#All Organs:</b>							
<b>Hemangioma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#All Organs:</b>							
<b>Hemangiosarcoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#All Organs:</b>							
<b>Hemangiosarcoma or Hemangioma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	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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 Report Date: 06/05/2013

	Male				Female			
<b>#All Organs:</b>								
<b>Histiocytic Sarcoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated</b>								
		18/50 (36%)			6/50 (12%)			
<b>Overall Incidence</b>	Total	18/50 (36%)	Mean 36%	SD 0%	Total	6/50 (12%)	Mean 12%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Benign, Malignant, NOS</b>								
		2/50 (4%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Malignant</b>								
		2/50 (4%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Osteoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	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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 Report Date: 06/05/2013

	Male				Female			
<b>#All Organs:</b>								
<b>Osteosarcoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Osteosarcoma or Osteoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Adrenal Cortex:</b>								
<b>Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Adrenal Cortex:</b>								
<b>Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma Benign</b>								
		4/50	(8%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	4/50	(8%)	Mean 8%	SD 0%	Total	1/50	(2%)
							Mean 2%	SD 0%
.....								
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma Complex</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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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 Report Date: 06/05/2013

		Male			Female		
<b>*Adrenal Medulla:</b>							
<b>Pheochromocytoma Malignant</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Adrenal Medulla:</b>							
<b>Pheochromocytoma: Benign, Complex, Malignant, NOS</b>							
		4/50 (8%)			1/50 (2%)		
<b>Overall Incidence</b>	Total	4/50 (8%)	Mean 8%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
<b>#Blood Vessel:</b>							
<b>Leiomyosarcoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Bone:</b>							
<b>Chordoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Bone:</b>							
<b>Osteoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Bone:</b>							
<b>Osteosarcoma</b>							
		1/50 (2%)			0/50 (0%)		
<b>Overall Incidence</b>	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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 Report Date: 06/05/2013

	Male				Female			
<b>#Bone:</b>								
<b>Osteosarcoma or Osteoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Brain:</b>								
<b>Glioma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Brain:</b>								
<b>Glioma Benign</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Brain:</b>								
<b>Glioma Malignant</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Brain:</b>								
<b>Oligodendroglioma, Glioma, or Astrocytoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Brain:</b>								
<b>Osteosarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>*Clitoral/Preputial Gland: Adenoma</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
<b>*Clitoral/Preputial Gland: Carcinoma</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
<b>*Clitoral/Preputial Gland: Carcinoma or Adenoma</b>									
		0/50	(0%)			2/50	(4%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50	(4%)	Mean 4% SD 0%
.....									
<b>*Clitoral/Preputial Gland: Sarcoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Ear: Neural Crest Tumor</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Eye: Melanoma Benign</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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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 Report Date: 06/05/2013

		Male				Female			
<b>#Eye:</b>									
<b>Melanoma Malignant</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
<b>#Harderian Gland:</b>									
<b>Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Harderian Gland:</b>									
<b>Carcinoma</b>									
		1/50	(2%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Harderian Gland:</b>									
<b>Carcinoma or Adenoma</b>									
		1/50	(2%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Heart:</b>									
<b>Schwannoma Benign</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Heart:</b>									
<b>Schwannoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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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 Report Date: 06/05/2013

		Male				Female			
<b>#Intestine Large: Colon/Rectum:</b>									
<b>Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Intestine Large: Colon/Rectum:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Intestine Small: Duodenum:</b>									
<b>Leiomyoma</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	1/50	(2%)	Mean 2%	SD 0%
.....									
<b>#Intestine Small: Duodenum:</b>									
<b>Schwannoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Intestine Small: Ileum:</b>									
<b>Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Intestine Small: Jejunum:</b>									
<b>Carcinoma</b>									
		1/50	(2%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 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**  
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		Male			Female		
<b>#Intestine Small: Jejunum:</b>							
<b>Leiomyoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>#Intestine Small: Jejunum:</b>							
<b>Leiomyosarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Carcinoma</b>							
		1/50	(2%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Carcinoma or Adenoma</b>							
		1/50	(2%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Leiomyoma</b>							
		0/50	(0%)		1/50	(2%)	
<b>Overall Incidence</b>	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			
<b>#Intestine Small: Site Unspecified:</b>									
<b>Leiomyosarcoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Intestine Small: Site Unspecified:</b>									
<b>Schwannoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Islets, Pancreatic:</b>									
<b>Adenoma</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
<b>*Islets, Pancreatic:</b>									
<b>Carcinoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Islets, Pancreatic:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
<b>*Kidney: Pelvis and Transitional Epithelium:</b>									
<b>Papilloma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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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		Male			Female		
<b>*Kidney: Renal Tubule: Adenoma</b>							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Carcinoma</b>							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Carcinoma or Adenoma</b>							
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Lipoma</b>							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Mesenchymal Tumor Malignant</b>							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Sarcoma</b>							
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  
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		Male			Female		
<b>*Liver:</b>							
<b>Hepatocellular Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma</b>							
		1/50	(2%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma or Hepatoblastoma</b>							
		1/50	(2%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma or Hepatocellular Adenoma</b>							
		1/50	(2%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma</b>							
		1/50	(2%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
<b>*Liver:</b>							
<b>Ito Cell Tumor Benign</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>*Lung:</b>									
<b>Alveolar/Bronchiolar Adenoma</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
<b>*Lung:</b>									
<b>Alveolar/Bronchiolar Carcinoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Lung:</b>									
<b>Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
<b>*Lung:</b>									
<b>Fibrosarcoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Mammary Gland:</b>									
<b>Adenolipoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Mammary Gland:</b>									
<b>Adenoma</b>									
		0/50	(0%)			2/50	(4%)		
<b>Overall Incidence</b>	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  
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		Male			Female		
<b>#Mammary Gland:</b>							
<b>Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Mammary Gland:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50	(0%)		2/50	(4%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50 (4%)
.....							
<b>#Mammary Gland:</b>							
<b>Fibroadenoma</b>							
		2/50	(4%)		32/50	(64%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	32/50 (64%)
.....							
<b>#Mammary Gland:</b>							
<b>Fibroma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Mammary Gland:</b>							
<b>Fibroma, Fibroadenoma or Adenoma</b>							
		2/50	(4%)		33/50	(66%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	33/50 (66%)
.....							
<b>#Mammary Gland:</b>							
<b>Fibroma, Fibroadenoma, Carcinoma, or Adenoma</b>							
		2/50	(4%)		33/50	(66%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	33/50 (66%)

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

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	Male				Female			
<b>#Oral Mucosa:</b>								
<b>Squamous Cell Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Oral Mucosa:</b>								
<b>Squamous Cell Papilloma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Cystadenoma</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Fibrosarcoma</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Granulosa Cell Tumor Benign</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Granulosa Cell Tumor Malignant</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						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					
<b>*Ovary:</b>										
Granulosa Cell Tumor: Benign, Malignant, NOS										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Granulosa-Theca Tumor Malignant										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Schwannoma Malignant										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Sertoli Cell Tumor Malignant										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Tubulostromal Adenoma										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Pancreas:</b>										
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

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 Tumor Incidence for Selected Control Animal Groups  
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		Male			Female		
<b>*Pancreas:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Pancreas:</b>							
<b>Mixed Tumor Benign</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Parathyroid Gland:</b>							
<b>Adenoma</b>							
		0/50 (0%)			0/48 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/48 (0%)	Mean 0% SD 0%
.....							
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>							
<b>Adenoma</b>							
		20/50 (40%)			16/50 (32%)		
<b>Overall Incidence</b>	Total	20/50 (40%)	Mean 40%	SD 0%	Total	16/50 (32%)	Mean 32% SD 0%
.....							
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>							
<b>Carcinoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>							
<b>Carcinoma or Adenoma</b>							
		20/50 (40%)			16/50 (32%)		
<b>Overall Incidence</b>	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				
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>									
<b>Ganglioneuroma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Pituitary Gland: Pars Intermedia:</b>									
<b>Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Pituitary Gland: Pars Intermedia:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Pituitary Gland: Pars Nervosa:</b>									
<b>Craniopharyngioma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Prostate:</b>									
<b>Adenoma</b>									
		1/50	(2%)						
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%				
.....									
<b>*Prostate:</b>									
<b>Carcinoma or Adenoma</b>									
		1/50	(2%)						
<b>Overall Incidence</b>	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		
<b>*Salivary Glands:</b>							
<b>Carcinoma</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>*Salivary Glands:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>*Salivary Glands:</b>							
<b>Sarcoma</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>*Salivary Glands:</b>							
<b>Schwannoma Malignant</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Seminal Vesicle:</b>							
<b>Adenoma</b>							
		1/50	(2%)				
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%		
.....							
<b>#Skeletal Muscle:</b>							
<b>Fibrous Histiocytoma</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	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			
<b>#Skeletal Muscle:</b>								
Lipoma								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
Basal Cell Adenoma								
		1/50	(2%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
Basal Cell Adenoma or Basosquamous Tumor Benign								
		1/50	(2%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma								
		1/50	(2%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
Basal Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Skin:</b>								
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%
-----								
<b>#Skin:</b>								
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%
-----								
<b>#Skin:</b>								
Fibroma								
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
-----								
<b>#Skin:</b>								
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%
-----								
<b>#Skin:</b>								
Fibrosarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
-----								
<b>#Skin:</b>								
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			
<b>#Skin:</b>								
<b>Fibrous Histiocytoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Skin:</b>								
<b>Hemangiosarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Skin:</b>								
<b>Keratoacanthoma</b>								
		0/50	(0%)			2/50	(4%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	2/50	(4%)
							Mean 4%	SD 0%
.....								
<b>#Skin:</b>								
<b>Lipoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Skin:</b>								
<b>Liposarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Skin:</b>								
<b>Neural Crest Tumor</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Skin:</b>								
<b>Neurofibroma or Schwannoma benign</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Neurofibrosarcoma or Schwannoma (malignant or NOS)</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Sarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Schwannoma Benign</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Schwannoma Malignant</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Skin:</b>								
<b>Squamous Cell Carcinoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								
<b>#Skin:</b>								
<b>Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
								Mean 0%
								SD 0%
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma</b>								
		0/50	(0%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma or Papilloma</b>								
		0/50	(0%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
								Mean 2%
								SD 0%
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma</b>								
		1/50	(2%)			3/50	(6%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	3/50	(6%)
								Mean 6%
								SD 0%
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma, Papilloma, or Keratoacanthoma</b>								
		0/50	(0%)			3/50	(6%)	
<b>Overall Incidence</b>	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			
<b>#Skin:</b>								
<b>Trichoepithelioma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin: Sebaceous Gland:</b>								
<b>Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin: Sebaceous Gland:</b>								
<b>Carcinoma or Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Spinal Cord:</b>								
<b>Glioma Malignant</b>								
		0/50	(0%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
<b>#Stomach, Glandular:</b>								
<b>Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Stomach, Glandular:</b>								
<b>Carcinoma or Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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		
<b>#Stomach, Glandular:</b>							
<b>Sarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>*Testes:</b>							
<b>Adenoma</b>							
		45/50	(90%)				
<b>Overall Incidence</b>	Total	45/50	(90%)	Mean 90%	SD 0%		
.....							
<b>*Testes:</b>							
<b>Hemangioma</b>							
		0/50	(0%)				
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%		
.....							
<b>*Thymus:</b>							
<b>Thymoma Benign</b>							
		0/50	(0%)			0/48	(0%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/48 (0%)
						Mean 0%	SD 0%
.....							
<b>*Thymus:</b>							
<b>Thymoma Malignant</b>							
		0/50	(0%)			1/48	(2%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/48 (2.08%)
						Mean 2.08%	SD 0%
.....							
<b>*Thymus:</b>							
<b>Thymoma NOS</b>							
		0/50	(0%)			0/48	(0%)
<b>Overall Incidence</b>	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  
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 Vehicle: WATER

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	Male				Female			
<b>*Thymus:</b>								
<b>Thymoma: Benign, Malignant, NOS</b>								
		0/50 (0%)			1/48 (2%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/48 (2.08%)	Mean 2.08%	SD 0%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Adenoma</b>								
		11/50 (22%)			6/50 (12%)			
<b>Overall Incidence</b>	Total	11/50 (22%)	Mean 22%	SD 0%	Total	6/50 (12%)	Mean 12%	SD 0%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Carcinoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Carcinoma or Adenoma</b>								
		11/50 (22%)			6/50 (12%)			
<b>Overall Incidence</b>	Total	11/50 (22%)	Mean 22%	SD 0%	Total	6/50 (12%)	Mean 12%	SD 0%
.....								
<b>*Thyroid Gland: Follicular Cell:</b>								
<b>Adenoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Thyroid Gland: Follicular Cell:</b>								
<b>Carcinoma</b>								
		1/50 (2%)			0/50 (0%)			
<b>Overall Incidence</b>	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  
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		Male			Female		
<b>*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma</b>							
		1/50 (2%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tongue: Squamous Cell Carcinoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tongue: Squamous Cell Carcinoma or Papilloma Squamous</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tongue: Squamous Cell Papilloma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tooth: Adamantinoma Malignant</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Urinary Bladder: Carcinoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	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			
<b>*Urinary Bladder: Carcinoma or Papilloma</b>								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Urinary Bladder: Hemangiosarcoma</b>								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Urinary Bladder: Papilloma</b>								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Uterus: Adenoma</b>								
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Uterus: Carcinoma</b>								
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Uterus: Leiomyosarcoma</b>								
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
<b>#Uterus:</b> Polyp Stromal		
Overall Incidence	Total 8/50 (16%)	Mean 16% SD 0%
<b>#Uterus:</b> Sarcoma		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
<b>#Uterus:</b> Sarcoma Stromal		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
<b>#Uterus:</b> Sarcoma Stromal or Polyp Stromal		
Overall Incidence	Total 8/50 (16%)	Mean 16% SD 0%
<b>#Uterus:</b> Schwannoma Malignant		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
<b>#Vagina:</b> 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  
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Male					Female				
<b>#Vagina:</b>									
Sarcoma									
					0/50	(0%)			
<b>Overall Incidence</b>					Total	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Vagina:</b>									
Schwannoma Malignant									
					0/50	(0%)			
<b>Overall Incidence</b>					Total	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Zymbal's Gland:</b>									
Adenoma									
					0/50	(0%)			
<b>Overall Incidence</b>					Total	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Zymbal's Gland:</b>									
Carcinoma									
					0/50	(0%)			
<b>Overall Incidence</b>					Total	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Zymbal's Gland:</b>									
Carcinoma or Adenoma									
					0/50	(0%)			
<b>Overall Incidence</b>					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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**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
<b>Male</b>							
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
<b>Female</b>							
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			
<b>#All Organs:</b>									
<b>Benign Tumors</b>									
		48/50 (96%)	44/50 (88%)	48/50 (96%)		45/50 (90%)	43/50 (86%)	40/50 (80%)	
		47/50 (94%)				47/50 (94%)			
<b>Overall Incidence</b>	Total	187/200 (93.5%)	Mean 93.5%	SD 3.79%	Total	175/200 (87.5%)	Mean 87.5%	SD 5.97%	
.....									
<b>#All Organs:</b>									
<b>Malignant Tumors</b>									
		38/50 (76%)	31/50 (62%)	33/50 (66%)		26/50 (52%)	24/50 (48%)	25/50 (50%)	
		27/50 (54%)				24/50 (48%)			
<b>Overall Incidence</b>	Total	129/200 (64.5%)	Mean 64.5%	SD 9.15%	Total	99/200 (49.5%)	Mean 49.5%	SD 1.91%	
.....									
<b>#All Organs:</b>									
<b>Malignant and Benign Tumors</b>									
		50/50 (100%)	49/50 (98%)	50/50 (100%)		49/50 (98%)	48/50 (96%)	46/50 (92%)	
		50/50 (100%)				49/50 (98%)			
<b>Overall Incidence</b>	Total	199/200 (99.5%)	Mean 99.5%	SD 1%	Total	192/200 (96%)	Mean 96%	SD 2.83%	
.....									
<b>#All Organs:</b>									
<b>Hemangioma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#All Organs:</b>									
<b>Hemangiosarcoma</b>									
		0/50 (0%)	1/50 (2%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#All Organs:</b>									
<b>Hemangiosarcoma or Hemangioma</b>									
		0/50 (0%)	1/50 (2%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	2/200 (1%)	Mean 1%	SD 1.15%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#All Organs:</b>									
<b>Histiocytic Sarcoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	2/50 (4%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	2/200 (1%)	Mean 1%	SD 2%	
.....									
<b>#All Organs:</b>									
<b>Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated</b>									
		29/50 (58%)	25/50 (50%)	25/50 (50%)		16/50 (32%)	15/50 (30%)	17/50 (34%)	
		17/50 (34%)				10/50 (20%)			
<b>Overall Incidence</b>	Total	96/200 (48%)	Mean 48%	SD 10.07%	Total	58/200 (29%)	Mean 29%	SD 6.22%	
.....									
<b>#All Organs:</b>									
<b>Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				1/50 (2%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>#All Organs:</b>									
<b>Mesothelioma: Benign, Malignant, NOS</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#All Organs:</b>									
<b>Mesothelioma: Malignant</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#All Organs:</b>									
<b>Osteoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#All Organs:</b>									
<b>Osteosarcoma</b>									
		2/50 (4%)	0/50 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
<b>Overall Incidence</b>	Total	6/200 (3%)	Mean 3%	SD 2.58%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>#All Organs:</b>									
<b>Osteosarcoma or Osteoma</b>									
		2/50 (4%)	0/50 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		2/50 (4%)				1/50 (2%)			
<b>Overall Incidence</b>	Total	7/200 (3.5%)	Mean 3.5%	SD 2.52%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>*Adrenal Cortex:</b>									
<b>Adenoma</b>									
		1/50 (2%)	1/50 (2%)	0/50 (0%)		3/50 (6%)	4/50 (8%)	8/50 (16%)	
		4/49 (8%)				2/50 (4%)			
<b>Overall Incidence</b>	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			
<b>*Adrenal Cortex:</b>									
<b>  Carcinoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/49 (0%)				1/50 (2%)			
<b>Overall Incidence</b>	Total	0/199 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>*Adrenal Medulla:</b>									
<b>  Pheochromocytoma Benign</b>									
		10/50 (20%)	7/50 (14%)	9/50 (18%)		2/50 (4%)	0/50 (0%)	2/50 (4%)	
		5/49 (10%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	31/199 (15.58%)	Mean 15.55%	SD 4.35%	Total	4/200 (2%)	Mean 2%	SD 2.31%	
.....									
<b>*Adrenal Medulla:</b>									
<b>  Pheochromocytoma Complex</b>									
		1/50 (2%)	2/50 (4%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/49 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	3/199 (1.51%)	Mean 1.5%	SD 1.91%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>*Adrenal Medulla:</b>									
<b>  Pheochromocytoma Malignant</b>									
		0/50 (0%)	1/50 (2%)	4/50 (8%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
		2/49 (4%)				1/50 (2%)			
<b>Overall Incidence</b>	Total	7/199 (3.52%)	Mean 3.52%	SD 3.42%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
<b>*Adrenal Medulla:</b>									
<b>  Pheochromocytoma: Benign, Complex, Malignant, NOS</b>									
		11/50 (22%)	10/50 (20%)	12/50 (24%)		3/50 (6%)	0/50 (0%)	3/50 (6%)	
		6/49 (12%)				1/50 (2%)			
<b>Overall Incidence</b>	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  
 Route: INHALATION  
 Vehicle: AIR

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		Male				Female			
<b>#Blood Vessel:</b>									
<b>Leiomyosarcoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				1/50 (2%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>#Bone:</b>									
<b>Chordoma</b>									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Bone:</b>									
<b>Osteoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Bone:</b>									
<b>Osteosarcoma</b>									
		1/50 (2%)	0/50 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
<b>Overall Incidence</b>	Total	5/200 (2.5%)	Mean 2.5%	SD 2.52%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>#Bone:</b>									
<b>Osteosarcoma or Osteoma</b>									
		1/50 (2%)	0/50 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		2/50 (4%)				1/50 (2%)			
<b>Overall Incidence</b>	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			
<b>*Brain:</b>									
<b>Glioma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Brain:</b>									
<b>Glioma Benign</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Brain:</b>									
<b>Glioma Malignant</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>*Brain:</b>									
<b>Oligodendroglioma, Glioma, or Astrocytoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>*Brain:</b>									
<b>Osteosarcoma</b>									
		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%)			
<b>Overall Incidence</b>	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			
<b>*Clitoral/Preputial Gland:</b>									
<b>Adenoma</b>									
		4/50 (8%)	0/50 (0%)	0/50 (0%)		3/49 (6%)	1/50 (2%)	0/50 (0%)	
		2/50 (4%)				4/47 (9%)			
<b>Overall Incidence</b>	Total	6/200 (3%)	Mean 3%	SD 3.83%	Total	8/196 (4.08%)	Mean 4.16%	SD 3.86%	
.....									
<b>*Clitoral/Preputial Gland:</b>									
<b>Carcinoma</b>									
		2/50 (4%)	1/50 (2%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	4/50 (8%)	
		2/50 (4%)				1/47 (2%)			
<b>Overall Incidence</b>	Total	5/200 (2.5%)	Mean 2.5%	SD 1.91%	Total	6/196 (3.06%)	Mean 3.04%	SD 3.45%	
.....									
<b>*Clitoral/Preputial Gland:</b>									
<b>Carcinoma or Adenoma</b>									
		6/50 (12%)	1/50 (2%)	0/50 (0%)		4/49 (8%)	1/50 (2%)	4/50 (8%)	
		4/50 (8%)				5/47 (11%)			
<b>Overall Incidence</b>	Total	11/200 (5.5%)	Mean 5.5%	SD 5.51%	Total	14/196 (7.14%)	Mean 7.2%	SD 3.67%	
.....									
<b>*Clitoral/Preputial Gland:</b>									
<b>Sarcoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/47 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/196 (0%)	Mean 0%	SD 0%	
.....									
<b>#Ear:</b>									
<b>Neural Crest Tumor</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#Eye:</b>									
<b>Melanoma Benign</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Eye:</b>									
<b>Melanoma Malignant</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Harderian Gland:</b>									
<b>Adenoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Harderian Gland:</b>									
<b>Carcinoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Harderian Gland:</b>									
<b>Carcinoma or Adenoma</b>									
		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%)			
<b>Overall Incidence</b>	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			
<b>*Heart:</b>									
<b>Schwannoma Benign</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Heart:</b>									
<b>Schwannoma Malignant</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Intestine Large: Colon/Rectum:</b>									
<b>Adenoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Intestine Large: Colon/Rectum:</b>									
<b>Carcinoma or Adenoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Intestine Small: Duodenum:</b>									
<b>Leiomyoma</b>									
		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%)			
<b>Overall Incidence</b>	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								
<b>#Intestine Small: Duodenum:</b>														
<b>Schwannoma Malignant</b>														
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)			
		0/50	(0%)			0/50	(0%)			0/50	(0%)			
<b>Overall Incidence</b>	Total	0/200	(0%)	Mean	0%	SD	0%	Total	0/200	(0%)	Mean	0%	SD	0%
.....														
<b>#Intestine Small: Ileum:</b>														
<b>Adenoma</b>														
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)			
		0/50	(0%)			0/50	(0%)			0/50	(0%)			
<b>Overall Incidence</b>	Total	0/200	(0%)	Mean	0%	SD	0%	Total	0/200	(0%)	Mean	0%	SD	0%
.....														
<b>#Intestine Small: Jejunum:</b>														
<b>Carcinoma</b>														
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)			
		0/50	(0%)			0/50	(0%)			0/50	(0%)			
<b>Overall Incidence</b>	Total	0/200	(0%)	Mean	0%	SD	0%	Total	0/200	(0%)	Mean	0%	SD	0%
.....														
<b>#Intestine Small: Jejunum:</b>														
<b>Leiomyoma</b>														
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)			
		0/50	(0%)			0/50	(0%)			0/50	(0%)			
<b>Overall Incidence</b>	Total	0/200	(0%)	Mean	0%	SD	0%	Total	0/200	(0%)	Mean	0%	SD	0%
.....														
<b>#Intestine Small: Jejunum:</b>														
<b>Leiomyosarcoma</b>														
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)			
		0/50	(0%)			0/50	(0%)			0/50	(0%)			
<b>Overall Incidence</b>	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			
<b>#Intestine Small: Site Unspecified:</b>									
<b>Adenoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Intestine Small: Site Unspecified:</b>									
<b>Carcinoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Intestine Small: Site Unspecified:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Intestine Small: Site Unspecified:</b>									
<b>Leiomyoma</b>									
		0/50 (0%)	1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Intestine Small: Site Unspecified:</b>									
<b>Leiomyosarcoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#Intestine Small: Site Unspecified:</b>									
<b>Schwannoma Malignant</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Islets, Pancreatic:</b>									
<b>Adenoma</b>									
		0/50 (0%)	6/50 (12%)	3/50 (6%)		0/50 (0%)	2/50 (4%)	0/50 (0%)	
		2/50 (4%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	11/200 (5.5%)	Mean 5.5%	SD 5%	Total	2/200 (1%)	Mean 1%	SD 2%	
.....									
<b>*Islets, Pancreatic:</b>									
<b>Carcinoma</b>									
		3/50 (6%)	1/50 (2%)	1/50 (2%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		2/50 (4%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	7/200 (3.5%)	Mean 3.5%	SD 1.91%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>*Islets, Pancreatic:</b>									
<b>Carcinoma or Adenoma</b>									
		3/50 (6%)	7/50 (14%)	4/50 (8%)		1/50 (2%)	2/50 (4%)	0/50 (0%)	
		4/50 (8%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	18/200 (9%)	Mean 9%	SD 3.46%	Total	3/200 (1.5%)	Mean 1.5%	SD 1.91%	
.....									
<b>*Kidney: Pelvis and Transitional Epithelium:</b>									
<b>Papilloma</b>									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>*Kidney: Renal Tubule: Adenoma</b>									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
<b>*Kidney: Renal Tubule: Carcinoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	
.....									
<b>*Kidney: Renal Tubule: Carcinoma or Adenoma</b>									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	1/199 (0.5%)	Mean 0.51%	SD 1.02%	
.....									
<b>*Kidney: Renal Tubule: Lipoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
<b>*Kidney: Renal Tubule: Mesenchymal Tumor Malignant</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>*Kidney: Renal Tubule:</b>									
<b>Sarcoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
<b>*Liver:</b>									
<b>Hepatocellular Adenoma</b>									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	1/50 (2%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
<b>Overall Incidence</b>	Total	2/200 (1%)	Mean 1%	SD 1.15%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
<b>*Liver:</b>									
<b>Hepatocellular Carcinoma</b>									
		2/50 (4%)	0/50 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	2/200 (1%)	Mean 1%	SD 2%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>*Liver:</b>									
<b>Hepatocellular Carcinoma or Hepatoblastoma</b>									
		2/50 (4%)	0/50 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	2/200 (1%)	Mean 1%	SD 2%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>*Liver:</b>									
<b>Hepatocellular Carcinoma or Hepatocellular Adenoma</b>									
		2/50 (4%)	0/50 (0%)	1/50 (2%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
<b>Overall Incidence</b>	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			
<b>*Liver:</b>									
<b>Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma</b>									
		2/50 (4%)	0/50 (0%)	1/50 (2%)	1/50 (2%)	1/50 (2%)	0/50 (0%)		
		1/50 (2%)			1/50 (2%)				
<b>Overall Incidence</b>	Total	4/200 (2%)	Mean 2%	SD 1.63%	Total	3/200 (1.5%)	Mean 1.5%	SD 1%	
.....									
<b>*Liver:</b>									
<b>Ito Cell Tumor Benign</b>									
		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%)				
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Lung:</b>									
<b>Alveolar/Bronchiolar Adenoma</b>									
		2/50 (4%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)		
		3/50 (6%)			1/50 (2%)				
<b>Overall Incidence</b>	Total	5/200 (2.5%)	Mean 2.5%	SD 3%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
<b>*Lung:</b>									
<b>Alveolar/Bronchiolar Carcinoma</b>									
		1/50 (2%)	1/50 (2%)	1/50 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)		
		0/50 (0%)			0/50 (0%)				
<b>Overall Incidence</b>	Total	3/200 (1.5%)	Mean 1.5%	SD 1%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>*Lung:</b>									
<b>Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma</b>									
		3/50 (6%)	1/50 (2%)	1/50 (2%)	2/50 (4%)	0/50 (0%)	0/50 (0%)		
		3/50 (6%)			1/50 (2%)				
<b>Overall Incidence</b>	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			
<b>*Lung:</b>									
<b>Fibrosarcoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Mammary Gland:</b>									
<b>Adenolipoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Mammary Gland:</b>									
<b>Adenoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>#Mammary Gland:</b>									
<b>Carcinoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	21/200 (10.5%)	Mean 10.5%	SD 5.26%	
.....									
<b>#Mammary Gland:</b>									
<b>Carcinoma or Adenoma</b>									
		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%)			
<b>Overall Incidence</b>	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			
<b>#Mammary Gland:</b>									
<b>Fibroadenoma</b>									
		2/50 (4%)	2/50 (4%)	1/50 (2%)		25/50 (50%)	27/50 (54%)	14/50 (28%)	
		1/50 (2%)				37/50 (74%)			
<b>Overall Incidence</b>	Total	6/200 (3%)	Mean 3%	SD 1.15%	Total	103/200 (51.5%)	Mean 51.5%	SD 18.86%	
.....									
<b>#Mammary Gland:</b>									
<b>Fibroma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Mammary Gland:</b>									
<b>Fibroma, Fibroadenoma or Adenoma</b>									
		2/50 (4%)	2/50 (4%)	1/50 (2%)		25/50 (50%)	27/50 (54%)	14/50 (28%)	
		1/50 (2%)				37/50 (74%)			
<b>Overall Incidence</b>	Total	6/200 (3%)	Mean 3%	SD 1.15%	Total	103/200 (51.5%)	Mean 51.5%	SD 18.86%	
.....									
<b>#Mammary Gland:</b>									
<b>Fibroma, Fibroadenoma, Carcinoma, or Adenoma</b>									
		2/50 (4%)	2/50 (4%)	1/50 (2%)		27/50 (54%)	30/50 (60%)	16/50 (32%)	
		1/50 (2%)				38/50 (76%)			
<b>Overall Incidence</b>	Total	6/200 (3%)	Mean 3%	SD 1.15%	Total	111/200 (55.5%)	Mean 55.5%	SD 18.21%	
.....									
<b>#Mesentery:</b>									
<b>Fibrous Histiocytoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#Mesentery:</b>									
<b>Schwannoma Malignant</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Nose:</b>									
<b>Adenoma</b>									
		0/50 (0%)	0/49 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/49 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/198 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>									
<b>Papilloma Squamous or Papilloma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>									
<b>Squamous Cell Carcinoma</b>									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	1/50 (2%)
		0/50 (0%)				1/50 (2%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>									
<b>Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma</b>									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	1/50 (2%)
		0/50 (0%)				1/50 (2%)			
<b>Overall Incidence</b>	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

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		Male				Female			
<b>#Oral Mucosa:</b>									
<b>Squamous Cell Carcinoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Oral Mucosa:</b>									
<b>Squamous Cell Papilloma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Ovary:</b>									
<b>Cystadenoma</b>									
						0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
						0/50 (0%)			
<b>Overall Incidence</b>	Total				Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Ovary:</b>									
<b>Fibrosarcoma</b>									
						0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
						0/50 (0%)			
<b>Overall Incidence</b>	Total				Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Ovary:</b>									
<b>Granulosa Cell Tumor Benign</b>									
						0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
						0/50 (0%)			
<b>Overall Incidence</b>	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**  
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	Male	Female
<b>*Ovary:</b>		
<b>Granulosa Cell Tumor Malignant</b>		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	<b>Total</b> 0/200 (0%)	<b>Mean</b> 0% <b>SD</b> 0%
.....		
<b>*Ovary:</b>		
<b>Granulosa Cell Tumor: Benign, Malignant, NOS</b>		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	<b>Total</b> 0/200 (0%)	<b>Mean</b> 0% <b>SD</b> 0%
.....		
<b>*Ovary:</b>		
<b>Granulosa-Theca Tumor Malignant</b>		
	2/50 (4%)	0/50 (0%)
	1/50 (2%)	0/50 (0%)
<b>Overall Incidence</b>	<b>Total</b> 3/200 (1.5%)	<b>Mean</b> 1.5% <b>SD</b> 1.91%
.....		
<b>*Ovary:</b>		
<b>Schwannoma Malignant</b>		
	0/50 (0%)	0/50 (0%)
	0/50 (0%)	0/50 (0%)
<b>Overall Incidence</b>	<b>Total</b> 0/200 (0%)	<b>Mean</b> 0% <b>SD</b> 0%
.....		
<b>*Ovary:</b>		
<b>Sertoli Cell Tumor Malignant</b>		
	0/50 (0%)	0/50 (0%)
	1/50 (2%)	0/50 (0%)
<b>Overall Incidence</b>	<b>Total</b> 1/200 (0.5%)	<b>Mean</b> 0.5% <b>SD</b> 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		
<b>*Ovary:</b>							
<b>Tubulostromal Adenoma</b>							
					0/50 (0%)	0/50 (0%)	0/50 (0%)
					0/50 (0%)		
<b>Overall Incidence</b>					Total 0/200 (0%)	Mean 0%	SD 0%
.....							
<b>*Pancreas:</b>							
<b>Adenoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/199 (0%)	Mean 0%	SD 0%	Total 0/200 (0%)	Mean 0%	SD 0%
.....							
<b>*Pancreas:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/199 (0%)	Mean 0%	SD 0%	Total 0/200 (0%)	Mean 0%	SD 0%
.....							
<b>*Pancreas:</b>							
<b>Mixed Tumor Benign</b>							
		0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/199 (0%)	Mean 0%	SD 0%	Total 0/200 (0%)	Mean 0%	SD 0%
.....							
<b>*Parathyroid Gland:</b>							
<b>Adenoma</b>							
		0/46 (0%)	0/48 (0%)	0/48 (0%)	0/47 (0%)	1/43 (2%)	0/49 (0%)
		0/50 (0%)			0/49 (0%)		
<b>Overall Incidence</b>	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

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

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 Tumor Incidence for Selected Control Animal Groups  
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		Male				Female			
<b>*Pituitary Gland: Pars Intermedia:</b>									
<b>  Carcinoma or Adenoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/49 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
<b>*Pituitary Gland: Pars Nervosa:</b>									
<b>  Craniopharyngioma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/49 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/199 (0%)	Mean 0%	SD 0%	
.....									
<b>*Prostate:</b>									
<b>  Adenoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)					
		0/50 (0%)							
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%					
.....									
<b>*Prostate:</b>									
<b>  Carcinoma or Adenoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)					
		0/50 (0%)							
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%					
.....									
<b>*Salivary Glands:</b>									
<b>  Carcinoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	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								
<b>*Salivary Glands:</b>														
<b>  Carcinoma or Adenoma</b>														
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)			
		0/50	(0%)			0/50	(0%)	0/50	(0%)					
<b>Overall Incidence</b>	Total	0/200	(0%)	Mean	0%	SD	0%	Total	0/200	(0%)	Mean	0%	SD	0%
.....														
<b>*Salivary Glands:</b>														
<b>  Sarcoma</b>														
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)			
		0/50	(0%)			0/50	(0%)	0/50	(0%)					
<b>Overall Incidence</b>	Total	0/200	(0%)	Mean	0%	SD	0%	Total	0/200	(0%)	Mean	0%	SD	0%
.....														
<b>*Salivary Glands:</b>														
<b>  Schwannoma Malignant</b>														
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)			
		0/50	(0%)			0/50	(0%)	0/50	(0%)					
<b>Overall Incidence</b>	Total	0/200	(0%)	Mean	0%	SD	0%	Total	0/200	(0%)	Mean	0%	SD	0%
.....														
<b>#Seminal Vesicle:</b>														
<b>  Adenoma</b>														
		0/50	(0%)	0/50	(0%)	0/50	(0%)							
		0/50	(0%)											
<b>Overall Incidence</b>	Total	0/200	(0%)	Mean	0%	SD	0%							
.....														
<b>#Skeletal Muscle:</b>														
<b>  Fibrous Histiocytoma</b>														
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)			
		0/50	(0%)			0/50	(0%)	0/50	(0%)					
<b>Overall Incidence</b>	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  
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		Male				Female			
<b>#Skeletal Muscle:</b>									
<b>Lipoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Basal Cell Adenoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	2/200 (1%)	Mean 1%	SD 1.15%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>#Skin:</b>									
<b>Basal Cell Adenoma or Basosquamous Tumor Benign</b>									
		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%)			
<b>Overall Incidence</b>	Total	2/200 (1%)	Mean 1%	SD 1.15%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>#Skin:</b>									
<b>Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma</b>									
		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%)			
<b>Overall Incidence</b>	Total	3/200 (1.5%)	Mean 1.5%	SD 1.91%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>#Skin:</b>									
<b>Basal Cell Carcinoma</b>									
		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%)			
<b>Overall Incidence</b>	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

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 Tumor Incidence for Selected Control Animal Groups  
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		Male				Female			
<b>#Skin:</b>									
<b>Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)</b>									
		0/50 (0%)	1/50 (2%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	5/200 (2.5%)	Mean 2.5%	SD 2.52%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma</b>									
		0/50 (0%)	1/50 (2%)	4/50 (8%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		3/50 (6%)				1/50 (2%)			
<b>Overall Incidence</b>	Total	8/200 (4%)	Mean 4%	SD 3.65%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>#Skin:</b>									
<b>Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma</b>									
		1/50 (2%)	1/50 (2%)	5/50 (10%)		1/50 (2%)	1/50 (2%)	1/50 (2%)	
		9/50 (18%)				2/50 (4%)			
<b>Overall Incidence</b>	Total	16/200 (8%)	Mean 8%	SD 7.66%	Total	5/200 (2.5%)	Mean 2.5%	SD 1%	
.....									
<b>#Skin:</b>									
<b>Fibroma</b>									
		3/50 (6%)	1/50 (2%)	3/50 (6%)		2/50 (4%)	1/50 (2%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
<b>Overall Incidence</b>	Total	8/200 (4%)	Mean 4%	SD 2.31%	Total	4/200 (2%)	Mean 2%	SD 1.63%	
.....									
<b>#Skin:</b>									
<b>Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma</b>									
		3/50 (6%)	2/50 (4%)	6/50 (12%)		2/50 (4%)	1/50 (2%)	0/50 (0%)	
		1/50 (2%)				1/50 (2%)			
<b>Overall Incidence</b>	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**  
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		Male				Female			
<b>#Skin:</b>									
<b>Fibrosarcoma</b>									
		0/50 (0%)	0/50 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	3/200 (1.5%)	Mean 1.5%	SD 3%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma</b>									
		0/50 (0%)	1/50 (2%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	4/200 (2%)	Mean 2%	SD 2.83%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Fibrous Histiocytoma</b>									
		0/50 (0%)	1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Hemangiosarcoma</b>									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Keratoacanthoma</b>									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
		3/50 (6%)				1/50 (2%)			
<b>Overall Incidence</b>	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			
<b>#Skin:</b>									
<b>Lipoma</b>									
		2/50 (4%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	2/200 (1%)	Mean 1%	SD 2%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Liposarcoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Neural Crest Tumor</b>									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>#Skin:</b>									
<b>Neurofibroma or Schwannoma benign</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Neurofibrosarcoma or Schwannoma (malignant or NOS)</b>									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#Skin:</b>									
<b>Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)</b>									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Sarcoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Schwannoma Benign</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Schwannoma Malignant</b>									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Squamous Cell Carcinoma</b>									
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	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**  
**Vehicle: AIR**

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		Male				Female			
<b>#Skin:</b>									
<b>Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma</b>									
		1/50 (2%)	1/50 (2%)	3/50 (6%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
		1/50 (2%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	6/200 (3%)	Mean 3%	SD 2%	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>#Skin:</b>									
<b>Squamous Cell Papilloma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		3/50 (6%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	3/200 (1.5%)	Mean 1.5%	SD 3%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Squamous Cell Papilloma or Papilloma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		3/50 (6%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	3/200 (1.5%)	Mean 1.5%	SD 3%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma</b>									
		1/50 (2%)	0/50 (0%)	1/50 (2%)		1/50 (2%)	1/50 (2%)	1/50 (2%)	
		6/50 (12%)				1/50 (2%)			
<b>Overall Incidence</b>	Total	8/200 (4%)	Mean 4%	SD 5.42%	Total	4/200 (2%)	Mean 2%	SD 0%	
.....									
<b>#Skin:</b>									
<b>Squamous Cell Papilloma, Papilloma, or Keratoacanthoma</b>									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		1/50 (2%)	1/50 (2%)	0/50 (0%)	
		6/50 (12%)				1/50 (2%)			
<b>Overall Incidence</b>	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			
<b>#Skin:</b>									
<b>Trichoepithelioma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		1/50 (2%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin: Sebaceous Gland:</b>									
<b>Adenoma</b>									
		0/50 (0%)	1/50 (2%)	2/50 (4%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	3/200 (1.5%)	Mean 1.5%	SD 1.91%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Skin: Sebaceous Gland:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50 (0%)	1/50 (2%)	2/50 (4%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	3/200 (1.5%)	Mean 1.5%	SD 1.91%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Spinal Cord:</b>									
<b>Glioma Malignant</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Stomach, Glandular:</b>									
<b>Carcinoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#Stomach, Glandular:</b>									
<b>Carcinoma or Adenoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Stomach, Glandular:</b>									
<b>Sarcoma</b>									
		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%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Testes:</b>									
<b>Adenoma</b>									
		34/50 (68%)	36/50 (72%)	29/50 (58%)					
		32/50 (64%)							
<b>Overall Incidence</b>	Total	131/200 (65.5%)	Mean 65.5%	SD 5.97%					
.....									
<b>*Testes:</b>									
<b>Hemangioma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)					
		0/50 (0%)							
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%					
.....									
<b>*Thymus:</b>									
<b>Thymoma Benign</b>									
		0/43 (0%)	0/44 (0%)	0/47 (0%)		1/46 (2%)	0/48 (0%)	0/44 (0%)	
		0/42 (0%)				0/46 (0%)			
<b>Overall Incidence</b>	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

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

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		Male				Female			
<b>*Thymus:</b>									
<b>Thymoma Malignant</b>									
		0/43 (0%)	0/44 (0%)	0/47 (0%)		0/46 (0%)	0/48 (0%)	0/44 (0%)	
		0/42 (0%)				0/46 (0%)			
<b>Overall Incidence</b>	Total	0/176 (0%)	Mean 0%	SD 0%	Total	0/184 (0%)	Mean 0%	SD 0%	
.....									
<b>*Thymus:</b>									
<b>Thymoma NOS</b>									
		0/43 (0%)	0/44 (0%)	0/47 (0%)		0/46 (0%)	1/48 (2%)	0/44 (0%)	
		0/42 (0%)				0/46 (0%)			
<b>Overall Incidence</b>	Total	0/176 (0%)	Mean 0%	SD 0%	Total	1/184 (0.54%)	Mean 0.52%	SD 1.04%	
.....									
<b>*Thymus:</b>									
<b>Thymoma: Benign, Malignant, NOS</b>									
		0/43 (0%)	0/44 (0%)	0/47 (0%)		1/46 (2%)	1/48 (2%)	0/44 (0%)	
		0/42 (0%)				0/46 (0%)			
<b>Overall Incidence</b>	Total	0/176 (0%)	Mean 0%	SD 0%	Total	2/184 (1.09%)	Mean 1.06%	SD 1.23%	
.....									
<b>*Thyroid Gland: C-Cell:</b>									
<b>Adenoma</b>									
		5/50 (10%)	7/50 (14%)	5/50 (10%)		3/50 (6%)	4/50 (8%)	3/50 (6%)	
		4/50 (8%)				3/50 (6%)			
<b>Overall Incidence</b>	Total	21/200 (10.5%)	Mean 10.5%	SD 2.52%	Total	13/200 (6.5%)	Mean 6.5%	SD 1%	
.....									
<b>*Thyroid Gland: C-Cell:</b>									
<b>Carcinoma</b>									
		4/50 (8%)	1/50 (2%)	2/50 (4%)		1/50 (2%)	0/50 (0%)	0/50 (0%)	
		3/50 (6%)				0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>*Thyroid Gland: C-Cell: Carcinoma or Adenoma</b>									
		9/50 (18%)	8/50 (16%)	6/50 (12%)		4/50 (8%)	4/50 (8%)	3/50 (6%)	
		7/50 (14%)				3/50 (6%)			
<b>Overall Incidence</b>	Total	30/200 (15%)	Mean 15%	SD 2.58%	Total	14/200 (7%)	Mean 7%	SD 1.15%	
.....									
<b>*Thyroid Gland: Follicular Cell: Adenoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Thyroid Gland: Follicular Cell: Carcinoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Tongue: Squamous Cell Carcinoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
		0/50 (0%)				1/50 (2%)			
<b>Overall Incidence</b>	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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		Male				Female			
<b>#Tongue:</b>									
<b>Squamous Cell Carcinoma or Papilloma Squamous</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)	
		0/50 (0%)				1/50 (2%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
<b>#Tongue:</b>									
<b>Squamous Cell Papilloma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/200 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Tooth:</b>									
<b>Adamantinoma Malignant</b>									
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/50 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/200 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Urinary Bladder:</b>									
<b>Carcinoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/49 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	0/199 (0%)	Mean 0%	SD 0%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Urinary Bladder:</b>									
<b>Carcinoma or Papilloma</b>									
		0/50 (0%)	1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/49 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	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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		Male				Female			
<b>*Urinary Bladder:</b>									
<b>Hemangiosarcoma</b>									
		0/50 (0%)	1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/49 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>*Urinary Bladder:</b>									
<b>Papilloma</b>									
		0/50 (0%)	1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)	
		0/49 (0%)				0/50 (0%)			
<b>Overall Incidence</b>	Total	1/199 (0.5%)	Mean 0.5%	SD 1%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Uterus:</b>									
<b>Adenoma</b>									
						0/50 (0%)	1/50 (2%)	1/50 (2%)	
						0/50 (0%)			
<b>Overall Incidence</b>					Total	2/200 (1%)	Mean 1%	SD 1.15%	
.....									
<b>#Uterus:</b>									
<b>Carcinoma</b>									
						0/50 (0%)	0/50 (0%)	1/50 (2%)	
						0/50 (0%)			
<b>Overall Incidence</b>					Total	1/200 (0.5%)	Mean 0.5%	SD 1%	
.....									
<b>#Uterus:</b>									
<b>Leiomyosarcoma</b>									
						0/50 (0%)	0/50 (0%)	0/50 (0%)	
						0/50 (0%)			
<b>Overall Incidence</b>					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
<b>#Uterus:</b> <b>Polyp Stromal</b>		
	8/50 (16%) 11/50 (22%)	8/50 (16%) 6/50 (12%)
<b>Overall Incidence</b>	Total 33/200 (16.5%)	Mean 16.5% SD 4.12%
.....		
<b>#Uterus:</b> <b>Sarcoma</b>		
	0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)
<b>Overall Incidence</b>	Total 0/200 (0%)	Mean 0% SD 0%
.....		
<b>#Uterus:</b> <b>Sarcoma Stromal</b>		
	2/50 (4%) 0/50 (0%)	0/50 (0%) 0/50 (0%)
<b>Overall Incidence</b>	Total 2/200 (1%)	Mean 1% SD 2%
.....		
<b>#Uterus:</b> <b>Sarcoma Stromal or Polyp Stromal</b>		
	10/50 (20%) 11/50 (22%)	8/50 (16%) 6/50 (12%)
<b>Overall Incidence</b>	Total 35/200 (17.5%)	Mean 17.5% SD 4.43%
.....		
<b>#Uterus:</b> <b>Schwannoma Malignant</b>		
	0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)
<b>Overall Incidence</b>	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			
<b>#Vagina:</b>									
<b>Polyp</b>									
			0/50 (0%)		0/50 (0%)		0/50 (0%)		0/50 (0%)
			0/50 (0%)						
<b>Overall Incidence</b>		Total	0/200 (0%)		Mean	0%		SD	0%
.....									
<b>#Vagina:</b>									
<b>Sarcoma</b>									
			1/50 (2%)		0/50 (0%)		0/50 (0%)		0/50 (0%)
			0/50 (0%)						
<b>Overall Incidence</b>		Total	1/200 (0.5%)		Mean	0.5%		SD	1%
.....									
<b>#Vagina:</b>									
<b>Schwannoma Malignant</b>									
			0/50 (0%)		0/50 (0%)		0/50 (0%)		0/50 (0%)
			0/50 (0%)						
<b>Overall Incidence</b>		Total	0/200 (0%)		Mean	0%		SD	0%
.....									
<b>#Zymbal's Gland:</b>									
<b>Adenoma</b>									
		0/50 (0%)	2/50 (4%)	0/50 (0%)			0/50 (0%)	0/50 (0%)	0/50 (0%)
		0/50 (0%)					0/50 (0%)		
<b>Overall Incidence</b>	Total	2/200 (1%)	Mean 1%	SD 2%	Total	0/200 (0%)	Mean 0%	SD 0%	
.....									
<b>#Zymbal's Gland:</b>									
<b>Carcinoma</b>									
		0/50 (0%)	0/50 (0%)	0/50 (0%)			1/50 (2%)	0/50 (0%)	1/50 (2%)
		0/50 (0%)					0/50 (0%)		
<b>Overall Incidence</b>	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

Page: 142  
 Report Date: 06/05/2013

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

Page: 143  
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
<b>Male</b>							
Battelle Columbus Laboratory	052000903	11/18/04	726	50(3)	33(668)	516.1	beta-Picoline
<b>Female</b>							
Battelle Columbus Laboratory	052000903	11/19/04	727	50(5)	30(688)	352.7	beta-Picoline

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

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		
<b>#All Organs:</b>							
<b>Benign Tumors</b>							
		45/50 (90%)			47/50 (94%)		
<b>Overall Incidence</b>	Total	45/50 (90%)	Mean 90%	SD 0%	Total	47/50 (94%)	Mean 94% SD 0%
.....							
<b>#All Organs:</b>							
<b>Malignant Tumors</b>							
		23/50 (46%)			17/50 (34%)		
<b>Overall Incidence</b>	Total	23/50 (46%)	Mean 46%	SD 0%	Total	17/50 (34%)	Mean 34% SD 0%
.....							
<b>#All Organs:</b>							
<b>Malignant and Benign Tumors</b>							
		48/50 (96%)			49/50 (98%)		
<b>Overall Incidence</b>	Total	48/50 (96%)	Mean 96%	SD 0%	Total	49/50 (98%)	Mean 98% SD 0%
.....							
<b>#All Organs:</b>							
<b>Hemangioma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#All Organs:</b>							
<b>Hemangiosarcoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#All Organs:</b>							
<b>Hemangiosarcoma or Hemangioma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	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			
<b>#All Organs:</b>								
<b>Histiocytic Sarcoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated</b>								
		14/50 (28%)			12/50 (24%)			
<b>Overall Incidence</b>	Total	14/50 (28%)	Mean 28%	SD 0%	Total	12/50 (24%)	Mean 24%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Benign, Malignant, NOS</b>								
		4/50 (8%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	4/50 (8%)	Mean 8%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Malignant</b>								
		4/50 (8%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	4/50 (8%)	Mean 8%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Osteoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	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		
<b>#All Organs:</b>							
<b>Osteosarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#All Organs:</b>							
<b>Osteosarcoma or Osteoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>*Adrenal Cortex:</b>							
<b>Adenoma</b>							
		1/50	(2%)		2/50	(4%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	2/50 (4%)
.....							
<b>*Adrenal Cortex:</b>							
<b>Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>*Adrenal Medulla:</b>							
<b>Pheochromocytoma Benign</b>							
		5/50	(10%)		2/50	(4%)	
<b>Overall Incidence</b>	Total	5/50	(10%)	Mean 10%	SD 0%	Total	2/50 (4%)
.....							
<b>*Adrenal Medulla:</b>							
<b>Pheochromocytoma Complex</b>							
		1/50	(2%)		0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma Malignant</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma: Benign, Complex, Malignant, NOS</b>								
		6/50 (12%)			2/50 (4%)			
<b>Overall Incidence</b>	Total	6/50 (12%)	Mean 12%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
.....								
<b>#Blood Vessel:</b>								
<b>Leiomyosarcoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Bone:</b>								
<b>Chordoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Bone:</b>								
<b>Osteoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Bone:</b>								
<b>Osteosarcoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#Bone:</b>									
<b>Osteosarcoma or Osteoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Brain:</b>									
<b>Glioma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Brain:</b>									
<b>Glioma Benign</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
<b>*Brain:</b>									
<b>Glioma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Brain:</b>									
<b>Oligodendroglioma, Glioma, or Astrocytoma</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
<b>*Brain:</b>									
<b>Osteosarcoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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			
<b>*Clitoral/Preputial Gland: Adenoma</b>								
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	7/50 (14%)	Mean 14%	SD 0%
.....								
<b>*Clitoral/Preputial Gland: Carcinoma</b>								
<b>Overall Incidence</b>	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Clitoral/Preputial Gland: Carcinoma or Adenoma</b>								
<b>Overall Incidence</b>	Total	2/50 (4%)	Mean 4%	SD 0%	Total	7/50 (14%)	Mean 14%	SD 0%
.....								
<b>*Clitoral/Preputial Gland: Sarcoma</b>								
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
<b>#Ear: Neural Crest Tumor</b>								
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Eye: Melanoma Benign</b>								
<b>Overall Incidence</b>	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**

Page: 150  
 Report Date: 06/05/2013

		Male				Female			
<b>#Eye:</b>									
<b>Melanoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Harderian Gland:</b>									
<b>Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Harderian Gland:</b>									
<b>Carcinoma</b>									
		1/50	(2%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Harderian Gland:</b>									
<b>Carcinoma or Adenoma</b>									
		1/50	(2%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Heart:</b>									
<b>Schwannoma Benign</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Heart:</b>									
<b>Schwannoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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			
<b>#Intestine Large: Colon/Rectum:</b>								
<b>Adenoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Intestine Large: Colon/Rectum:</b>								
<b>Carcinoma or Adenoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Intestine Small: Duodenum:</b>								
<b>Leiomyoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Intestine Small: Duodenum:</b>								
<b>Schwannoma Malignant</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Intestine Small: Ileum:</b>								
<b>Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Intestine Small: Jejunum:</b>								
<b>Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Intestine Small: Jejunum: Leiomyoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Intestine Small: Jejunum: Leiomyosarcoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Intestine Small: Site Unspecified: Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Intestine Small: Site Unspecified: Carcinoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Intestine Small: Site Unspecified: Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Intestine Small: Site Unspecified: Leiomyoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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		
<b>#Intestine Small: Site Unspecified:</b>							
<b>Leiomyosarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
<b>#Intestine Small: Site Unspecified:</b>							
<b>Schwannoma Malignant</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
<b>*Islets, Pancreatic:</b>							
<b>Adenoma</b>							
		4/50	(8%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	4/50	(8%)	Mean 8%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
<b>*Islets, Pancreatic:</b>							
<b>Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
<b>*Islets, Pancreatic:</b>							
<b>Carcinoma or Adenoma</b>							
		4/50	(8%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	4/50	(8%)	Mean 8%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
<b>*Kidney: Pelvis and Transitional Epithelium:</b>							
<b>Papilloma</b>							
		0/50	(0%)		0/49	(0%)	
<b>Overall Incidence</b>	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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		Male				Female			
<b>*Kidney: Renal Tubule: Adenoma</b>									
		0/50	(0%)			0/49	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49	(0%)	Mean 0% SD 0%
.....									
<b>*Kidney: Renal Tubule: Carcinoma</b>									
		0/50	(0%)			0/49	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49	(0%)	Mean 0% SD 0%
.....									
<b>*Kidney: Renal Tubule: Carcinoma or Adenoma</b>									
		0/50	(0%)			0/49	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49	(0%)	Mean 0% SD 0%
.....									
<b>*Kidney: Renal Tubule: Lipoma</b>									
		0/50	(0%)			0/49	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49	(0%)	Mean 0% SD 0%
.....									
<b>*Kidney: Renal Tubule: Mesenchymal Tumor Malignant</b>									
		0/50	(0%)			0/49	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/49	(0%)	Mean 0% SD 0%
.....									
<b>*Kidney: Renal Tubule: Sarcoma</b>									
		0/50	(0%)			0/49	(0%)		
<b>Overall Incidence</b>	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		
<b>*Liver:</b>							
<b>Hepatocellular Adenoma</b>							
		3/50	(6%)		2/50	(4%)	
<b>Overall Incidence</b>	Total	3/50	(6%)	Mean 6%	SD 0%	Total	2/50 (4%)
							Mean 4%
							SD 0%
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma or Hepatoblastoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma or Hepatocellular Adenoma</b>							
		3/50	(6%)		2/50	(4%)	
<b>Overall Incidence</b>	Total	3/50	(6%)	Mean 6%	SD 0%	Total	2/50 (4%)
							Mean 4%
							SD 0%
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma</b>							
		3/50	(6%)		2/50	(4%)	
<b>Overall Incidence</b>	Total	3/50	(6%)	Mean 6%	SD 0%	Total	2/50 (4%)
							Mean 4%
							SD 0%
.....							
<b>*Liver:</b>							
<b>Ito Cell Tumor Benign</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>*Lung:</b>								
<b>Alveolar/Bronchiolar Adenoma</b>								
		3/50	(6%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	3/50	(6%)	Mean 6%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>*Lung:</b>								
<b>Alveolar/Bronchiolar Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>*Lung:</b>								
<b>Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma</b>								
		3/50	(6%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	3/50	(6%)	Mean 6%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>*Lung:</b>								
<b>Fibrosarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>#Mammary Gland:</b>								
<b>Adenolipoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>#Mammary Gland:</b>								
<b>Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Mammary Gland: Carcinoma</b>								
		0/50 (0%)			2/50 (4%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
.....								
<b>#Mammary Gland: Carcinoma or Adenoma</b>								
		0/50 (0%)			2/50 (4%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
.....								
<b>#Mammary Gland: Fibroadenoma</b>								
		1/50 (2%)			34/50 (68%)			
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	34/50 (68%)	Mean 68%	SD 0%
.....								
<b>#Mammary Gland: Fibroma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Mammary Gland: Fibroma, Fibroadenoma or Adenoma</b>								
		1/50 (2%)			34/50 (68%)			
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	34/50 (68%)	Mean 68%	SD 0%
.....								
<b>#Mammary Gland: Fibroma, Fibroadenoma, Carcinoma, or Adenoma</b>								
		1/50 (2%)			34/50 (68%)			
<b>Overall Incidence</b>	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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	Male				Female			
<b>#Mesentery:</b>								
<b>Fibrous Histiocytoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Mesentery:</b>								
<b>Schwannoma Malignant</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>*Nose:</b>								
<b>Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>								
<b>Papilloma Squamous or Papilloma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>								
<b>Squamous Cell Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>								
<b>Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Oral Mucosa:</b>								
<b>Squamous Cell Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Oral Mucosa:</b>								
<b>Squamous Cell Papilloma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Cystadenoma</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Fibrosarcoma</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Granulosa Cell Tumor Benign</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Granulosa Cell Tumor Malignant</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						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					
<b>*Ovary:</b>										
Granulosa Cell Tumor: Benign, Malignant, NOS										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Granulosa-Theca Tumor Malignant										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Schwannoma Malignant										
					1/50	(2%)				
Overall Incidence					Total	1/50 (2%)	Mean	2%	SD	0%
.....										
<b>*Ovary:</b>										
Sertoli Cell Tumor Malignant										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Tubulostromal Adenoma										
					0/50	(0%)				
Overall Incidence					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Pancreas:</b>										
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			
<b>*Pancreas:</b>								
<b>Carcinoma or Adenoma</b>								
		1/49 (2%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	1/49 (2.04%)	Mean 2.04%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Pancreas:</b>								
<b>Mixed Tumor Benign</b>								
		0/49 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Parathyroid Gland:</b>								
<b>Adenoma</b>								
		0/50 (0%)			0/47 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/47 (0%)	Mean 0%	SD 0%
.....								
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>								
<b>Adenoma</b>								
		28/50 (56%)			30/50 (60%)			
<b>Overall Incidence</b>	Total	28/50 (56%)	Mean 56%	SD 0%	Total	30/50 (60%)	Mean 60%	SD 0%
.....								
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>								
<b>Carcinoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>								
<b>Carcinoma or Adenoma</b>								
		28/50 (56%)			30/50 (60%)			
<b>Overall Incidence</b>	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				
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>									
<b>Ganglioneuroma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Pituitary Gland: Pars Intermedia:</b>									
<b>Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Pituitary Gland: Pars Intermedia:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Pituitary Gland: Pars Nervosa:</b>									
<b>Craniopharyngioma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Prostate:</b>									
<b>Adenoma</b>									
		0/49	(0%)						
<b>Overall Incidence</b>	Total	0/49	(0%)	Mean 0%	SD 0%				
.....									
<b>*Prostate:</b>									
<b>Carcinoma or Adenoma</b>									
		0/49	(0%)						
<b>Overall Incidence</b>	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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		Male				Female			
<b>*Salivary Glands:</b>									
<b>  Carcinoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Salivary Glands:</b>									
<b>  Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Salivary Glands:</b>									
<b>  Sarcoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Salivary Glands:</b>									
<b>  Schwannoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Seminal Vesicle:</b>									
<b>  Adenoma</b>									
		0/50	(0%)						
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
<b>#Skeletal Muscle:</b>									
<b>  Fibrous Histiocytoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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		
<b>#Skeletal Muscle:</b>							
<b>Lipoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>#Skin:</b>							
<b>Basal Cell Adenoma</b>							
		1/50	(2%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
.....							
<b>#Skin:</b>							
<b>Basal Cell Adenoma or Basosquamous Tumor Benign</b>							
		1/50	(2%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
.....							
<b>#Skin:</b>							
<b>Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma</b>							
		1/50	(2%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	1/50 (2%)
						Mean 2%	SD 0%
.....							
<b>#Skin:</b>							
<b>Basal Cell Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>#Skin:</b>							
<b>Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Skin:</b>								
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%
-----								
<b>#Skin:</b>								
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%
-----								
<b>#Skin:</b>								
Fibroma								
Overall Incidence	Total	3/50 (6%)	Mean 6%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
-----								
<b>#Skin:</b>								
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%
-----								
<b>#Skin:</b>								
Fibrosarcoma								
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
-----								
<b>#Skin:</b>								
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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 Report Date: 06/05/2013

		Male			Female		
<b>#Skin:</b>							
<b>Fibrous Histiocytoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Hemangiosarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Keratoacanthoma</b>							
		5/50	(10%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Lipoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Liposarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Neural Crest Tumor</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Skin:</b>								
<b>Neurofibroma or Schwannoma benign</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Neurofibrosarcoma or Schwannoma (malignant or NOS)</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Sarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Schwannoma Benign</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Schwannoma Malignant</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Skin:</b>								
<b>Squamous Cell Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma or Papilloma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma</b>								
		5/50	(10%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma, Papilloma, or Keratoacanthoma</b>								
		5/50	(10%)			0/50	(0%)	
<b>Overall Incidence</b>	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

Page: 169  
 Report Date: 06/05/2013

		Male				Female			
<b>#Skin:</b>									
<b>Trichoepithelioma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Skin: Sebaceous Gland:</b>									
<b>Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Skin: Sebaceous Gland:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Spinal Cord:</b>									
<b>Glioma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Stomach, Glandular:</b>									
<b>Carcinoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Stomach, Glandular:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 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: ORAL**  
**Vehicle: WATER**

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 Report Date: 06/05/2013

		Male			Female		
<b>#Stomach, Glandular:</b>							
<b>Sarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Testes:</b>							
<b>Adenoma</b>							
		35/50	(70%)				
<b>Overall Incidence</b>	Total	35/50	(70%)	Mean 70%	SD 0%		
.....							
<b>*Testes:</b>							
<b>Hemangioma</b>							
		0/50	(0%)				
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%		
.....							
<b>*Thymus:</b>							
<b>Thymoma Benign</b>							
		0/49	(0%)			0/49	(0%)
<b>Overall Incidence</b>	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Thymus:</b>							
<b>Thymoma Malignant</b>							
		0/49	(0%)			0/49	(0%)
<b>Overall Incidence</b>	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/49 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Thymus:</b>							
<b>Thymoma NOS</b>							
		0/49	(0%)			0/49	(0%)
<b>Overall Incidence</b>	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		
<b>*Thymus:</b>							
<b>Thymoma: Benign, Malignant, NOS</b>							
		0/49 (0%)			0/49 (0%)		
<b>Overall Incidence</b>	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0% SD 0%
.....							
<b>*Thyroid Gland: C-Cell:</b>							
<b>Adenoma</b>							
		12/50 (24%)			10/50 (20%)		
<b>Overall Incidence</b>	Total	12/50 (24%)	Mean 24%	SD 0%	Total	10/50 (20%)	Mean 20% SD 0%
.....							
<b>*Thyroid Gland: C-Cell:</b>							
<b>Carcinoma</b>							
		1/50 (2%)			1/50 (2%)		
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
<b>*Thyroid Gland: C-Cell:</b>							
<b>Carcinoma or Adenoma</b>							
		13/50 (26%)			11/50 (22%)		
<b>Overall Incidence</b>	Total	13/50 (26%)	Mean 26%	SD 0%	Total	11/50 (22%)	Mean 22% SD 0%
.....							
<b>*Thyroid Gland: Follicular Cell:</b>							
<b>Adenoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Thyroid Gland: Follicular Cell:</b>							
<b>Carcinoma</b>							
		1/50 (2%)			0/50 (0%)		
<b>Overall Incidence</b>	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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 Report Date: 06/05/2013

		Male			Female		
<b>*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma</b>							
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tongue: Squamous Cell Carcinoma</b>							
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tongue: Squamous Cell Carcinoma or Papilloma Squamous</b>							
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tongue: Squamous Cell Papilloma</b>							
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tooth: Adamantinoma Malignant</b>							
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Urinary Bladder: Carcinoma</b>							
<b>Overall Incidence</b>	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			
<b>*Urinary Bladder: Carcinoma or Papilloma</b>								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Urinary Bladder: Hemangiosarcoma</b>								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Urinary Bladder: Papilloma</b>								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Uterus: Adenoma</b>								
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Uterus: Carcinoma</b>								
Overall Incidence					Total	1/50 (2%)	Mean 2%	SD 0%
.....								
<b>#Uterus: Leiomyosarcoma</b>								
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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 Report Date: 06/05/2013

	Male	Female
<b>#Uterus:</b> <b>Polyp Stromal</b>		
<b>Overall Incidence</b>	Total 8/50 (16%)	Mean 16% SD 0%
<b>#Uterus:</b> <b>Sarcoma</b>		
<b>Overall Incidence</b>	Total 0/50 (0%)	Mean 0% SD 0%
<b>#Uterus:</b> <b>Sarcoma Stromal</b>		
<b>Overall Incidence</b>	Total 0/50 (0%)	Mean 0% SD 0%
<b>#Uterus:</b> <b>Sarcoma Stromal or Polyp Stromal</b>		
<b>Overall Incidence</b>	Total 8/50 (16%)	Mean 16% SD 0%
<b>#Uterus:</b> <b>Schwannoma Malignant</b>		
<b>Overall Incidence</b>	Total 0/50 (0%)	Mean 0% SD 0%
<b>#Vagina:</b> <b>Polyp</b>		
<b>Overall Incidence</b>	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**

Page: 175  
 Report Date: 06/05/2013

Male					Female						
<b>#Vagina:</b>											
<b>Sarcoma</b>											
					0/50 (0%)						
<b>Overall Incidence</b>					Total		0/50 (0%)		Mean 0% SD 0%		
.....											
<b>#Vagina:</b>											
<b>Schwannoma Malignant</b>											
					0/50 (0%)						
<b>Overall Incidence</b>					Total		0/50 (0%)		Mean 0% SD 0%		
.....											
<b>#Zymbal's Gland:</b>											
<b>Adenoma</b>											
					0/50 (0%)						
<b>Overall Incidence</b>		Total		0/50 (0%)		Mean 0%		SD 0%			
					0/50 (0%)						
<b>Overall Incidence</b>		Total		0/50 (0%)		Mean 0%		SD 0%			
.....											
<b>#Zymbal's Gland:</b>											
<b>Carcinoma</b>											
					0/50 (0%)						
<b>Overall Incidence</b>		Total		1/50 (2%)		Mean 2%		SD 0%			
					0/50 (0%)						
<b>Overall Incidence</b>		Total		1/50 (2%)		Mean 2%		SD 0%			
.....											
<b>#Zymbal's Gland:</b>											
<b>Carcinoma or Adenoma</b>											
					0/50 (0%)						
<b>Overall Incidence</b>		Total		1/50 (2%)		Mean 2%		SD 0%			
					0/50 (0%)						
<b>Overall Incidence</b>		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

Page: 176  
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
<b>Male</b>							
Battelle Columbus Laboratory	059901305	05/12/05	726	50(3)	36(685)	522.7	Styrene-acrylonitrile trimer
<b>Female</b>							
Battelle Columbus Laboratory	059901305	05/13/05	727	50(5)	41(699)	371.2	Styrene-acrylonitrile trimer

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



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			
<b>#All Organs:</b>								
<b>Benign Tumors</b>								
		46/50 (92%)			42/50 (84%)			
<b>Overall Incidence</b>	Total	46/50 (92%)	Mean 92%	SD 0%	Total	42/50 (84%)	Mean 84%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Malignant Tumors</b>								
		22/50 (44%)			19/50 (38%)			
<b>Overall Incidence</b>	Total	22/50 (44%)	Mean 44%	SD 0%	Total	19/50 (38%)	Mean 38%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Malignant and Benign Tumors</b>								
		49/50 (98%)			44/50 (88%)			
<b>Overall Incidence</b>	Total	49/50 (98%)	Mean 98%	SD 0%	Total	44/50 (88%)	Mean 88%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Hemangioma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Hemangiosarcoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Hemangiosarcoma or Hemangioma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#All Organs:</b>								
<b>Histiocytic Sarcoma</b>								
		1/50 (2%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated</b>								
		15/50 (30%)			13/50 (26%)			
<b>Overall Incidence</b>	Total	15/50 (30%)	Mean 30%	SD 0%	Total	13/50 (26%)	Mean 26%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Benign, Malignant, NOS</b>								
		4/50 (8%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	4/50 (8%)	Mean 8%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Malignant</b>								
		4/50 (8%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	4/50 (8%)	Mean 8%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Osteoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#All Organs:</b>									
<b>Osteosarcoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#All Organs:</b>									
<b>Osteosarcoma or Osteoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Adrenal Cortex:</b>									
<b>Adenoma</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
<b>*Adrenal Cortex:</b>									
<b>Carcinoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Adrenal Medulla:</b>									
<b>Pheochromocytoma Benign</b>									
		4/50	(8%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	4/50	(8%)	Mean 8%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Adrenal Medulla:</b>									
<b>Pheochromocytoma Complex</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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			
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma Malignant</b>								
		0/50 (0%)			1/50 (2%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma: Benign, Complex, Malignant, NOS</b>								
		4/50 (8%)			1/50 (2%)			
<b>Overall Incidence</b>	Total	4/50 (8%)	Mean 8%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
<b>#Blood Vessel:</b>								
<b>Leiomyosarcoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Bone:</b>								
<b>Chordoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Bone:</b>								
<b>Osteoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Bone:</b>								
<b>Osteosarcoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#Bone:</b>									
<b>Osteosarcoma or Osteoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Brain:</b>									
<b>Glioma</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
<b>*Brain:</b>									
<b>Glioma Benign</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Brain:</b>									
<b>Glioma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Brain:</b>									
<b>Oligodendroglioma, Glioma, or Astrocytoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Brain:</b>									
<b>Osteosarcoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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			
<b>*Clitoral/Preputial Gland: Adenoma</b>								
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	3/50 (6%)	Mean 6%	SD 0%
.....								
<b>*Clitoral/Preputial Gland: Carcinoma</b>								
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Clitoral/Preputial Gland: Carcinoma or Adenoma</b>								
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	3/50 (6%)	Mean 6%	SD 0%
.....								
<b>*Clitoral/Preputial Gland: Sarcoma</b>								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Ear: Neural Crest Tumor</b>								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Eye: Melanoma Benign</b>								
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			
<b>#Eye:</b>									
<b>Melanoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Harderian Gland:</b>									
<b>Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Harderian Gland:</b>									
<b>Carcinoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Harderian Gland:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Heart:</b>									
<b>Schwannoma Benign</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Heart:</b>									
<b>Schwannoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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			
<b>#Intestine Large: Colon/Rectum:</b>								
<b>Adenoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Intestine Large: Colon/Rectum:</b>								
<b>Carcinoma or Adenoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Intestine Small: Duodenum:</b>								
<b>Leiomyoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Intestine Small: Duodenum:</b>								
<b>Schwannoma Malignant</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Intestine Small: Ileum:</b>								
<b>Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#Intestine Small: Jejunum:</b>								
<b>Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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		
<b>#Intestine Small: Jejunum:</b>							
<b>Leiomyoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Jejunum:</b>							
<b>Leiomyosarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Leiomyoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Intestine Small: Site Unspecified:</b>									
<b>Leiomyosarcoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Intestine Small: Site Unspecified:</b>									
<b>Schwannoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Islets, Pancreatic:</b>									
<b>Adenoma</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
<b>*Islets, Pancreatic:</b>									
<b>Carcinoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Islets, Pancreatic:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)	Mean 2% SD 0%
.....									
<b>*Kidney: Pelvis and Transitional Epithelium:</b>									
<b>Papilloma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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		
<b>*Kidney: Renal Tubule: Adenoma</b>							
		1/50 (2%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Carcinoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Carcinoma or Adenoma</b>							
		1/50 (2%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Lipoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Mesenchymal Tumor Malignant</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Kidney: Renal Tubule: Sarcoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	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		
<b>*Liver:</b>							
<b>Hepatocellular Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma or Hepatoblastoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma or Hepatocellular Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>*Liver:</b>							
<b>Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
						Mean 0%	SD 0%
.....							
<b>*Liver:</b>							
<b>Ito Cell Tumor Benign</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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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	Male				Female			
<b>*Lung:</b>								
<b>Alveolar/Bronchiolar Adenoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>*Lung:</b>								
<b>Alveolar/Bronchiolar Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>*Lung:</b>								
<b>Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>*Lung:</b>								
<b>Fibrosarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>#Mammary Gland:</b>								
<b>Adenolipoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>#Mammary Gland:</b>								
<b>Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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		
<b>#Mammary Gland:</b>							
<b>Carcinoma</b>							
		0/50 (0%)			2/50 (4%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/50 (4%)	Mean 4% SD 0%
.....							
<b>#Mammary Gland:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50 (0%)			2/50 (4%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/50 (4%)	Mean 4% SD 0%
.....							
<b>#Mammary Gland:</b>							
<b>Fibroadenoma</b>							
		1/50 (2%)			36/50 (72%)		
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	36/50 (72%)	Mean 72% SD 0%
.....							
<b>#Mammary Gland:</b>							
<b>Fibroma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Mammary Gland:</b>							
<b>Fibroma, Fibroadenoma or Adenoma</b>							
		1/50 (2%)			36/50 (72%)		
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	36/50 (72%)	Mean 72% SD 0%
.....							
<b>#Mammary Gland:</b>							
<b>Fibroma, Fibroadenoma, Carcinoma, or Adenoma</b>							
		1/50 (2%)			36/50 (72%)		
<b>Overall Incidence</b>	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

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		
<b>#Mesentery:</b>							
<b>Fibrous Histiocytoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Mesentery:</b>							
<b>Schwannoma Malignant</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>*Nose:</b>							
<b>Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>							
<b>Papilloma Squamous or Papilloma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>							
<b>Squamous Cell Carcinoma</b>							
		0/50	(0%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
.....							
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>							
<b>Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma</b>							
		0/50	(0%)		1/50	(2%)	
<b>Overall Incidence</b>	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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	Male				Female			
<b>#Oral Mucosa:</b>								
<b>Squamous Cell Carcinoma</b>								
		0/50	(0%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
							Mean 2%	SD 0%
.....								
<b>#Oral Mucosa:</b>								
<b>Squamous Cell Papilloma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Ovary:</b>								
<b>Cystadenoma</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Ovary:</b>								
<b>Fibrosarcoma</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Ovary:</b>								
<b>Granulosa Cell Tumor Benign</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Ovary:</b>								
<b>Granulosa Cell Tumor Malignant</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						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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Male					Female					
<b>*Ovary:</b>										
Granulosa Cell Tumor: Benign, Malignant, NOS										
					0/50	(0%)				
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Granulosa-Theca Tumor Malignant										
					0/50	(0%)				
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Schwannoma Malignant										
					0/50	(0%)				
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Sertoli Cell Tumor Malignant										
					0/50	(0%)				
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Ovary:</b>										
Tubulostromal Adenoma										
					0/50	(0%)				
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%
.....										
<b>*Pancreas:</b>										
Adenoma										
					1/50	(2%)				
<b>Overall Incidence</b>					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			
<b>*Pancreas:</b>								
<b>Carcinoma or Adenoma</b>								
		1/50 (2%)			1/50 (2%)			
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
.....								
<b>*Pancreas:</b>								
<b>Mixed Tumor Benign</b>								
		1/50 (2%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Parathyroid Gland:</b>								
<b>Adenoma</b>								
		0/35 (0%)			0/48 (0%)			
<b>Overall Incidence</b>	Total	0/35 (0%)	Mean 0%	SD 0%	Total	0/48 (0%)	Mean 0%	SD 0%
.....								
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>								
<b>Adenoma</b>								
		16/50 (32%)			22/50 (44%)			
<b>Overall Incidence</b>	Total	16/50 (32%)	Mean 32%	SD 0%	Total	22/50 (44%)	Mean 44%	SD 0%
.....								
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>								
<b>Carcinoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>								
<b>Carcinoma or Adenoma</b>								
		16/50 (32%)			22/50 (44%)			
<b>Overall Incidence</b>	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				
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>									
<b>Ganglioneuroma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Pituitary Gland: Pars Intermedia:</b>									
<b>Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Pituitary Gland: Pars Intermedia:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Pituitary Gland: Pars Nervosa:</b>									
<b>Craniopharyngioma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Prostate:</b>									
<b>Adenoma</b>									
		0/50	(0%)						
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
<b>*Prostate:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)						
<b>Overall Incidence</b>	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  
 Route: PERINATAL AND POSTNATAL  
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		Male				Female			
<b>*Salivary Glands:</b>									
<b>  Carcinoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Salivary Glands:</b>									
<b>  Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Salivary Glands:</b>									
<b>  Sarcoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Salivary Glands:</b>									
<b>  Schwannoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Seminal Vesicle:</b>									
<b>  Adenoma</b>									
		0/50	(0%)						
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%				
.....									
<b>#Skeletal Muscle:</b>									
<b>  Fibrous Histiocytoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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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		Male				Female			
<b>#Skeletal Muscle:</b>									
Lipoma									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Skin:</b>									
Basal Cell Adenoma									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Skin:</b>									
Basal Cell Adenoma or Basosquamous Tumor Benign									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Skin:</b>									
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Skin:</b>									
Basal Cell Carcinoma									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Skin:</b>									
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 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**  
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	Male				Female			
<b>#Skin:</b>								
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%
.....								
<b>#Skin:</b>								
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%
.....								
<b>#Skin:</b>								
Fibroma								
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Skin:</b>								
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%
.....								
<b>#Skin:</b>								
Fibrosarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Skin:</b>								
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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		Male			Female		
<b>#Skin:</b>							
<b>Fibrous Histiocytoma</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Hemangiosarcoma</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Keratoacanthoma</b>							
		2/50	(4%)			1/50	(2%)
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	1/50 (2%)
.....							
<b>#Skin:</b>							
<b>Lipoma</b>							
		1/50	(2%)			0/50	(0%)
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Liposarcoma</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Neural Crest Tumor</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	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  
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	Male				Female			
<b>#Skin:</b>								
<b>Neurofibroma or Schwannoma benign</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Neurofibrosarcoma or Schwannoma (malignant or NOS)</b>								
		0/50	(0%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
<b>Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)</b>								
		0/50	(0%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
<b>Sarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Schwannoma Benign</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Schwannoma Malignant</b>								
		0/50	(0%)			1/50	(2%)	
<b>Overall Incidence</b>	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

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

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	Male				Female			
<b>#Skin:</b>								
<b>Squamous Cell Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma</b>								
		2/50	(4%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma or Papilloma</b>								
		2/50	(4%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma</b>								
		4/50	(8%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	4/50	(8%)	Mean 8%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma, Papilloma, or Keratoacanthoma</b>								
		4/50	(8%)			1/50	(2%)	
<b>Overall Incidence</b>	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  
 Route: PERINATAL AND POSTNATAL  
 Vehicle: FEED

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		Male			Female		
<b>#Skin:</b>							
<b>Trichoepithelioma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin: Sebaceous Gland:</b>							
<b>Adenoma</b>							
		0/50	(0%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
.....							
<b>#Skin: Sebaceous Gland:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50	(0%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
.....							
<b>#Spinal Cord:</b>							
<b>Glioma Malignant</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Stomach, Glandular:</b>							
<b>Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Stomach, Glandular:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Stomach, Glandular:</b>								
<b>Sarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>*Testes:</b>								
<b>Adenoma</b>								
		41/50	(82%)					
<b>Overall Incidence</b>	Total	41/50	(82%)	Mean 82%	SD 0%			
.....								
<b>*Testes:</b>								
<b>Hemangioma</b>								
		0/50	(0%)					
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%			
.....								
<b>*Thymus:</b>								
<b>Thymoma Benign</b>								
		1/48	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/48	(2.08%)	Mean 2.08%	SD 0%	Total	0/50	(0%)
.....								
<b>*Thymus:</b>								
<b>Thymoma Malignant</b>								
		1/48	(2%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	1/48	(2.08%)	Mean 2.08%	SD 0%	Total	1/50	(2%)
.....								
<b>*Thymus:</b>								
<b>Thymoma NOS</b>								
		0/48	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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  
 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		
<b>*Thymus:</b>							
<b>Thymoma: Benign, Malignant, NOS</b>							
		2/48 (4%)			1/50 (2%)		
<b>Overall Incidence</b>	Total	2/48 (4.17%)	Mean 4.17%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
<b>*Thyroid Gland: C-Cell:</b>							
<b>Adenoma</b>							
		12/50 (24%)			6/50 (12%)		
<b>Overall Incidence</b>	Total	12/50 (24%)	Mean 24%	SD 0%	Total	6/50 (12%)	Mean 12% SD 0%
.....							
<b>*Thyroid Gland: C-Cell:</b>							
<b>Carcinoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Thyroid Gland: C-Cell:</b>							
<b>Carcinoma or Adenoma</b>							
		12/50 (24%)			6/50 (12%)		
<b>Overall Incidence</b>	Total	12/50 (24%)	Mean 24%	SD 0%	Total	6/50 (12%)	Mean 12% SD 0%
.....							
<b>*Thyroid Gland: Follicular Cell:</b>							
<b>Adenoma</b>							
		1/50 (2%)			1/50 (2%)		
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
<b>*Thyroid Gland: Follicular Cell:</b>							
<b>Carcinoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	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		
<b>*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma</b>							
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
<b>#Tongue: Squamous Cell Carcinoma</b>							
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tongue: Squamous Cell Carcinoma or Papilloma Squamous</b>							
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tongue: Squamous Cell Papilloma</b>							
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Tooth: Adamantinoma Malignant</b>							
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Urinary Bladder: Carcinoma</b>							
<b>Overall Incidence</b>	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: PERINATAL AND POSTNATAL  
 Vehicle: FEED

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	Male				Female			
<b>*Urinary Bladder: Carcinoma or Papilloma</b>								
		1/50 (2%)				0/50 (0%)		
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Urinary Bladder: Hemangiosarcoma</b>								
		0/50 (0%)				0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Urinary Bladder: Papilloma</b>								
		0/50 (0%)				0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Uterus: Adenoma</b>								
						0/50 (0%)		
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Uterus: Carcinoma</b>								
						0/50 (0%)		
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Uterus: Leiomyosarcoma</b>								
						0/50 (0%)		
<b>Overall Incidence</b>					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
<b>#Uterus:</b>		
<b>Polyp Stromal</b>		
Overall Incidence	Total 6/50 (12%)	Mean 12% SD 0%
<b>#Uterus:</b>		
<b>Sarcoma</b>		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
<b>#Uterus:</b>		
<b>Sarcoma Stromal</b>		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
<b>#Uterus:</b>		
<b>Sarcoma Stromal or Polyp Stromal</b>		
Overall Incidence	Total 6/50 (12%)	Mean 12% SD 0%
<b>#Uterus:</b>		
<b>Schwannoma Malignant</b>		
Overall Incidence	Total 1/50 (2%)	Mean 2% SD 0%
<b>#Vagina:</b>		
<b>Polyp</b>		
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					
<b>#Vagina:</b>										
<b>Sarcoma</b>										
					0/50 (0%)					
<b>Overall Incidence</b>					Total		0/50 (0%)		Mean 0% SD 0%	
.....										
<b>#Vagina:</b>										
<b>Schwannoma Malignant</b>										
					0/50 (0%)					
<b>Overall Incidence</b>					Total		0/50 (0%)		Mean 0% SD 0%	
.....										
<b>#Zymbal's Gland:</b>										
<b>Adenoma</b>										
					0/50 (0%)					
<b>Overall Incidence</b>					Total		0/50 (0%)		Mean 0% SD 0%	
.....										
<b>#Zymbal's Gland:</b>										
<b>Carcinoma</b>										
					1/50 (2%)					
<b>Overall Incidence</b>					Total		1/50 (2%)		Mean 2% SD 0%	
.....										
<b>#Zymbal's Gland:</b>										
<b>Carcinoma or Adenoma</b>										
					1/50 (2%)					
<b>Overall Incidence</b>					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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**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
<b>Male</b>							
Southern Research Institute	058813307	01/18/05	729	50(1)	23(681)	516.1	Trimethylolpropane triacrylate
<b>Female</b>							
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			
<b>#All Organs:</b>								
<b>Benign Tumors</b>								
		48/50 (96%)			43/50 (86%)			
<b>Overall Incidence</b>	Total	48/50 (96%)	Mean 96%	SD 0%	Total	43/50 (86%)	Mean 86%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Malignant Tumors</b>								
		30/50 (60%)			21/50 (42%)			
<b>Overall Incidence</b>	Total	30/50 (60%)	Mean 60%	SD 0%	Total	21/50 (42%)	Mean 42%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Malignant and Benign Tumors</b>								
		50/50 (100%)			47/50 (94%)			
<b>Overall Incidence</b>	Total	50/50 (100%)	Mean 100%	SD 0%	Total	47/50 (94%)	Mean 94%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Hemangioma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Hemangiosarcoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Hemangiosarcoma or Hemangioma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#All Organs:</b>								
<b>Histiocytic Sarcoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated</b>								
		26/50 (52%)			12/50 (24%)			
<b>Overall Incidence</b>	Total	26/50 (52%)	Mean 52%	SD 0%	Total	12/50 (24%)	Mean 24%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Benign, Malignant, NOS</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Malignant</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Osteoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	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			
<b>#All Organs:</b>								
<b>Osteosarcoma</b>								
		2/50	(4%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Osteosarcoma or Osteoma</b>								
		2/50	(4%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Adrenal Cortex:</b>								
<b>Adenoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Adrenal Cortex:</b>								
<b>Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma Benign</b>								
		11/49	(22%)			0/48	(0%)	
<b>Overall Incidence</b>	Total	11/49	(22.45%)	Mean 22.45%	SD 0%	Total	0/48	(0%)
							Mean 0%	SD 0%
.....								
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma Complex</b>								
		0/49	(0%)			0/48	(0%)	
<b>Overall Incidence</b>	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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	Male				Female			
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma Malignant</b>								
		1/49 (2%)			0/48 (0%)			
<b>Overall Incidence</b>	Total	1/49 (2.04%)	Mean 2.04%	SD 0%	Total	0/48 (0%)	Mean 0%	SD 0%
.....								
<b>*Adrenal Medulla:</b>								
<b>Pheochromocytoma: Benign, Complex, Malignant, NOS</b>								
		12/49 (24%)			0/48 (0%)			
<b>Overall Incidence</b>	Total	12/49 (24.49%)	Mean 24.49%	SD 0%	Total	0/48 (0%)	Mean 0%	SD 0%
.....								
<b>#Blood Vessel:</b>								
<b>Leiomyosarcoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Bone:</b>								
<b>Chordoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Bone:</b>								
<b>Osteoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Bone:</b>								
<b>Osteosarcoma</b>								
		2/50 (4%)			0/50 (0%)			
<b>Overall Incidence</b>	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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		Male			Female		
<b>#Bone:</b>							
<b>Osteosarcoma or Osteoma</b>							
		2/50 (4%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Brain:</b>							
<b>Glioma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Brain:</b>							
<b>Glioma Benign</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Brain:</b>							
<b>Glioma Malignant</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Brain:</b>							
<b>Oligodendroglioma, Glioma, or Astrocytoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>*Brain:</b>							
<b>Osteosarcoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	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			
<b>*Clitoral/Preputial Gland: Adenoma</b>								
<b>Overall Incidence</b>	Total	3/50 (6%)	Mean 6%	SD 0%	Total	4/50 (8%)	Mean 8%	SD 0%
.....								
<b>*Clitoral/Preputial Gland: Carcinoma</b>								
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	7/50 (14%)	Mean 14%	SD 0%
.....								
<b>*Clitoral/Preputial Gland: Carcinoma or Adenoma</b>								
<b>Overall Incidence</b>	Total	3/50 (6%)	Mean 6%	SD 0%	Total	10/50 (20%)	Mean 20%	SD 0%
.....								
<b>*Clitoral/Preputial Gland: Sarcoma</b>								
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Ear: Neural Crest Tumor</b>								
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Eye: Melanoma Benign</b>								
<b>Overall Incidence</b>	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			
<b>#Eye:</b>									
<b>Melanoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Harderian Gland:</b>									
<b>Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Harderian Gland:</b>									
<b>Carcinoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Harderian Gland:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Heart:</b>									
<b>Schwannoma Benign</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Heart:</b>									
<b>Schwannoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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				
<b>#Intestine Large: Colon/Rectum:</b>									
<b>Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Intestine Large: Colon/Rectum:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Intestine Small: Duodenum:</b>									
<b>Leiomyoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Intestine Small: Duodenum:</b>									
<b>Schwannoma Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Intestine Small: Ileum:</b>									
<b>Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>#Intestine Small: Jejunum:</b>									
<b>Carcinoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	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		
<b>#Intestine Small: Jejunum:</b>							
<b>Leiomyoma</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Jejunum:</b>							
<b>Leiomyosarcoma</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Adenoma</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Carcinoma</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Intestine Small: Site Unspecified:</b>							
<b>Leiomyoma</b>							
		0/50	(0%)			0/50	(0%)
<b>Overall Incidence</b>	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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		Male			Female		
<b>#Intestine Small: Site Unspecified:</b>							
<b>Leiomyosarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
<b>#Intestine Small: Site Unspecified:</b>							
<b>Schwannoma Malignant</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
<b>*Islets, Pancreatic:</b>							
<b>Adenoma</b>							
		18/50	(36%)		3/50	(6%)	
<b>Overall Incidence</b>	Total	18/50	(36%)	Mean 36%	SD 0%	Total	3/50 (6%)
							Mean 6%
							SD 0%
<b>*Islets, Pancreatic:</b>							
<b>Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
<b>*Islets, Pancreatic:</b>							
<b>Carcinoma or Adenoma</b>							
		18/50	(36%)		3/50	(6%)	
<b>Overall Incidence</b>	Total	18/50	(36%)	Mean 36%	SD 0%	Total	3/50 (6%)
							Mean 6%
							SD 0%
<b>*Kidney: Pelvis and Transitional Epithelium:</b>							
<b>Papilloma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>*Kidney: Renal Tubule: Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Kidney: Renal Tubule: Carcinoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Kidney: Renal Tubule: Carcinoma or Adenoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Kidney: Renal Tubule: Lipoma</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Kidney: Renal Tubule: Mesenchymal Tumor Malignant</b>									
		0/50	(0%)			0/50	(0%)		
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)	Mean 0% SD 0%
.....									
<b>*Kidney: Renal Tubule: Sarcoma</b>									
		0/50	(0%)			1/50	(2%)		
<b>Overall Incidence</b>	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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	Male				Female			
<b>*Liver:</b>								
<b>Hepatocellular Adenoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Liver:</b>								
<b>Hepatocellular Carcinoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Liver:</b>								
<b>Hepatocellular Carcinoma or Hepatoblastoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Liver:</b>								
<b>Hepatocellular Carcinoma or Hepatocellular Adenoma</b>								
		2/50	(4%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Liver:</b>								
<b>Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma</b>								
		2/50	(4%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Liver:</b>								
<b>Ito Cell Tumor Benign</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>*Lung:</b>								
<b>Alveolar/Bronchiolar Adenoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>*Lung:</b>								
<b>Alveolar/Bronchiolar Carcinoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>*Lung:</b>								
<b>Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma</b>								
		2/50	(4%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>*Lung:</b>								
<b>Fibrosarcoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>#Mammary Gland:</b>								
<b>Adenolipoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....								
<b>#Mammary Gland:</b>								
<b>Adenoma</b>								
		0/50	(0%)			4/50	(8%)	
<b>Overall Incidence</b>	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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	Male				Female			
<b>#Mammary Gland:</b>								
<b>Carcinoma</b>								
		0/50	(0%)			3/50	(6%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	3/50 (6%)	Mean 6%
								SD 0%
.....								
<b>#Mammary Gland:</b>								
<b>Carcinoma or Adenoma</b>								
		0/50	(0%)			6/50	(12%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	6/50 (12%)	Mean 12%
								SD 0%
.....								
<b>#Mammary Gland:</b>								
<b>Fibroadenoma</b>								
		1/50	(2%)			22/50	(44%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	22/50 (44%)	Mean 44%
								SD 0%
.....								
<b>#Mammary Gland:</b>								
<b>Fibroma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%
								SD 0%
.....								
<b>#Mammary Gland:</b>								
<b>Fibroma, Fibroadenoma or Adenoma</b>								
		1/50	(2%)			25/50	(50%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	25/50 (50%)	Mean 50%
								SD 0%
.....								
<b>#Mammary Gland:</b>								
<b>Fibroma, Fibroadenoma, Carcinoma, or Adenoma</b>								
		1/50	(2%)			25/50	(50%)	
<b>Overall Incidence</b>	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			
<b>#Mesentery:</b>								
<b>Fibrous Histiocytoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Mesentery:</b>								
<b>Schwannoma Malignant</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>*Nose:</b>								
<b>Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>								
<b>Papilloma Squamous or Papilloma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
.....								
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>								
<b>Squamous Cell Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>								
<b>Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	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: SKIN**  
**Vehicle: ACETONE**

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	Male				Female			
<b>#Oral Mucosa:</b>								
<b>Squamous Cell Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Oral Mucosa:</b>								
<b>Squamous Cell Papilloma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Cystadenoma</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Fibrosarcoma</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Granulosa Cell Tumor Benign</b>								
						0/50	(0%)	
<b>Overall Incidence</b>						Total	0/50	(0%)
.....								
<b>*Ovary:</b>								
<b>Granulosa Cell Tumor Malignant</b>								
						1/50	(2%)	
<b>Overall Incidence</b>						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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Male					Female								
<b>*Ovary:</b>													
Granulosa Cell Tumor: Benign, Malignant, NOS													
					1/50	(2%)							
<b>Overall Incidence</b>					Total	1/50 (2%)	Mean	2%	SD	0%			
.....													
<b>*Ovary:</b>													
Granulosa-Theca Tumor Malignant													
					0/50	(0%)							
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%			
.....													
<b>*Ovary:</b>													
Schwannoma Malignant													
					0/50	(0%)							
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%			
.....													
<b>*Ovary:</b>													
Sertoli Cell Tumor Malignant													
					0/50	(0%)							
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%			
.....													
<b>*Ovary:</b>													
Tubulostromal Adenoma													
					0/50	(0%)							
<b>Overall Incidence</b>					Total	0/50 (0%)	Mean	0%	SD	0%			
.....													
<b>*Pancreas:</b>													
Adenoma													
		1/50	(2%)			0/50	(0%)						
<b>Overall Incidence</b>		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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	Male				Female			
<b>*Pancreas:</b>								
<b>Carcinoma or Adenoma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Pancreas:</b>								
<b>Mixed Tumor Benign</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
							Mean 0%	SD 0%
.....								
<b>*Parathyroid Gland:</b>								
<b>Adenoma</b>								
		0/45	(0%)			0/45	(0%)	
<b>Overall Incidence</b>	Total	0/45	(0%)	Mean 0%	SD 0%	Total	0/45	(0%)
							Mean 0%	SD 0%
.....								
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>								
<b>Adenoma</b>								
		34/49	(69%)			36/50	(72%)	
<b>Overall Incidence</b>	Total	34/49	(69.39%)	Mean 69.39%	SD 0%	Total	36/50	(72%)
							Mean 72%	SD 0%
.....								
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>								
<b>Carcinoma</b>								
		0/49	(0%)			2/50	(4%)	
<b>Overall Incidence</b>	Total	0/49	(0%)	Mean 0%	SD 0%	Total	2/50	(4%)
							Mean 4%	SD 0%
.....								
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>								
<b>Carcinoma or Adenoma</b>								
		34/49	(69%)			38/50	(76%)	
<b>Overall Incidence</b>	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		
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>							
<b>Ganglioneuroma</b>							
		0/49	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/49	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
<b>*Pituitary Gland: Pars Intermedia:</b>							
<b>Adenoma</b>							
		0/49	(0%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	0/49	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%
<b>*Pituitary Gland: Pars Intermedia:</b>							
<b>Carcinoma or Adenoma</b>							
		0/49	(0%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	0/49	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%
<b>*Pituitary Gland: Pars Nervosa:</b>							
<b>Craniopharyngioma</b>							
		0/49	(0%)		1/50	(2%)	
<b>Overall Incidence</b>	Total	0/49	(0%)	Mean 0%	SD 0%	Total	1/50 (2%)
							Mean 2%
							SD 0%
<b>*Prostate:</b>							
<b>Adenoma</b>							
		0/50	(0%)				
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%		
<b>*Prostate:</b>							
<b>Carcinoma or Adenoma</b>							
		0/50	(0%)				
<b>Overall Incidence</b>	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		
<b>*Salivary Glands:</b>							
<b>Carcinoma</b>							
		1/50	(2%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Salivary Glands:</b>							
<b>Carcinoma or Adenoma</b>							
		1/50	(2%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Salivary Glands:</b>							
<b>Sarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Salivary Glands:</b>							
<b>Schwannoma Malignant</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>#Seminal Vesicle:</b>							
<b>Adenoma</b>							
		0/50	(0%)				
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%		
.....							
<b>#Skeletal Muscle:</b>							
<b>Fibrous Histiocytoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Skeletal Muscle:</b>								
Lipoma								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
Basal Cell Adenoma								
		0/50	(0%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
Basal Cell Adenoma or Basosquamous Tumor Benign								
		0/50	(0%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma								
		0/50	(0%)			1/50	(2%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	1/50	(2%)
.....								
<b>#Skin:</b>								
Basal Cell Carcinoma								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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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	Male				Female			
<b>#Skin:</b>								
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%
.....								
<b>#Skin:</b>								
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%
.....								
<b>#Skin:</b>								
Fibroma								
Overall Incidence	Total	4/50 (8%)	Mean 8%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Skin:</b>								
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%
.....								
<b>#Skin:</b>								
Fibrosarcoma								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Skin:</b>								
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		
<b>#Skin:</b>							
<b>Fibrous Histiocytoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Hemangiosarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Keratoacanthoma</b>							
		4/50	(8%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	4/50	(8%)	Mean 8%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Lipoma</b>							
		2/50	(4%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	2/50	(4%)	Mean 4%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Liposarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
.....							
<b>#Skin:</b>							
<b>Neural Crest Tumor</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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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		Male			Female		
<b>#Skin:</b>							
<b>Neurofibroma or Schwannoma benign</b>							
		0/50 (0%)			1/50 (2%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
<b>#Skin:</b>							
<b>Neurofibrosarcoma or Schwannoma (malignant or NOS)</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Skin:</b>							
<b>Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)</b>							
		0/50 (0%)			1/50 (2%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
<b>#Skin:</b>							
<b>Sarcoma</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0% SD 0%
.....							
<b>#Skin:</b>							
<b>Schwannoma Benign</b>							
		0/50 (0%)			1/50 (2%)		
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2% SD 0%
.....							
<b>#Skin:</b>							
<b>Schwannoma Malignant</b>							
		0/50 (0%)			0/50 (0%)		
<b>Overall Incidence</b>	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			
<b>#Skin:</b>								
<b>Squamous Cell Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma or Papilloma</b>								
		1/50	(2%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma</b>								
		5/50	(10%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	5/50	(10%)	Mean 10%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin:</b>								
<b>Squamous Cell Papilloma, Papilloma, or Keratoacanthoma</b>								
		5/50	(10%)			0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>#Skin:</b>								
<b>Trichoepithelioma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin: Sebaceous Gland:</b>								
<b>Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Skin: Sebaceous Gland:</b>								
<b>Carcinoma or Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Spinal Cord:</b>								
<b>Glioma Malignant</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Stomach, Glandular:</b>								
<b>Carcinoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50	(0%)
.....								
<b>#Stomach, Glandular:</b>								
<b>Carcinoma or Adenoma</b>								
		0/50	(0%)			0/50	(0%)	
<b>Overall Incidence</b>	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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		Male			Female		
<b>#Stomach, Glandular:</b>							
<b>Sarcoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Testes:</b>							
<b>Adenoma</b>							
		27/50	(54%)				
<b>Overall Incidence</b>	Total	27/50	(54%)	Mean 54%	SD 0%		
.....							
<b>*Testes:</b>							
<b>Hemangioma</b>							
		0/50	(0%)				
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%		
.....							
<b>*Thymus:</b>							
<b>Thymoma Benign</b>							
		0/45	(0%)			0/47	(0%)
<b>Overall Incidence</b>	Total	0/45	(0%)	Mean 0%	SD 0%	Total	0/47 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Thymus:</b>							
<b>Thymoma Malignant</b>							
		0/45	(0%)			0/47	(0%)
<b>Overall Incidence</b>	Total	0/45	(0%)	Mean 0%	SD 0%	Total	0/47 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Thymus:</b>							
<b>Thymoma NOS</b>							
		0/45	(0%)			0/47	(0%)
<b>Overall Incidence</b>	Total	0/45	(0%)	Mean 0%	SD 0%	Total	0/47 (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			
<b>*Thymus:</b>								
<b>Thymoma: Benign, Malignant, NOS</b>								
		0/45 (0%)			0/47 (0%)			
<b>Overall Incidence</b>	Total	0/45 (0%)	Mean 0%	SD 0%	Total	0/47 (0%)	Mean 0%	SD 0%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Adenoma</b>								
		8/50 (16%)			3/50 (6%)			
<b>Overall Incidence</b>	Total	8/50 (16%)	Mean 16%	SD 0%	Total	3/50 (6%)	Mean 6%	SD 0%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Carcinoma</b>								
		1/50 (2%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Carcinoma or Adenoma</b>								
		8/50 (16%)			3/50 (6%)			
<b>Overall Incidence</b>	Total	8/50 (16%)	Mean 16%	SD 0%	Total	3/50 (6%)	Mean 6%	SD 0%
.....								
<b>*Thyroid Gland: Follicular Cell:</b>								
<b>Adenoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Thyroid Gland: Follicular Cell:</b>								
<b>Carcinoma</b>								
		0/50 (0%)			0/50 (0%)			
<b>Overall Incidence</b>	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		
<b>*Thyroid Gland: Follicular Cell:</b>							
<b>  Carcinoma or Adenoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>#Tongue:</b>							
<b>  Squamous Cell Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>#Tongue:</b>							
<b>  Squamous Cell Carcinoma or Papilloma Squamous</b>							
		1/50	(2%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>#Tongue:</b>							
<b>  Squamous Cell Papilloma</b>							
		1/50	(2%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	1/50	(2%)	Mean 2%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>#Tooth:</b>							
<b>  Adamantinoma Malignant</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	Total	0/50	(0%)	Mean 0%	SD 0%	Total	0/50 (0%)
							Mean 0%
							SD 0%
.....							
<b>*Urinary Bladder:</b>							
<b>  Carcinoma</b>							
		0/50	(0%)		0/50	(0%)	
<b>Overall Incidence</b>	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			
<b>*Urinary Bladder: Carcinoma or Papilloma</b>								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Urinary Bladder: Hemangiosarcoma</b>								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>*Urinary Bladder: Papilloma</b>								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Uterus: Adenoma</b>								
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Uterus: Carcinoma</b>								
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
.....								
<b>#Uterus: Leiomyosarcoma</b>								
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
<b>#Uterus:</b>		
<b>Polyp Stromal</b>		
Overall Incidence	Total 9/50 (18%)	Mean 18% SD 0%
<b>#Uterus:</b>		
<b>Sarcoma</b>		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
<b>#Uterus:</b>		
<b>Sarcoma Stromal</b>		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
<b>#Uterus:</b>		
<b>Sarcoma Stromal or Polyp Stromal</b>		
Overall Incidence	Total 9/50 (18%)	Mean 18% SD 0%
<b>#Uterus:</b>		
<b>Schwannoma Malignant</b>		
Overall Incidence	Total 0/50 (0%)	Mean 0% SD 0%
<b>#Vagina:</b>		
<b>Polyp</b>		
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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Male					Female				
<b>#Vagina:</b>									
Sarcoma									
					0/50	(0%)			
<b>Overall Incidence</b>					Total	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Vagina:</b>									
Schwannoma Malignant									
					0/50	(0%)			
<b>Overall Incidence</b>					Total	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Zymbal's Gland:</b>									
Adenoma									
					1/50	(2%)			
<b>Overall Incidence</b>					Total	1/50	(2%)	Mean 2%	SD 0%
					Total	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Zymbal's Gland:</b>									
Carcinoma									
					0/50	(0%)			
<b>Overall Incidence</b>					Total	0/50	(0%)	Mean 0%	SD 0%
					Total	0/50	(0%)	Mean 0%	SD 0%
.....									
<b>#Zymbal's Gland:</b>									
Carcinoma or Adenoma									
					1/50	(2%)			
<b>Overall Incidence</b>					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
<b>Male</b>							
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
<b>Female</b>							
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		
<b>#All Organs:</b>							
<b>Benign Tumors</b>							
		46/50 (92%)	47/50 (94%)		47/50 (94%)	43/50 (86%)	
<b>Overall Incidence</b>	Total	93/100 (93%)	Mean 93%	SD 1.41%	Total	90/100 (90%)	Mean 90%
							SD 5.66%
.....							
<b>#All Organs:</b>							
<b>Malignant Tumors</b>							
		33/50 (66%)	22/50 (44%)		22/50 (44%)	12/50 (24%)	
<b>Overall Incidence</b>	Total	55/100 (55%)	Mean 55%	SD 15.56%	Total	34/100 (34%)	Mean 34%
							SD 14.14%
.....							
<b>#All Organs:</b>							
<b>Malignant and Benign Tumors</b>							
		48/50 (96%)	49/50 (98%)		49/50 (98%)	45/50 (90%)	
<b>Overall Incidence</b>	Total	97/100 (97%)	Mean 97%	SD 1.41%	Total	94/100 (94%)	Mean 94%
							SD 5.66%
.....							
<b>#All Organs:</b>							
<b>Hemangioma</b>							
		0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	0/100 (0%)	Mean 0%
							SD 0%
.....							
<b>#All Organs:</b>							
<b>Hemangiosarcoma</b>							
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%
							SD 0%
.....							
<b>#All Organs:</b>							
<b>Hemangiosarcoma or Hemangioma</b>							
		0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	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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	Male				Female			
<b>#All Organs:</b>								
<b>Histiocytic Sarcoma</b>								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated</b>								
		26/50 (52%)	11/50 (22%)		18/50 (36%)	8/50 (16%)		
<b>Overall Incidence</b>	Total	37/100 (37%)	Mean 37%	SD 21.21%	Total	26/100 (26%)	Mean 26%	SD 14.14%
.....								
<b>#All Organs:</b>								
<b>Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type</b>								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Benign, Malignant, NOS</b>								
		4/50 (8%)	2/50 (4%)		0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	Total	6/100 (6%)	Mean 6%	SD 2.83%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Mesothelioma: Malignant</b>								
		4/50 (8%)	2/50 (4%)		0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	Total	6/100 (6%)	Mean 6%	SD 2.83%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
<b>#All Organs:</b>								
<b>Osteoma</b>								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)		
<b>Overall Incidence</b>	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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		Male				Female					
<b>#All Organs:</b>											
<b>Osteosarcoma</b>											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#All Organs:</b>											
<b>Osteosarcoma or Osteoma</b>											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	1/50	(2%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	1/100	(1%)	Mean 1%	SD 1.41%	
.....											
<b>*Adrenal Cortex:</b>											
<b>Adenoma</b>											
		0/50	(0%)	0/50	(0%)			4/50	(8%)	1/50	(2%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	5/100	(5%)	Mean 5%	SD 4.24%	
.....											
<b>*Adrenal Cortex:</b>											
<b>Carcinoma</b>											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>*Adrenal Medulla:</b>											
<b>Pheochromocytoma Benign</b>											
		11/49	(22%)	4/50	(8%)			1/49	(2%)	1/50	(2%)
<b>Overall Incidence</b>	Total	15/99	(15.15%)	Mean 15.22%	SD 10.22%	Total	2/99	(2.02%)	Mean 2.02%	SD 0.03%	
.....											
<b>*Adrenal Medulla:</b>											
<b>Pheochromocytoma Complex</b>											
		0/49	(0%)	0/50	(0%)			0/49	(0%)	0/50	(0%)
<b>Overall Incidence</b>	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			
<b>*Adrenal Medulla:</b>									
<b>Pheochromocytoma Malignant</b>									
		0/49 (0%)	1/50 (2%)		0/49 (0%)	0/50 (0%)			
<b>Overall Incidence</b>	Total	1/99 (1.01%)	Mean 1%	SD 1.41%	Total	0/99 (0%)	Mean 0%	SD 0%	
.....									
<b>*Adrenal Medulla:</b>									
<b>Pheochromocytoma: Benign, Complex, Malignant, NOS</b>									
		11/49 (22%)	5/50 (10%)		1/49 (2%)	1/50 (2%)			
<b>Overall Incidence</b>	Total	16/99 (16.16%)	Mean 16.22%	SD 8.8%	Total	2/99 (2.02%)	Mean 2.02%	SD 0.03%	
.....									
<b>#Blood Vessel:</b>									
<b>Leiomyosarcoma</b>									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
<b>#Bone:</b>									
<b>Chordoma</b>									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
<b>#Bone:</b>									
<b>Osteoma</b>									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)			
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	1/100 (1%)	Mean 1%	SD 1.41%	
.....									
<b>#Bone:</b>									
<b>Osteosarcoma</b>									
		1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
<b>Overall Incidence</b>	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  
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**Toxicology Data Management System**  
 Tumor Incidence for Selected Control Animal Groups  
**Route: SKIN**  
**Vehicle: ETHANOL**

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		Male				Female			
<b>#Bone:</b>									
<b>Osteosarcoma or Osteoma</b>									
		1/50	(2%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	1/100	(1%)	Mean 1%
.....									
<b>*Brain:</b>									
<b>Glioma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
.....									
<b>*Brain:</b>									
<b>Glioma Benign</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
.....									
<b>*Brain:</b>									
<b>Glioma Malignant</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
.....									
<b>*Brain:</b>									
<b>Oligodendroglioma, Glioma, or Astrocytoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
.....									
<b>*Brain:</b>									
<b>Osteosarcoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 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			
<b>*Clitoral/Preputial Gland:</b>									
<b>Adenoma</b>									
		1/50 (2%)	0/50 (0%)			6/50 (12%)	3/50 (6%)		
<b>Overall Incidence</b>	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	9/100 (9%)	Mean 9%	SD 4.24%	
.....									
<b>*Clitoral/Preputial Gland:</b>									
<b>Carcinoma</b>									
		3/50 (6%)	0/50 (0%)			3/50 (6%)	1/50 (2%)		
<b>Overall Incidence</b>	Total	3/100 (3%)	Mean 3%	SD 4.24%	Total	4/100 (4%)	Mean 4%	SD 2.83%	
.....									
<b>*Clitoral/Preputial Gland:</b>									
<b>Carcinoma or Adenoma</b>									
		4/50 (8%)	0/50 (0%)			9/50 (18%)	4/50 (8%)		
<b>Overall Incidence</b>	Total	4/100 (4%)	Mean 4%	SD 5.66%	Total	13/100 (13%)	Mean 13%	SD 7.07%	
.....									
<b>*Clitoral/Preputial Gland:</b>									
<b>Sarcoma</b>									
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
<b>#Ear:</b>									
<b>Neural Crest Tumor</b>									
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
<b>#Eye:</b>									
<b>Melanoma Benign</b>									
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	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  
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**Toxicology Data Management System**  
 Tumor Incidence for Selected Control Animal Groups  
**Route: SKIN**  
**Vehicle: ETHANOL**

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		Male				Female					
<b>#Eye:</b>											
<b>Melanoma Malignant</b>											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Harderian Gland:</b>											
<b>Adenoma</b>											
		0/50	(0%)	0/50	(0%)			2/50	(4%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	2/100	(2%)	Mean 2%	SD 2.83%	
.....											
<b>#Harderian Gland:</b>											
<b>Carcinoma</b>											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Harderian Gland:</b>											
<b>Carcinoma or Adenoma</b>											
		0/50	(0%)	0/50	(0%)			2/50	(4%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	2/100	(2%)	Mean 2%	SD 2.83%	
.....											
<b>*Heart:</b>											
<b>Schwannoma Benign</b>											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>*Heart:</b>											
<b>Schwannoma Malignant</b>											
		0/50	(0%)	2/50	(4%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	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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		Male				Female					
<b>#Intestine Large: Colon/Rectum:</b>											
<b>Adenoma</b>											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Intestine Large: Colon/Rectum:</b>											
<b>Carcinoma or Adenoma</b>											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Intestine Small: Duodenum:</b>											
<b>Leiomyoma</b>											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Intestine Small: Duodenum:</b>											
<b>Schwannoma Malignant</b>											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Intestine Small: Ileum:</b>											
<b>Adenoma</b>											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	1/50	(2%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%	SD 1.41%	
.....											
<b>#Intestine Small: Jejunum:</b>											
<b>Carcinoma</b>											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	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			
<b>#Intestine Small: Jejunum:</b>									
<b>Leiomyoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
<b>#Intestine Small: Jejunum:</b>									
<b>Leiomyosarcoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
<b>#Intestine Small: Site Unspecified:</b>									
<b>Adenoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	1/100	(1%)	Mean 1%	SD 1.41%
.....									
<b>#Intestine Small: Site Unspecified:</b>									
<b>Carcinoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
<b>#Intestine Small: Site Unspecified:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	1/100	(1%)	Mean 1%	SD 1.41%
.....									
<b>#Intestine Small: Site Unspecified:</b>									
<b>Leiomyoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%

\*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: 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		
<b>#Intestine Small: Site Unspecified:</b>							
<b>Leiomyosarcoma</b>							
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0% SD 0%
<b>#Intestine Small: Site Unspecified:</b>							
<b>Schwannoma Malignant</b>							
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0% SD 0%
<b>*Islets, Pancreatic:</b>							
<b>Adenoma</b>							
		5/49 (10%)	3/50 (6%)		3/49 (6%)	2/50 (4%)	
<b>Overall Incidence</b>	Total	8/99 (8.08%)	Mean 8.1%	SD 2.97%	Total	5/99 (5.05%)	Mean 5.06% SD 1.5%
<b>*Islets, Pancreatic:</b>							
<b>Carcinoma</b>							
		3/49 (6%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	3/99 (3.03%)	Mean 3.06%	SD 4.33%	Total	0/99 (0%)	Mean 0% SD 0%
<b>*Islets, Pancreatic:</b>							
<b>Carcinoma or Adenoma</b>							
		8/49 (16%)	3/50 (6%)		3/49 (6%)	2/50 (4%)	
<b>Overall Incidence</b>	Total	11/99 (11.11%)	Mean 11.16%	SD 7.3%	Total	5/99 (5.05%)	Mean 5.06% SD 1.5%
<b>*Kidney: Pelvis and Transitional Epithelium:</b>							
<b>Papilloma</b>							
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	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			
<b>*Kidney: Renal Tubule: Adenoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
<b>*Kidney: Renal Tubule: Carcinoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
<b>*Kidney: Renal Tubule: Carcinoma or Adenoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
<b>*Kidney: Renal Tubule: Lipoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	1/100	(1%)	Mean 1%	SD 1.41%
.....									
<b>*Kidney: Renal Tubule: Mesenchymal Tumor Malignant</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
<b>*Kidney: Renal Tubule: Sarcoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%

\*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: 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			
<b>*Liver:</b>								
<b>Hepatocellular Adenoma</b>								
		2/50 (4%)	1/50 (2%)		0/50 (0%)	2/50 (4%)		
<b>Overall Incidence</b>	Total	3/100 (3%)	Mean 3%	SD 1.41%	Total	2/100 (2%)	Mean 2%	SD 2.83%
.....								
<b>*Liver:</b>								
<b>Hepatocellular Carcinoma</b>								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
<b>*Liver:</b>								
<b>Hepatocellular Carcinoma or Hepatoblastoma</b>								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
<b>*Liver:</b>								
<b>Hepatocellular Carcinoma or Hepatocellular Adenoma</b>								
		2/50 (4%)	1/50 (2%)		0/50 (0%)	2/50 (4%)		
<b>Overall Incidence</b>	Total	3/100 (3%)	Mean 3%	SD 1.41%	Total	2/100 (2%)	Mean 2%	SD 2.83%
.....								
<b>*Liver:</b>								
<b>Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma</b>								
		2/50 (4%)	1/50 (2%)		0/50 (0%)	2/50 (4%)		
<b>Overall Incidence</b>	Total	3/100 (3%)	Mean 3%	SD 1.41%	Total	2/100 (2%)	Mean 2%	SD 2.83%
.....								
<b>*Liver:</b>								
<b>Ito Cell Tumor Benign</b>								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	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			
<b>*Lung:</b>									
<b>Alveolar/Bronchiolar Adenoma</b>									
		2/50 (4%)	1/50 (2%)		1/50 (2%)	0/50 (0%)			
<b>Overall Incidence</b>	Total	3/100 (3%)	Mean 3%	SD 1.41%	Total	1/100 (1%)	Mean 1%	SD 1.41%	
.....									
<b>*Lung:</b>									
<b>Alveolar/Bronchiolar Carcinoma</b>									
		0/50 (0%)	3/50 (6%)		0/50 (0%)	0/50 (0%)			
<b>Overall Incidence</b>	Total	3/100 (3%)	Mean 3%	SD 4.24%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
<b>*Lung:</b>									
<b>Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma</b>									
		2/50 (4%)	4/50 (8%)		1/50 (2%)	0/50 (0%)			
<b>Overall Incidence</b>	Total	6/100 (6%)	Mean 6%	SD 2.83%	Total	1/100 (1%)	Mean 1%	SD 1.41%	
.....									
<b>*Lung:</b>									
<b>Fibrosarcoma</b>									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
<b>#Mammary Gland:</b>									
<b>Adenolipoma</b>									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
<b>#Mammary Gland:</b>									
<b>Adenoma</b>									
		0/50 (0%)	0/50 (0%)		1/50 (2%)	2/50 (4%)			
<b>Overall Incidence</b>	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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		Male				Female					
<b>#Mammary Gland:</b>											
<b>Carcinoma</b>											
		0/50	(0%)	1/50	(2%)			2/50	(4%)	1/50	(2%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	3/100	(3%)	Mean 3%	SD 1.41%	
.....											
<b>#Mammary Gland:</b>											
<b>Carcinoma or Adenoma</b>											
		0/50	(0%)	1/50	(2%)			3/50	(6%)	3/50	(6%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	6/100	(6%)	Mean 6%	SD 0%	
.....											
<b>#Mammary Gland:</b>											
<b>Fibroadenoma</b>											
		2/50	(4%)	0/50	(0%)			19/50	(38%)	24/50	(48%)
<b>Overall Incidence</b>	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	43/100	(43%)	Mean 43%	SD 7.07%	
.....											
<b>#Mammary Gland:</b>											
<b>Fibroma</b>											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Mammary Gland:</b>											
<b>Fibroma, Fibroadenoma or Adenoma</b>											
		2/50	(4%)	0/50	(0%)			19/50	(38%)	25/50	(50%)
<b>Overall Incidence</b>	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	44/100	(44%)	Mean 44%	SD 8.49%	
.....											
<b>#Mammary Gland:</b>											
<b>Fibroma, Fibroadenoma, Carcinoma, or Adenoma</b>											
		2/50	(4%)	1/50	(2%)			21/50	(42%)	26/50	(52%)
<b>Overall Incidence</b>	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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		Male				Female					
<b>#Mesentery:</b>											
<b>Fibrous Histiocytoma</b>											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Mesentery:</b>											
<b>Schwannoma Malignant</b>											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	2/50	(4%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	2/100	(2%)	Mean 2%	SD 2.83%	
.....											
<b>*Nose:</b>											
<b>Adenoma</b>											
		0/50	(0%)	0/50	(0%)			0/48	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/98	(0%)	Mean 0%	SD 0%	
.....											
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>											
<b>Papilloma Squamous or Papilloma</b>											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>											
<b>Squamous Cell Carcinoma</b>											
		1/50	(2%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	2/100	(2%)	Mean 2%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):</b>											
<b>Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma</b>											
		1/50	(2%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	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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	Male					Female				
<b>#Oral Mucosa:</b>										
<b>Squamous Cell Carcinoma</b>										
		1/50	(2%)	0/50	(0%)		0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%
.....										
<b>#Oral Mucosa:</b>										
<b>Squamous Cell Papilloma</b>										
		0/50	(0%)	0/50	(0%)		0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%
.....										
<b>*Ovary:</b>										
<b>Cystadenoma</b>										
							0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>						Total	0/100	(0%)	Mean 0%	SD 0%
.....										
<b>*Ovary:</b>										
<b>Fibrosarcoma</b>										
							0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>						Total	0/100	(0%)	Mean 0%	SD 0%
.....										
<b>*Ovary:</b>										
<b>Granulosa Cell Tumor Benign</b>										
							1/50	(2%)	1/50	(2%)
<b>Overall Incidence</b>						Total	2/100	(2%)	Mean 2%	SD 0%
.....										
<b>*Ovary:</b>										
<b>Granulosa Cell Tumor Malignant</b>										
							0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>						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							
<b>*Ovary:</b>												
Granulosa Cell Tumor: Benign, Malignant, NOS												
					1/50	(2%)	1/50	(2%)				
<b>Overall Incidence</b>					Total	2/100	(2%)	Mean	2%	SD 0%		
.....												
<b>*Ovary:</b>												
Granulosa-Theca Tumor Malignant												
					0/50	(0%)	0/50	(0%)				
<b>Overall Incidence</b>					Total	0/100	(0%)	Mean	0%	SD 0%		
.....												
<b>*Ovary:</b>												
Schwannoma Malignant												
					0/50	(0%)	0/50	(0%)				
<b>Overall Incidence</b>					Total	0/100	(0%)	Mean	0%	SD 0%		
.....												
<b>*Ovary:</b>												
Sertoli Cell Tumor Malignant												
					0/50	(0%)	0/50	(0%)				
<b>Overall Incidence</b>					Total	0/100	(0%)	Mean	0%	SD 0%		
.....												
<b>*Ovary:</b>												
Tubulostromal Adenoma												
					0/50	(0%)	0/50	(0%)				
<b>Overall Incidence</b>					Total	0/100	(0%)	Mean	0%	SD 0%		
.....												
<b>*Pancreas:</b>												
Adenoma												
		0/49	(0%)	0/50	(0%)			0/49	(0%)	0/50	(0%)	
<b>Overall Incidence</b>		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			
<b>*Pancreas:</b>									
<b>Carcinoma or Adenoma</b>									
		0/49	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/99	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									
<b>*Pancreas:</b>									
<b>Mixed Tumor Benign</b>									
		0/49	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/99	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									
<b>*Parathyroid Gland:</b>									
<b>Adenoma</b>									
		0/49	(0%)	0/50	(0%)	1/50	(2%)	0/49	(0%)
<b>Overall Incidence</b>	Total	0/99	(0%)	Mean 0%	SD 0%	Total	1/99	(1.01%)	Mean 1%
									SD 1.41%
.....									
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>									
<b>Adenoma</b>									
		33/50	(66%)	33/50	(66%)	31/50	(62%)	25/50	(50%)
<b>Overall Incidence</b>	Total	66/100	(66%)	Mean 66%	SD 0%	Total	56/100	(56%)	Mean 56%
									SD 8.49%
.....									
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>									
<b>Carcinoma</b>									
		2/50	(4%)	0/50	(0%)	2/50	(4%)	0/50	(0%)
<b>Overall Incidence</b>	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	2/100	(2%)	Mean 2%
									SD 2.83%
.....									
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>									
<b>Carcinoma or Adenoma</b>									
		35/50	(70%)	33/50	(66%)	33/50	(66%)	25/50	(50%)
<b>Overall Incidence</b>	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			
<b>*Pituitary Gland: Pars Distalis or Unspecified Site:</b>									
<b>Ganglioneuroma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
<b>*Pituitary Gland: Pars Intermedia:</b>									
<b>Adenoma</b>									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
<b>*Pituitary Gland: Pars Intermedia:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
<b>*Pituitary Gland: Pars Nervosa:</b>									
<b>Craniopharyngioma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
<b>*Prostate:</b>									
<b>Adenoma</b>									
		0/50	(0%)	0/50	(0%)				
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%				
.....									
<b>*Prostate:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)	0/50	(0%)				
<b>Overall Incidence</b>	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					
<b>*Salivary Glands:</b>											
<b>  Carcinoma</b>											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>*Salivary Glands:</b>											
<b>  Carcinoma or Adenoma</b>											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>*Salivary Glands:</b>											
<b>  Sarcoma</b>											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>*Salivary Glands:</b>											
<b>  Schwannoma Malignant</b>											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Seminal Vesicle:</b>											
<b>  Adenoma</b>											
		0/50	(0%)	0/50	(0%)						
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%						
.....											
<b>#Skeletal Muscle:</b>											
<b>  Fibrous Histiocytoma</b>											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	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					
<b>#Skeletal Muscle:</b>											
Lipoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Skin:</b>											
Basal Cell Adenoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Skin:</b>											
Basal Cell Adenoma or Basosquamous Tumor Benign											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Skin:</b>											
Basal Cell Adenoma, Basosquamous Tumor Benign, or Trichoepithelioma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Skin:</b>											
Basal Cell Carcinoma											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	1/50	(2%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	1/100	(1%)	Mean 1%	SD 1.41%	
.....											
<b>#Skin:</b>											
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	1/50	(2%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	1/100	(1%)	Mean 1%	SD 1.41%	

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

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

\*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: 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			
<b>#Skin:</b>								
<b>Neurofibroma or Schwannoma benign</b>								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
<b>#Skin:</b>								
<b>Neurofibrosarcoma or Schwannoma (malignant or NOS)</b>								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)		
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	1/100 (1%)	Mean 1%	SD 1.41%
.....								
<b>#Skin:</b>								
<b>Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)</b>								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)		
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	1/100 (1%)	Mean 1%	SD 1.41%
.....								
<b>#Skin:</b>								
<b>Sarcoma</b>								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
<b>#Skin:</b>								
<b>Schwannoma Benign</b>								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
<b>#Skin:</b>								
<b>Schwannoma Malignant</b>								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)		
<b>Overall Incidence</b>	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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		Male				Female					
<b>#Skin:</b>											
<b>Squamous Cell Carcinoma</b>											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Skin:</b>											
<b>Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma</b>											
		2/50	(4%)	0/50	(0%)			0/50	(0%)	1/50	(2%)
<b>Overall Incidence</b>	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	1/100	(1%)	Mean 1%	SD 1.41%	
.....											
<b>#Skin:</b>											
<b>Squamous Cell Papilloma</b>											
		1/50	(2%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	2/100	(2%)	Mean 2%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Skin:</b>											
<b>Squamous Cell Papilloma or Papilloma</b>											
		1/50	(2%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	2/100	(2%)	Mean 2%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Skin:</b>											
<b>Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma</b>											
		6/50	(12%)	3/50	(6%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	9/100	(9%)	Mean 9%	SD 4.24%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
<b>#Skin:</b>											
<b>Squamous Cell Papilloma, Papilloma, or Keratoacanthoma</b>											
		5/50	(10%)	3/50	(6%)			0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	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**  
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**Route: SKIN**  
**Vehicle: ETHANOL**

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		Male				Female			
<b>#Skin:</b>									
<b>Trichoepithelioma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
<b>#Skin: Sebaceous Gland:</b>									
<b>Adenoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
<b>#Skin: Sebaceous Gland:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
<b>#Spinal Cord:</b>									
<b>Glioma Malignant</b>									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
<b>#Stomach, Glandular:</b>									
<b>Carcinoma</b>									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	0/100	(0%)	Mean 0%	SD 0%
.....									
<b>#Stomach, Glandular:</b>									
<b>Carcinoma or Adenoma</b>									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	0/100	(0%)	Mean 0%	SD 0%

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

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 Species: RATS  
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		Male			Female		
<b>#Stomach, Glandular:</b>							
<b>Sarcoma</b>							
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0% SD 0%
.....							
<b>*Testes:</b>							
<b>Adenoma</b>							
		34/50 (68%)	37/50 (74%)				
<b>Overall Incidence</b>	Total	71/100 (71%)	Mean 71%	SD 4.24%			
.....							
<b>*Testes:</b>							
<b>Hemangioma</b>							
		0/50 (0%)	1/50 (2%)				
<b>Overall Incidence</b>	Total	1/100 (1%)	Mean 1%	SD 1.41%			
.....							
<b>*Thymus:</b>							
<b>Thymoma Benign</b>							
		0/50 (0%)	0/47 (0%)		1/50 (2%)	1/50 (2%)	
<b>Overall Incidence</b>	Total	0/97 (0%)	Mean 0%	SD 0%	Total	2/100 (2%)	Mean 2% SD 0%
.....							
<b>*Thymus:</b>							
<b>Thymoma Malignant</b>							
		0/50 (0%)	0/47 (0%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/97 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0% SD 0%
.....							
<b>*Thymus:</b>							
<b>Thymoma NOS</b>							
		0/50 (0%)	0/47 (0%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	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

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 Species: RATS  
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	Male				Female			
<b>*Thymus:</b>								
<b>Thymoma: Benign, Malignant, NOS</b>								
		0/50 (0%)	0/47 (0%)		1/50 (2%)	1/50 (2%)		
<b>Overall Incidence</b>	Total	0/97 (0%)	Mean 0%	SD 0%	Total	2/100 (2%)	Mean 2%	SD 0%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Adenoma</b>								
		6/46 (13%)	9/50 (18%)		7/50 (14%)	7/50 (14%)		
<b>Overall Incidence</b>	Total	15/96 (15.62%)	Mean 15.52%	SD 3.5%	Total	14/100 (14%)	Mean 14%	SD 0%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Carcinoma</b>								
		0/46 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)		
<b>Overall Incidence</b>	Total	0/96 (0%)	Mean 0%	SD 0%	Total	1/100 (1%)	Mean 1%	SD 1.41%
.....								
<b>*Thyroid Gland: C-Cell:</b>								
<b>Carcinoma or Adenoma</b>								
		6/46 (13%)	9/50 (18%)		8/50 (16%)	7/50 (14%)		
<b>Overall Incidence</b>	Total	15/96 (15.62%)	Mean 15.52%	SD 3.5%	Total	15/100 (15%)	Mean 15%	SD 1.41%
.....								
<b>*Thyroid Gland: Follicular Cell:</b>								
<b>Adenoma</b>								
		0/46 (0%)	0/50 (0%)		1/50 (2%)	1/50 (2%)		
<b>Overall Incidence</b>	Total	0/96 (0%)	Mean 0%	SD 0%	Total	2/100 (2%)	Mean 2%	SD 0%
.....								
<b>*Thyroid Gland: Follicular Cell:</b>								
<b>Carcinoma</b>								
		2/46 (4%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
<b>Overall Incidence</b>	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

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

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		Male			Female		
<b>*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma</b>							
		2/46 (4%)	0/50 (0%)		1/50 (2%)	1/50 (2%)	
<b>Overall Incidence</b>	Total	2/96 (2.08%)	Mean 2.17%	SD 3.07%	Total	2/100 (2%)	Mean 2% SD 0%
.....							
<b>#Tongue: Squamous Cell Carcinoma</b>							
		0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	0/100 (0%)	Mean 0% SD 0%
.....							
<b>#Tongue: Squamous Cell Carcinoma or Papilloma Squamous</b>							
		0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	0/100 (0%)	Mean 0% SD 0%
.....							
<b>#Tongue: Squamous Cell Papilloma</b>							
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0% SD 0%
.....							
<b>#Tooth: Adamantinoma Malignant</b>							
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0% SD 0%
.....							
<b>*Urinary Bladder: Carcinoma</b>							
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	
<b>Overall Incidence</b>	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0% SD 0%

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

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**Toxicology Data Management System**  
 Tumor Incidence for Selected Control Animal Groups  
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		Male				Female				
<b>*Urinary Bladder:</b>										
<b>  Carcinoma or Papilloma</b>										
		0/50	(0%)	1/50	(2%)		0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%
.....										
<b>*Urinary Bladder:</b>										
<b>  Hemangiosarcoma</b>										
		0/50	(0%)	0/50	(0%)		0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%
.....										
<b>*Urinary Bladder:</b>										
<b>  Papilloma</b>										
		0/50	(0%)	1/50	(2%)		0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%
.....										
<b>#Uterus:</b>										
<b>  Adenoma</b>										
							0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>						Total	0/100	(0%)	Mean 0%	SD 0%
.....										
<b>#Uterus:</b>										
<b>  Carcinoma</b>										
							0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>						Total	0/100	(0%)	Mean 0%	SD 0%
.....										
<b>#Uterus:</b>										
<b>  Leiomyosarcoma</b>										
							0/50	(0%)	0/50	(0%)
<b>Overall Incidence</b>						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  
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**Toxicology Data Management System**  
 Tumor Incidence for Selected Control Animal Groups  
**Route: SKIN**  
**Vehicle: ETHANOL**

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	Male	Female
<b>#Uterus:</b> <b>Polyp Stromal</b>		
<b>Overall Incidence</b>	Total 10/50 (20%) 17/100 (17%)	7/50 (14%) Mean 17% SD 4.24%
<b>#Uterus:</b> <b>Sarcoma</b>		
<b>Overall Incidence</b>	Total 0/50 (0%) 1/100 (1%)	1/50 (2%) Mean 1% SD 1.41%
<b>#Uterus:</b> <b>Sarcoma Stromal</b>		
<b>Overall Incidence</b>	Total 0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0% SD 0%
<b>#Uterus:</b> <b>Sarcoma Stromal or Polyp Stromal</b>		
<b>Overall Incidence</b>	Total 10/50 (20%) 17/100 (17%)	7/50 (14%) Mean 17% SD 4.24%
<b>#Uterus:</b> <b>Schwannoma Malignant</b>		
<b>Overall Incidence</b>	Total 0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0% SD 0%
<b>#Vagina:</b> <b>Polyp</b>		
<b>Overall Incidence</b>	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**  
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**Route: SKIN**  
**Vehicle: ETHANOL**

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