

NTP Historical Controls Report

By Route and Vehicle

MICE

August 2017

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
Female F1
F1
F1 F2

the data would be shown as:

	Male			Female	
M1	M2	М3	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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Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL Page: 4

Report Date: 01/20/2018

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	052000604	04/03/07	730	50(1)	26(663)	55.6	Indole-3-carbinol
Southern Research Institute	052020904	02/25/08	729	50(1)	29(657)	55.3	Pentabromodiphenyl Ether Mixture [DE-71 (Technical Grade)]
Battelle Columbus Laboratory	052032004	08/07/07	730	50(1)	33(687)	55.8	Tetrabromobisphenol A
					Female		
Battelle Columbus Laboratory	052000604	04/02/07	729	50(5)	33(702)	66.6	Indole-3-carbinol
Southern Research Institute	052020904	02/25/08	731	50(5)	33(679)	57.7	Pentabromodiphenyl Ether Mixture [DE-71 (Technical Grade)]
Battelle Columbus Laboratory	052032004	08/06/07	729	50(5)	40(711)	66.5	Tetrabromobisphenol A

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL

Length of Study: CHRONIC

			Male				Female	
#All Organs: Benign Tumors								
		33/50 (66%)	30/50 (60%)	38/50 (76%)		17/50 (34%)	24/50 (48%)	22/50 (44%)
Overall Incidence	Total	101/150 (67.33%)	Mean 67.33%	SD 8.08%	Total	63/150 (42%)	Mean 42%	SD 7.21%
#All Organs: Malignant Tumors								
Overell Incidence	Tatal	27/50 (54%)	27/50 (54%)	21/50 (42%)	Tatal	19/50 (38%)	16/50 (32%)	18/50 (36%)
Overall Incidence	Total	75/150 (50%)	Mean 50%	SD 6.93%	Total	53/150 (35.33%)	Mean 35.33%	SD 3.06%
#All Organs: Malignant and Benign Tu	umors	40/50 /000/	40/50 (000)	47/50 (040()		00/50 (000()	0.4/50 (0.00())	00/50 (0.40)
Overall Incidence	Total	48/50 (96%) 135/150 (90%)	40/50 (80%) Mean 90%	47/50 (94%) SD 8.72%	Total	30/50 (60%) 96/150 (64%)	34/50 (68%) Mean 64%	32/50 (64%) SD 4%
	ı Olai	133/130 (90%)		3D 0.12%	10tai	96/130 (64%)	04%	3D 4%
#All Organs: Hemangioma		0/50 (0%)	0/50 (0%)	2/50 (4%)		1/50 (2%)	1/50 (2%)	1/50 (2%)
Overall Incidence	Total	2/150 (1.33%)	Mean 1.33%	SD 2.31%	Total	3/150 (2%)	Mean 2%	SD 0%
#All Organs: Hemangiosarcoma								
		4/50 (8%)	1/50 (2%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	1/50 (2%)
Overall Incidence	Total	6/150 (4%)	Mean 4%	SD 3.46%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
#All Organs: Hemangiosarcoma or He	emangioma							
		4/50 (8%)	1/50 (2%)	3/50 (6%)		1/50 (2%)	1/50 (2%)	2/50 (4%)
Overall Incidence	Total	8/150 (5.33%)	Mean 5.33%	SD 3.06%	Total	4/150 (2.67%)	Mean 2.67%	SD 1.15%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Page: 6

Report Date: 01/20/2018

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** #All Organs: **Histiocytic Sarcoma** 2/50 (4%)1/50 (2%)0/50 (0%)1/50 (2%)1/50 (2%)1/50 (2%)**Overall Incidence** Total 3/150 (2%) Mean 2% SD 2% Total 3/150 (2%) Mean 2% SD 0% #All Organs: Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type 3/50 (6%)5/50 (10%) 3/50 (6%)6/50 (12%) 7/50 (14%) 9/50 (18%) **Overall Incidence** Total 11/150 (7.33%) Mean 7.33% SD 2.31% 22/150 (14.67%) Mean 14.67% SD 3.06% Total #All Organs: **Malignant Schwannoma** 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)1/50 (2%)Overall Incidence Total 0/150 (0%) Mean 0% SD 0% Total 1/150 (0.67%) Mean 0.67% SD 1.15% #All Organs: Osteosarcoma 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/150 (0%) Mean 0% SD 0% Total 0/150 (0%) Mean 0% SD 0% **#All Organs:** Osteosarcoma or Osteoma 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/150 (0%) Mean 0% SD 0% Total 0/150 (0%) Mean 0% SD 0% *Adrenal Cortex: Adenoma 0/50 (0%)0/50 (0%)1/50 (2%)2/49 (4%)0/50 (0%)0/50 (0%)**Overall Incidence** Total Mean 0.67% Mean 1.36% SD 2.36% 1/150 (0.67%) SD 1.15% Total 2/149 (1.34%)

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL Page: 7

			Male				Female	
*Adrenal Medulla: Pheochromocytoma Benign								
		0/50 (0%)	1/50 (2%)	0/50 (0%)		0/49 (0%)	0/49 (0%)	1/50 (2%)
Overall Incidence	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	Total	1/148 (0.68%)	Mean 0.67%	SD 1.15%
*Adrenal Medulla: Pheochromocytoma Maligna	ınt							
, ,		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/49 (0%)	0/49 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/148 (0%)	Mean 0%	SD 0%
*Adrenal Medulla: Pheochromocytoma: Benigr	ı, Complex	c, Malignant, NOS 0/50 (0%)	1/50 (2%)	0/50 (0%)		0/49 (0%)	0/49 (0%)	1/50 (2%)
Overall Incidence	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	Total	1/148 (0.68%)	Mean 0.67%	SD 1.15%
#Blood Vessel: Hemangioma				0/50 (0%)		1/50 (29/)	0/50 (/0%)	0/50 (00/)
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	Mean 0%	0/50 (0%) SD 0%	Total	1/50 (2%) 1/150 (0.67%)	0/50 (0%) Mean 0.67%	0/50 (0%) SD 1.15%
#Blood Vessel: Hemangiosarcoma								
_		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
Bone Marrow: Hemangiosarcoma		4/50 (631)	0/50 (05.)	0/50 (001)		0/50 (00.)	0/40 /00/	0/50 (00)
Overall Insidence	Tatal	1/50 (2%)	0/50 (0%)	0/50 (0%)	Tatal	0/50 (0%)	0/49 (0%)	0/50 (0%)
Overall Incidence	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/149 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL Page: 8

			Male				Female	
Bone Marrow: Mast Cell Tumor Malignant								
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0 SD 0%	0%) Total	0/50 (0%) 0/149 (0%)	0/49 (0%) Mean 0%	0/50 (0%) SD 0%
Bone Marrow:								
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0 SD 0%)%) Total	0/50 (0%) 0/149 (0%)	0/49 (0%) Mean 0%	0/50 (0%) SD 0%
Bone: Fibroma								
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0 SD 0%	0%) Total	0/50 (0%) 1/150 (0.67%)	0/50 (0%) Mean 0.67%	1/50 (2%) SD 1.15%
Bone: Hemangioma								
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	SD 0%	0%) Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%
Bone: Osteosarcoma								•••••
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0 SD 0%	0%) Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%
Bone: Osteosarcoma or Osteoma								
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL **Page:** 9

		Male				Female	
	0/50 (00)	0/50 (00/)	0/50 (00)		0/50 (00/)	0/50 (00/)	0/50 (00/)
Total	0/50 (0%) 0/150 (0%)	0/50 (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%
Total	0/50 (0%) 0/150 (0%)	Mean 0%	SD 0%	Total	0/49 (0%) 0/148 (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%	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%
			(00)				(20)
Total	0/50 (0%) 0/150 (0%)	0/50 (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%
Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%				
		•••••					
T-1-1	6/50 (12%)	5/50 (10%)	7/50 (14%)	T-1-1	3/50 (6%)	9/50 (18%)	2/50 (4%) SD 7.57%
	Total Total	0/50 (0%) Total 0/150 (0%) 0/50 (0%) Total 1/150 (0.67%) 0/50 (0%) Total 0/150 (0%) Total 0/150 (0%) Total 0/150 (0%)	0/50 (0%) 0/50 (0%) Total 0/150 (0%) Mean 0% 0/50 (0%) 0/50 (0%) Total 0/150 (0%) Mean 0% 0/50 (0%) 0/50 (0%) Total 1/150 (0.67%) Mean 0.67% Total 0/150 (0%) 0/50 (0%) Total 0/150 (0%) Mean 0% Total 0/150 (0%) Mean 0%	O/50 (0%) O/50 (0%) O/50 (0%) O/50 (0%) Total O/150 (0%) Mean 0% SD 0% O/50 (0%) O/50 (0%) O/50 (0%) Total O/150 (0%) Mean 0% SD 0% Total 1/150 (0.67%) Mean 0.67% SD 1.15% Total 0/50 (0%) 0/50 (0%) 0/50 (0%) Total 0/150 (0%) Mean 0% SD 0%	Total 0/50 (0%) 0/50 (0%) SD 0% Total Total 0/150 (0%)	O/50 (0%) O/50 (0%) O/50 (0%) O/50 (0%) O/50 (0%) Total O/150 (0%) Mean 0% SD 0% Total O/150 (0%) Total O/50 (0%) O/50 (0%) O/50 (0%) O/49 (0%) Total O/150 (0%) Mean 0% SD 0% Total O/148 (0%) Total 1/150 (0.67%) Mean 0% SD 1.15% Total O/150 (0%) Total 0/50 (0%) 0/50 (0%) 0/50 (0%) Total O/150 (0%) Total 0/150 (0%) Mean 0% SD 0% Total O/150 (0%) Total 0/150 (0%) Mean 0% SD 0% Total O/150 (0%) Total 0/150 (0%) Mean 0% SD 0% Total O/150 (0%)	O/50 (0%) O/60 (0%) O/60 (0%) O/49 (0%) O/418 (0%) Mean 0% O/50 (0%) O/50 (0%) <th< td=""></th<>

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL **Page:** 10

			Male				Female	
#Harderian Gland: Carcinoma								
	-	1/50 (2%)	1/50 (2%)	1/50 (2%)	.	0/50 (0%)	1/50 (2%)	1/50 (2%)
Overall Incidence	Total	3/150 (2%)	Mean 2%	SD 0%	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%
Harderian Gland: Carcinoma or Adenoma								
		7/50 (14%)	6/50 (12%)	8/50 (16%)		3/50 (6%)	10/50 (20%)	3/50 (6%)
verall Incidence	Total	21/150 (14%)	Mean 14%	SD 2%	Total	16/150 (10.67%)	Mean 10.67%	SD 8.08%
Harderian Gland: Mast Cell Tumor								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
verall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
leart: Hemangiosarcoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
verall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
ntestine Large: Cecum: Leiomyosarcoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		1/50 (2%)	0/50 (0%)	0/50 (0%)
verall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
Intestine Small: Duodenum: Adenoma								
		2/50 (4%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)
verall Incidence	Total	2/150 (1.33%)	Mean 1.33%	SD 2.31%	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

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL Page: 11

			Male				Female	
#Intestine Small: Duodenum: Carcinoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
fintestine Small: Duodenum: Polyp Adenomatous								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
fintestine Small: Ileum: Adenoma				2/-2				(00)
Overell Incidence	Tatal	0/50 (0%)	0/50 (0%)	0/50 (0%)	Tatal	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
Intestine Small: Jejunum: Adenoma								
Overall Incidence	Total	1/50 (2%)	0/50 (0%) Mean 1.33%	1/50 (2%) SD 1.15%	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%
		2/150 (1.33%)			Total	0/150 (0%)	wiean 0%	งบ 0%
fintestine Small: Jejunum: Carcinoma								
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0%	SD 0%
fIntestine Small: Jejunum: Leiomyosarcoma		0/50 (00/)	0/50 /000	0/50 (00%)		4/50 (000)	0/50 /00/	0/50 (00/)
Overall Incidence	Total	0/50 (0%)	0/50 (0%)	0/50 (0%)	Total	1/50 (2%)	0/50 (0%)	0/50 (0%) SD 1.15%
Jverali incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	3D 1.15%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL Page: 12

			Male				Female	
#Intestine Small: Jejunum Mast Cell Tumor	:							
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%
#Intestine Small: Site Unsp	pecified:							
Overall Incidence	Total	3/50 (6%) 4/150 (2.67%)	0/50 (0%) Mean 2.67%	1/50 (2%) SD 3.06%	Total	0/50 (0%) 1/150 (0.67%)	0/50 (0%) Mean 0.67%	1/50 (2%) SD 1.15%
#Intestine Small: Site Unsp Carcinoma			•••••					
Overall Incidence	Total	0/50 (0%) 1/150 (0.67%)	0/50 (0%) Mean 0.67%	1/50 (2%) SD 1.15%	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%
fintestine Small: Site Unsp Carcinoma or Adenoma								
Overall Incidence	Total	3/50 (6%) 5/150 (3.33%)	0/50 (0%) Mean 3.33%	2/50 (4%) SD 3.06%	Total	0/50 (0%) 1/150 (0.67%)	0/50 (0%) Mean 0.67%	1/50 (2%) SD 1.15%
fintestine Small: Site Unsp Leiomyosarcoma		•••••	•••••					•••••
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%	Total	1/50 (2%) 1/150 (0.67%)	0/50 (0%) Mean 0.67%	0/50 (0%) SD 1.15%
#Intestine Small: Site Unsp Mast Cell Tumor	pecified:							
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL

Length of Study: CHRONIC

Report Date: 01/20/2018

Page: 13

			Male				Female	
fintestine Small: Site Unspec	cified:							
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
verall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
slets, Pancreatic: Adenoma								
		1/50 (2%)	1/50 (2%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)
verall Incidence	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
slets, Pancreatic: Carcinoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
slets, Pancreatic: Carcinoma or Adenoma								
		1/50 (2%)	1/50 (2%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)
verall Incidence	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%
Kidney: Renal Tubule: Adenoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
verall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
Kidney: Renal Tubule: Carcinoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (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

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL Page: 14

			Male				Female	
Kidney: Renal Tubule: Carcinoma or Adenoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
Kidney: Renal Tubule: Mast Cell Tumor								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
Kidney: Renal Tubule: Renal Mesenchymal Tumor		0/50 (00/)	0/50 (0%)	0/50 (0%)		0/50 (00/)	0/50 (00/)	0/50 (0%)
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%
Liver: Cholangiocarcinoma		0/50 (00/)	0/50 (00/)	0(50 (00))		0/50 (00/)	0/50 (00/)	0/50 (00/)
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%
		` '				` '		
Liver: Hemangioma								
		0/50 (0%)	0/50 (0%)	2/50 (4%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
verall Incidence	Total	2/150 (1.33%)	Mean 1.33%	SD 2.31%	Total	0/150 (0%)	Mean 0%	SD 0%
Liver: Hemangiosarcoma								
		4/50 (8%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	4/150 (2.67%)	Mean 2.67%	SD 4.62%	Total	0/150 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL **Page:** 15

			Male				Female	
*Liver: Hepatoblastoma								
		3/50 (6%)	1/50 (2%)	2/50 (4%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	6/150 (4%)	Mean 4%	SD 2%	Total	0/150 (0%)	Mean 0%	SD 0%
Liver: Hepatocellular Adenoma								
		26/50 (52%)	23/50 (46%)	32/50 (64%)		7/50 (14%)	5/50 (10%)	13/50 (26%)
Overall Incidence	Total	81/150 (54%)	Mean 54%	SD 9.17%	Total	25/150 (16.67%)	Mean 16.67%	SD 8.33%
Liver: Hepatocellular Carcinoma								
		12/50 (24%)	18/50 (36%)	11/50 (22%)		6/50 (12%)	4/50 (8%)	2/50 (4%)
Overall Incidence	Total	41/150 (27.33%)	Mean 27.33%	SD 7.57%	Total	12/150 (8%)	Mean 8%	SD 4%
Liver: Hepatocellular Carcinoma			18/50 (36%)	12/50 (24%)		6/50 (12%)	4/50 (8%)	2/50 (4%)
Overall Incidence	Total	45/150 (30%)	Mean 30%	SD 6%	Total	12/150 (8%)	Mean 8%	SD 4%
Liver: Hepatocellular Carcinoma	a or Hepatoc			(700)			0.75	
	.	35/50 (70%)	31/50 (62%)	39/50 (78%)	.	12/50 (24%)	8/50 (16%)	15/50 (30%)
Overall Incidence	Total	105/150 (70%)	Mean 70%	SD 8%	Total	35/150 (23.33%)	Mean 23.33%	SD 7.02%
Liver: Hepatocellular Carcinoma	a, Hepatocell	_						
	.	36/50 (72%)	31/50 (62%)	39/50 (78%)	-	12/50 (24%)	8/50 (16%)	15/50 (30%)
Overall Incidence	Total	106/150 (70.67%)	Mean 70.67%	SD 8.08%	Total	35/150 (23.33%)	Mean 23.33%	SD 7.02%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL Page: 16

			Male				Female	
Liver: Hepatocholangiocarcinom	a							
O	T-1-1	0/50 (0%)	0/50 (0%)	0/50 (0%)	T-1-1	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
Liver: Mast Cell Tumor								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
Lung: Alveolar/Bronchiolar Aden	oma	4/50 (8%)	5/50 (10%)	6/50 (12%)		1/50 (2%)	1/50 (2%)	5/50 (10%)
Overall Incidence	Total	15/150 (10%)	Mean 10%	SD 2%	Total	7/150 (4.67%)	Mean 4.67%	SD 4.62%
Lung: Alveolar/Bronchiolar Carc	inoma	4/50 (00)	F/50 (400)	4/50 (004)		0(50 (40))	0/50 (00)	1/50 (004)
Overall Incidence	Total	4/50 (8%) 13/150 (8.67%)	5/50 (10%) Mean 8.67%	4/50 (8%) SD 1.15%	Total	2/50 (4%) 3/150 (2%)	0/50 (0%) Mean 2%	1/50 (2%) SD 2%
Lung: Alveolar/Bronchiolar Carc								
Aiveolai/Dioliciliolai Calci	ilionia di Al	8/50 (16%)	10/50 (20%)	10/50 (20%)		3/50 (6%)	1/50 (2%)	6/50 (12%)
Overall Incidence	Total	28/150 (18.67%)	Mean 18.67%	SD 2.31%	Total	10/150 (6.67%)	Mean 6.67%	SD 5.03%
Lung: Hemangiosarcoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (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

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL Page: 17

			Male				Female	
Lung: Mast Cell Tumor								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
Lymph Node: Hemangiosarcoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
Lymph Node: Mast Cell Tumor		-/	- ()					
	-	0/50 (0%)	0/50 (0%)	0/50 (0%)	+	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
Lymph Node, Mandibular: Mast Cell Tumor								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
Lymph Node, Mesenteric: Hemangioma								
-		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
Lymph Node, Mesenteric: Hemangiosarcoma		0/50 (00/)	0/50 (00/)	0/50 (00/)		0/50 (00)	0/50 (00/)	0/50 (00)
O	Tatal	0/50 (0%)	0/50 (0%)	0/50 (0%)	Tatal	0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (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

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL

Length of Study: CHRONIC

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			Male				Female	
Lymph Node, Mesenteric:								
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%
Mammary Gland: Adenoma	•••••							
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%
Mammary Gland: Carcinoma	•••••							
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%	Total	1/50 (2%) 2/150 (1.33%)	1/50 (2%) Mean 1.33%	0/50 (0%) SD 1.15%
Mammary Gland: Carcinoma or Adenoma								
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%	Total	1/50 (2%) 2/150 (1.33%)	1/50 (2%) Mean 1.33%	0/50 (0%) SD 1.15%
Mammary Gland: Fibroma, Fibroadenoma	or Adenoma							
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%
Mammary Gland: Fibroma, Fibroadenoma,	Carcinoma, or							
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%	Total	1/50 (2%) 2/150 (1.33%)	1/50 (2%) Mean 1.33%	0/50 (0%) SD 1.15%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL **Page:** 19

			Male				Female	
#Mesentery: Hemangioma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
#Mesentery: Hemangiosarcoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
#Mesentery: Lipoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
#Mesentery: Sarcoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
*Nose: Adenoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
*Nose: Polyp								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (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

Toxicology Data Management System

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Route: GAVAGE Vehicle: CORN OIL

			Male				Female					
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva): Papilloma Squamous or Papilloma 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%)	0/50 (0%)	1/50 (2%)				
verall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%				
Oral Cavity (Oral Mucos Squamous Cell Carcino		ynx, Tooth, Gingiva):										
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)				
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%				
Overall Incidence #Oral Mucosa: Squamous Cell Carcine	Total 	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 2/150 (1.33%)	0/50 (0%) Mean 1.33%	2/50 (4%) SD 2.31%				
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%				
'Ovary: Cystadenocarcinoma						0/50 (0%)	0/48 (0%)	0/50 (0%)				
Overall Incidence					Total	0/148 (0%)	Mean 0%	SD 0%				
Ovary: Cystadenoma						4/50 (00/)	0/40 /40/	0/50 (404)				
						1/50 (2%)	2/48 (4%)	2/50 (4%)				
Overall Incidence					Total	5/148 (3.38%)	Mean 3.39%	SD 1.21%				

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL

Length of Study: CHRONIC

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	Male	Female	
*Ovary: Granulosa Cell Tumor Benign		0/50 (00/) 4/40 (00/)	0/50 (00/)
Overall Incidence	Total	0/50 (0%) 1/48 (2%) 1/148 (0.68%) Mean 0.69%	0/50 (0%) SD 1.2%
*Ovary: Granulosa Cell Tumor Malignant		0/50 (0%) 0/48 (0%)	0/50 (0%)
Overall Incidence	Total	0/148 (0%) Mean 0%	SD 0%
*Ovary: Granulosa Cell Tumor: Benign, Malignant, NOS		0/50 (00/) 4/40 (00/)	0/50 /00/\
Overall Incidence	Total	0/50 (0%) 1/48 (2%) 1/148 (0.68%) Mean 0.69%	0/50 (0%) SD 1.2%
*Ovary: Granulosa-Theca Tumor Malignant		0/50 (0%) 0/48 (0%)	0/50 (0%)
Overall Incidence	Total	0/148 (0%) Mean 0%	SD 0%
*Ovary: Hemangioma		0/50 (00/) 0/40 (00/)	0/50 /0//
Overall Incidence	Total	0/50 (0%) 0/48 (0%) 0/148 (0%) Mean 0%	0/50 (0%) SD 0%
*Ovary: Hemangiosarcoma			
Overall Incidence	Total	0/50 (0%) 0/48 (0%) 0/148 (0%) Mean 0%	0/50 (0%) SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL

Length of Study: CHRONIC

Contract/Lab: All Laboratories

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Report Date: 01/

			Male			Female			
Ovary: Luteoma						0/50 (00/)	0/40 /00/	0/50 (00/)	
Overall Incidence					Total	0/50 (0%) 0/148 (0%)	0/48 (0%) Mean 0%	0/50 (0%) SD 0%	
Ovary: Sarcoma									
overall Incidence					Total	0/50 (0%) 0/148 (0%)	0/48 (0%) Mean 0%	0/50 (0%) SD 0%	
Ovary: Thecoma Malignant									
Overall Incidence					Total	0/50 (0%) 0/148 (0%)	0/48 (0%) Mean 0%	0/50 (0%) SD 0%	
Ovary: Tubulostromal Adenoma									
Overall Incidence					Total	1/50 (2%) 1/148 (0.68%)	0/48 (0%) Mean 0.67%	0/50 (0%) SD 1.15%	
Pancreas: Mast Cell Tumor									
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%	
Parathyroid Gland: Adenoma									
Overall Incidence	Total	0/48 (0%) 0/141 (0%)	0/48 (0%) Mean 0%	0/45 (0%) SD 0%	Total	0/43 (0%) 0/121 (0%)	0/44 (0%) Mean 0%	0/34 (0%) SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL Page: 23

			Male				Female					
*Pituitary Gland: Pars Distalis or Unspecified Site: Adenoma												
		0/50 (0%)	0/47 (0%)	0/50 (0%)		3/49 (6%)	5/50 (10%)	1/50 (2%)				
Overall Incidence	Total	0/147 (0%)	Mean 0%	SD 0%	Total	9/149 (6.04%)	Mean 6.04%	SD 4%				
Pituitary Gland: Pars Distali Carcinoma	is or Unspeci	fied Site:										
		0/50 (0%)	0/47 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/147 (0%)	Mean 0%	SD 0%	Total	0/149 (0%)	Mean 0%	SD 0%				
Pituitary Gland: Pars Distali Carcinoma or Adenoma	is or Unspeci											
		0/50 (0%)	0/47 (0%)	0/50 (0%)		3/49 (6%)	5/50 (10%)	1/50 (2%)				
Overall Incidence	Total	0/147 (0%)	Mean 0%	SD 0%	Total	9/149 (6.04%)	Mean 6.04%	SD 4%				
Pituitary Gland: Pars Interm Adenoma	nedia:											
		0/50 (0%)	0/47 (0%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/147 (0%)	Mean 0%	SD 0%	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%				
Pituitary Gland: Pars Interm Carcinoma												
		0/50 (0%)	0/47 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/147 (0%)	Mean 0%	SD 0%	Total	0/149 (0%)	Mean 0%	SD 0%				
Pituitary Gland: Pars Interm Carcinoma or Adenoma	nedia:											
		0/50 (0%)	0/47 (0%)	0/50 (0%)		1/49 (2%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/147 (0%)	Mean 0%	SD 0%	Total	1/149 (0.67%)	Mean 0.68%	SD 1.18%				

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL Page: 24

			Male				Female					
*Pituitary Gland: Pars Intermedia: Schwannoma Malignant												
		0/50 (0%)	0/47 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/147 (0%)	Mean 0%	SD 0%	Total	0/149 (0%)	Mean 0%	SD 0%				
Prostate: Mast Cell Tumor												
		0/50 (0%)	0/50 (0%)	0/50 (0%)								
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%								
*Salivary Glands: Adenoma		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0%	SD 0%				
Salivary Glands: Carcinoma		0/50 (00/)	0/50 (00/)	0/50 (00/)		0/50 (00/)	0(50 (00))	0/50 (00/)				
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%				
overali incidence	Total	` '			Total	0/150 (0%)						
Salivary Glands: Carcinoma or Adenoma												
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0%	SD 0%				
Salivary Glands: Hemangiosarcoma												
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	1/150 (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

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL

Length of Study: CHRONIC

			Male				Female	
*Salivary Glands: Mast Cell Tumor		0/50 (0%)	0/50 (00/)	0(50 (00())		0/50 (00)	0/50 (00/)	0/50 (00)
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%
*Salivary Glands: Myxosarcoma		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%
#Seminal Vesicle: Adenoma								
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%				
#Seminal Vesicle: Fibroma		0/50 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%				
#Skeletal Muscle: Osteosarcoma								
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%
#Skeletal Muscle: Rhabdomyosarcoma								
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 1/150 (0.67%)	1/50 (2%) Mean 0.67%	0/50 (0%) SD 1.15%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL **Page:** 26

Report Date: 01/20/2018

Length of Study: CHRONIC

			Male				Female	
#Skeletal Muscle: Rhabdomyosarcoma or F	Rhabdomyoma							
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 1/150 (0.67%)	1/50 (2%) Mean 0.67%	0/50 (0%) SD 1.15%
#Skeletal Muscle: Sarcoma	•••••							
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%
#Skin: Basal Cell Carcinoma								
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%
#Skin: Basal Cell Carcinoma or	Basosquamous	` •	•	0/50 (00)		0/50 (00/)	0/50 (00/)	4/50 (00())
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%
#Skin: Basal Cell Carcinoma, Ba NOS), or Trichoepithelior		•	, , ,					
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%
#Skin: Basal or Sq. Cell Carcino Adenoma, Papilloma, Sq		toacanthoma, Trìchoepi	ithelioma	•		0/50 (00)	0/50 (00)	450 (00)
Overall Incidence	Total	0/50 (0%) 1/150 (0.67%)	0/50 (0%) Mean 0.67%	1/50 (2%) SD 1.15%	Total	0/50 (0%) 1/150 (0.67%)	0/50 (0%) Mean 0.67%	1/50 (2%) SD 1.15%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE

Length of Study: CHRONIC

Vehicle: CORN OIL

Page: 27

			Male			Female			
≮Skin: Fibroma									
	+	0/50 (0%)	0/50 (0%)	0/50 (0%)	T	0/50 (0%)	0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%	
Skin: Fibroma, Fibrosarcom Hemangiopericytoma	a, Sarcoma, Myx	oma, Myxosarcoma, Mali	gnant Fibrous Histiod	cytoma, or					
		1/50 (2%)	0/50 (0%)	1/50 (2%)		1/50 (2%)	1/50 (2%)	1/50 (2%)	
verall Incidence	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%	Total	3/150 (2%)	Mean 2%	SD 0%	
tSkin: Fibroma, Fibrosarcom	a, Sarcoma, Myx	coma, Myxosarcoma, or M 1/50 (2%)	alignant Fibrous Hist	iocytoma 1/50 (2%)		1/50 (2%)	1/50 (2%)	1/50 (2%)	
verall Incidence	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%	Total	3/150 (2%)	Mean 2%	SD 0%	
Skin: Fibrosarcoma		•••••	•••••					•••••	
		1/50 (2%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	1/50 (2%)	
verall Incidence	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%	
Skin: Fibrosarcoma, Sarcom	na, Myxosarcoma	a, or Malignant Fibrous H							
		1/50 (2%)	0/50 (0%)	1/50 (2%)		1/50 (2%)	1/50 (2%)	1/50 (2%)	
verall Incidence	Total	2/150 (1.33%)	Mean 1.33%	SD 1.15%	Total	3/150 (2%)	Mean 2%	SD 0%	
Skin: Hemangioma		0/50 /(00/)	0/50 (000)	0/50 /00/2		0/50 /000	0/50 /00/	4/50 (00()	
Normall Implications	Tatal	0/50 (0%)	0/50 (0%)	0/50 (0%)	Tatal	0/50 (0%)	0/50 (0%)	1/50 (2%)	
Overall Incidence	Total	0/150 (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

#Skin:

#Skin:

#Skin: Lipoma

#Skin:

#Skin:

#Skin:

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Hemangiosarcoma

Overall Incidence

Overall Incidence

Overall Incidence

Overall Incidence

Overall Incidence

Overall Incidence

Melanoma Benign

......

Malignant Fibrous Histiocytoma

Keratoacanthoma

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL

SD 0%

0/50

SD 0%

0/50

SD 0%

(0%)

(0%)

Male **Female** 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)1/50 (2%)Mean 0% SD 0% Total 1/150 (0.67%) Mean 0.67% SD 1.15% 0/50 (0%)1/50 (2%)0/50 (0%)0/50 (0%)0/50 (0%)Mean 0.67% SD 1.15% 0/150 (0%) Mean 0% SD 0% Total 2/50 (4%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)Mean 1.33% SD 2.31% 0/150 (0%) Mean 0% SD 0% Total 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)

0/150 (0%)

0/50

0/50

1/150 (0.67%)

0/150 (0%)

(0%)

(0%)

Total

Total

Total

Page: 28

Mean 0%

Mean 0%

Mean 0.67%

(0%)

(0%)

0/50

0/50

SD 0%

SD 0%

SD 1.15%

(0%)

(2%)

0/50

1/50

Report Date: 01/20/2018

		examined microscopical	

Neurofibrosarcoma or Schwannoma (malignant or NOS)

Total

Total

Total

Total

Total

Total

0/50

0/150 (0%)

0/50

1/150 (0.67%)

0/50

2/150 (1.33%)

0/50

0/150 (0%)

0/50

0/150 (0%)

0/50

0/150 (0%)

(0%)

(0%)

(0%)

(0%)

(0%)

(0%)

Mean 0%

Mean 0%

Mean 0%

(0%)

(0%)

0/50

0/50

^{#:} Denominator is number of animals necropsied

Species: MICE Strain: B6C3F1/N **Toxicology Data Management System**

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Vehicle: CORN OIL

Page: 29

			Male				Female					
#Skin: Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)												
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)				
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%				
#Skin: Osteosarcoma												
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%				
#Skin: Pilomatrixoma												
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%				
#Skin: Sarcoma												
		0/50 (0%)	0/50 (0%)	1/50 (2%)		1/50 (2%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%				
#Skin: Schwannoma Malignant												
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)				
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%				
#Skin: Squamous Cell Carcinoma or Carcinoma				or NOS),								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)				
Overall Incidence	Total	0/150 (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

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL Page: 30

			Male			Female						
#Skin: Squamous Cell Papilloma												
Overall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (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%				
#Skin: Squamous Cell Papilloma o	r Panilloma											
Squamous Cen r apinoma o	Γαριποιπα	0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%				
#Skin:												
Squamous Cell Papilloma, F	Papilloma, \$	Squamous Cell Carcinom	a or Keratoacanthom	a								
	-	0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0%	SD 0%				
#Skin:												
Squamous Cell Papilloma, F	Papilloma, o											
		0/50 (0%)	0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%	Total	0/150 (0%)	Mean 0%	SD 0%				
Spleen: Hemangiosarcoma												
Ū		1/50 (2%)	1/50 (2%)	1/50 (2%)		0/50 (0%)	0/50 (0%)	1/50 (2%)				
Overall Incidence	Total	3/150 (2%)	Mean 2%	SD 0%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%				
#Stomach, Forestomach: Squamous Cell Carcinoma												
		1/50 (2%) 1/150 (0.67%)	0/50 (0%) Mean 0.67%	0/50 (0%) SD 1.15%	_	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%				
Overall Incidence	Total				Total							

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories Tumor I

Species: MICE
Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL **Page:** 31

	Male					Female						
#Stomach, Forestomach: Squamous Cell Carcinoma or Papilloma Squamous												
		2/50 (4%)	2/50 (4%)	5/50 (10%)		1/50 (2%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	9/150 (6%)	Mean 6%	SD 3.46%	Total	1/150 (0.67%)	Mean 0.67%	SD 1.15%				
Stomach, Forestomach: Squamous Cell Papilloma												
Overall Incidence	Total	1/50 (2%) 8/150 (5.33%)	2/50 (4%) Mean 5.33%	5/50 (10%) SD 4.16%	Total	1/50 (2%) 1/150 (0.67%)	0/50 (0%) Mean 0.67%	0/50 (0%) SD 1.15%				
Overali incidence	10tai	0/100 (0.33%)		3D 4.10%		1/150 (0.67%)	iviean 0.67%	ו עס 1.15%				
Stomach, Glandular: Adenoma												
	-	0/50 (0%)	0/50 (0%)	0/50 (0%)	.	0/50 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%				
Stomach, Glandular: Carcinoma												
S	T-1-1	0/50 (0%)	0/50 (0%)	0/50 (0%)	T-1-1	0/50 (0%)	0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%				
Stomach, Glandular: Carcinoma or Adenoma												
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)				
overall Incidence	Total	0/150 (0%)	Mean 0%	SD 0%	Total	0/150 (0%)	Mean 0%	SD 0%				
Testis: Adenoma		0/50 (00/)	0/50 (40/)	0(50 (00))								
Verall Incidence	Total	0/50 (0%)	2/50 (4%)	0/50 (0%)								
Overall Incidence	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

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL **Page: 32**

Report Date: 01/20/2018

Length of Study: CHRONIC

Male **Female** *Testis: Hemangioma 0/50 (0%)0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/150 (0%) Mean 0% SD 0% *Thymus: Thymoma Benign 1/49 (2%)0/40 (0%)0/47 (0%)0/49 (0%)0/48 (0%)0/50 (0%)**Overall Incidence** Total 1/136 (0.74%) Mean 0.68% SD 1.18% Total 0/147 (0%) Mean 0% SD 0% *Thymus: **Thymoma NOS** 0/49 (0%)0/40 (0%)0/47 (0%)0/49 (0%)0/48 (0%)0/50 (0%)**Overall Incidence** Total 0/136 (0%) Mean 0% SD 0% Total 0/147 (0%) Mean 0% SD 0% *Thymus: Thymoma: Benign, Malignant, NOS 1/49 (2%)0/40 (0%)0/47 (0%)0/49 (0%)0/48 (0%)0/50 (0%)**Overall Incidence** Total 1/136 (0.74%) Mean 0.68% SD 1.18% Total 0/147 (0%) Mean 0% SD 0% *Thyroid Gland: C-Cell: Adenoma 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)1/50 (2%)0/50 (0%)**Overall Incidence** Total 0/150 (0%) Mean 0% SD 0% Total 1/150 (0.67%) Mean 0.67% SD 1.15% *Thyroid Gland: C-Cell: Carcinoma 0/50 (0%)0/50 (0%)0/50 (0%)1/50 (2%)0/50 (0%)0/50 (0%)**Overall Incidence** Total Mean 0% SD 0% 1/150 (0.67%) Mean 0.67% SD 1.15% 0/150 (0%) Total

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Page: 33

Report Date: 01/20/2018

Route: GAVAGE Vehicle: CORN OIL

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** *Thyroid Gland: C-Cell: Carcinoma or Adenoma 0/50 (0%)0/50 (0%)0/50 (0%)1/50 (2%)1/50 (2%)0/50 (0%)**Overall Incidence** Total 0/150 (0%) Mean 0% SD 0% 2/150 (1.33%) Mean 1.33% SD 1.15% Total *Thyroid Gland: Follicular Cell: Adenoma 0/50 (0%)1/50 (2%)0/50 (0%)1/50 (2%)1/50 (2%)0/50 (0%)**Overall Incidence** Total 1/150 (0.67%) Mean 0.67% SD 1.15% 2/150 (1.33%) Mean 1.33% SD 1.15% Total *Thyroid Gland: Follicular Cell: Carcinoma or Adenoma 0/50 (0%)1/50 (2%)0/50 (0%)1/50 (2%)1/50 (2%)0/50 (0%)**Overall Incidence** Total 1/150 (0.67%) Mean 0.67% SD 1.15% 2/150 (1.33%) Mean 1.33% SD 1.15% Total #Tongue: Squamous Cell Carcinoma or Papilloma Squamous 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)1/50 (2%)Overall Incidence Total 0/150 (0%) Mean 0% SD 0% Total 1/150 (0.67%) Mean 0.67% SD 1.15% #Tongue: **Squamous Cell Papilloma** 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)1/50 (2%)**Overall Incidence** Total 0/150 (0%) Mean 0% SD 0% Total 1/150 (0.67%) Mean 0.67% SD 1.15% #Tooth: Odontoma

2/50

SD 2.31%

(4%)

Total

0/50

0/150 (0%)

(0%)

0/50

(0%)

Mean 0%

0/50

SD 0%

(0%)

Total

0/50

2/150 (1.33%)

(0%)

0/50

Mean 1.33%

(0%)

Overall Incidence

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL

Length of Study: CHRONIC

Page: 34

			Male			Female			
Urinary Bladder: Hemangiosarcoma									
verall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 0/149 (0%)	0/49 (0%) Mean 0%	0/50 (0%) SD 0%	
Jrinary Bladder: Mast Cell Tumor									
verall Incidence	Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 0/149 (0%)	0/49 (0%) Mean 0%	0/50 (0%) SD 0%	
Jterus: Adenoma		•••••	•••••					•••••	
verall Incidence					Total	0/50 (0%) 1/150 (0.67%)	1/50 (2%) Mean 0.67%	0/50 (0%) SD 1.15%	
Iterus: Fibroma			•••••					•••••	
verall Incidence					Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%	
lterus: Granular Cell Tumor Ber	nign								
verall Incidence					Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%	
lterus: Hemangioma									
verall Incidence					Total	0/50 (0%) 1/150 (0.67%)	1/50 (2%) Mean 0.67%	0/50 (0%) SD 1.15%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL

Length of Study: CHRONIC

Page: 35

		Male				Female	
#Uterus: Hemangiosarcoma					0/50 (00/)	0/50 (00)	0/50 (00()
Overall Incidence				Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%
#Uterus: Leiomyoma							
Overall Incidence				Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%
#Uterus: Polyp Stromal							
Overall Incidence				Total	0/50 (0%) 0/150 (0%)	0/50 (0%) Mean 0%	0/50 (0%) SD 0%
#Uterus: Sarcoma Stromal						0.75	
Overall Incidence				Total	0/50 (0%) 2/150 (1.33%)	0/50 (0%) Mean 1.33%	2/50 (4%) SD 2.31%
#Uterus: Sarcoma Stromal or Polyp Stromal		•••••					
Overall Incidence				Total	0/50 (0%) 2/150 (1.33%)	0/50 (0%) Mean 1.33%	2/50 (4%) SD 2.31%
#Zymbal's Gland: Carcinoma							
Overall Incidence Total	,	1/50 (2%) Mean 0.67%	0/50 (0%) SD 1.15%	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

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: CORN OIL **Page:** 36

			Male				Female	
#Zymbal's Gland: Carcinoma or Adenoma		2(7-2)	(20)	2/22 (221)		2/22 (221)	2/22 (224)	(20)
Overall Incidence	Total	0/50 (0%) 1/150 (0.67%)	1/50 (2%) Mean 0.67%	0/50 (0%) SD 1.15%	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

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page:** 37

Report Date: 01/20/2018

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	052020304	07/10/07	730	50(1)	33(694)	52.6	Green Tea Extract	
Female								
Battelle Columbus Laboratory	052020304	07/09/07	729	50(5)	34(665)	62.9	Green Tea Extract	

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page:** 38

			Male				Female	
#All Organs: Benign Tumors								
-		43/50 (86%)				20/50 (40%)		
Overall Incidence	Total	43/50 (86%)	Mean 86%	SD 0%	Total	20/50 (40%)	Mean 40%	SD 0%
#All Organs: Malignant Tumors								
		28/50 (56%)				18/50 (36%)		
Overall Incidence	Total	28/50 (56%)	Mean 56%	SD 0%	Total	18/50 (36%)	Mean 36%	SD 0%
#All Organs: Malignant and Benign To	umors							
		49/50 (98%)				29/50 (58%)		
Overall Incidence	Total	49/50 (98%)	Mean 98%	SD 0%	Total	29/50 (58%)	Mean 58%	SD 0%
#All Organs: Hemangioma		2/50 (4%)				0/50 (0%)		
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#All Organs: Hemangiosarcoma								
		5/50 (10%)				2/50 (4%)		
Overall Incidence	Total	5/50 (10%)	Mean 10%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
#All Organs: Hemangiosarcoma or He	emangioma							
		7/50 (14%)				2/50 (4%)		
Overall Incidence	Total	7/50 (14%)	Mean 14%	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

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Page: 39

Report Date: 01/20/2018

Route: GAVAGE Vehicle: WATER

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male Female #All Organs: **Histiocytic Sarcoma** 0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #All Organs: Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type 7/50 (14%) **Overall Incidence** Total 4/50 (8%) Mean 8% SD 0% Total 7/50 (14%) Mean 14% SD 0% #All Organs: **Malignant Schwannoma** 0/50 (0%)0/50 (0%)Overall Incidence Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #All Organs: Osteosarcoma 0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% **#All Organs:** Osteosarcoma or Osteoma 0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% *Adrenal Cortex: Adenoma 1/49 (2%)0/49 (0%)**Overall Incidence** Total 1/49 (2.04%) Mean 2.04% SD 0% Total Mean 0% SD 0% 0/49 (0%)

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE
Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page:** 40

				Male				Female				
*Adrenal Medulla: Pheochromocytoma Benign												
Overall Incidence	Total	0/49 (0/49 (0%)	(0%)	Mean 0%	SD 0%	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%			
*Adrenal Medulla: Pheochromocytoma Mali												
Overall Incidence	Total	0/49 (0/49 (0%)	(0%)	Mean 0%	SD 0%	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%			
*Adrenal Medulla: Pheochromocytoma: Ber		0/49 ((0%)		OD 00/		0/49 (0%)		OD 001			
Overall Incidence	Total	0/49 (0%)		Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0%	SD 0%			
#Blood Vessel: Hemangioma Overall Incidence	Total	0/50 (0%)	(0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%			
#Blood Vessel: Hemangiosarcoma		0/50 (0/50 (0%)					
Overall Incidence	Total	0/50 (0%)	(0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%			
*Bone Marrow: Hemangiosarcoma		1/50 (2%)				1/50 (2%)					
Overall Incidence	Total	1/50 (2%)	Z /0)	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

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER Page: 41

			Male				Female	
*Bone Marrow: Mast Cell Tumor Malignant								
_		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Bone Marrow: Sarcoma								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Bone: Fibroma								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Bone: Hemangioma								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Bone: Osteosarcoma								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Bone: Osteosarcoma or Osteoma								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER Page: 42

			Male				Female			
#Bone: Sarcoma										
		0/50 (0%)				0/50 (0%)				
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		
*Clitoral/Preputial Gland: Mast Cell Tumor										
		0/50 (0%)				0/49 (0%)				
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0%	SD 0%		
#Coagulating Gland: Granular Cell Tumor		0/50 (0%)				0/50 (0%)				
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		
#Coagulating Gland: Sarcoma						(201)				
Overall Incidence	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%		
*Epididymis: Mast Cell Tumor										
		0/50 (0%)								
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%						
#Harderian Gland: Adenoma										
Overell Incidence	Total	7/50 (14%)	Moon 140/	CD 00/	Total	2/50 (4%)	Maan 40/	CD 00/		
Overall Incidence	Total	7/50 (14%)	Mean 14%	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

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

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Report Date: 01/20/2018

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** #Harderian Gland: Carcinoma 1/50 (2%)2/50 (4%)1/50 (2%) **Overall Incidence** Total Mean 2% SD 0% Total 2/50 (4%) Mean 4% SD 0% #Harderian Gland: Carcinoma or Adenoma 8/50 (16%)4/50 (8%) **Overall Incidence** Total 8/50 (16%) Mean 16% SD 0% Total 4/50 (8%) Mean 8% SD 0% #Harderian Gland: **Mast Cell Tumor** 0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% *Heart: Hemangiosarcoma 0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Intestine Large: Cecum: Leiomyosarcoma 0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Intestine Small: Duodenum: Adenoma 0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) SD 0% Mean 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER Page: 44

				Male				Female	
#Intestine Small: Duodenum: Carcinoma									
			(0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)		Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Duodenum: Polyp Adenomatous									
			(0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)		Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Ileum: Adenoma									
Occupation of James	T-1-1		(0%)	M 00/	00.00/	T-1-1	0/50 (0%)	M 00/	OD 00/
Overall Incidence	Total	0/50 (0%)		Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Jejunum: Adenoma									
			(0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)		Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Jejunum: Carcinoma									
		2/50 (4%)				0/50 (0%)		
Overall Incidence	Total	2/50 (4%)		Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Jejunum: Leiomyosarcoma									
			(0%)				1/50 (2%)		
Overall Incidence	Total	0/50 (0%)		Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page:** 45

				Male				Female	
#Intestine Small: Jejunum: Mast Cell Tumor									
Overall Incidence	Total	0/50 (0%)	(0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Site Unspe Adenoma									
Overall Incidence	Total	0/50 (0%)	(0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Site Unspe Carcinoma									
Overall Incidence	Total	2/50 (4%)	(4%)	Mean 4%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Site Unspe Carcinoma or Adenoma			(4%)				0/50 (0%)		
Overall Incidence	Total	2/50 (4%)	` ,	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Site Unspe Leiomyosarcoma									
Overall Incidence	Total	0/50 0/50 (0%)	(0%)	Mean 0%	SD 0%	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%
#Intestine Small: Site Unspe Mast Cell Tumor	cified:	- /							
Overall Incidence	Total	0/50 0/50 (0%)	(0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Version: Aug2017 Contract/Lab: All Laboratories

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER

Length of Study: CHRONIC

			Male			Female						
#Intestine Small: Site Unspecified: Polyp Adenomatous												
		0/50 (0%)				0/50 (0%)						
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%				
*Islets, Pancreatic: Adenoma						(50)						
Overell lesidence	Tatal	1/50 (2%)	Mana 200/	CD 00/	Tatal	1/50 (2%)	Mana 20/	CD 00/				
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%				
*Islets, Pancreatic: Carcinoma												
		1/50 (2%)				0/50 (0%)						
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%				
*Islets, Pancreatic: Carcinoma or Adenoma		2/50 (4%)				1/50 (2%)						
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%				
*Kidney: Renal Tubule: Adenoma												
		1/50 (2%)				0/50 (0%)						
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%				
*Kidney: Renal Tubule: Carcinoma												
		2/50 (4%)				0/50 (0%)						
Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%				

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER Page: 47

				Male				Female	
*Kidney: Renal Tubule: Carcinoma or Adenoma									
		,	6%)				0/50 (0%)		
Overall Incidence	Total	3/50 (6%)		ean 6%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Kidney: Renal Tubule: Mast Cell Tumor									
		,	0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Me	ean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Kidney: Renal Tubule: Renal Mesenchymal Tumor		0/50 ((0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	,	ean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Liver: Cholangiocarcinoma Overall Incidence	Total		0%)	ean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Liver: Hemangioma			4%)				0/50 (0%)		
Overall Incidence	Total	2/50 (4%)	,	ean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Liver: Hemangiosarcoma		3/50 (6	6%)				1/50 (2%)		
Overall Incidence	Total	3/50 (6%)	,	ean 6%	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

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Vehicle: WATER

Page: 48

			Male				Female			
*Liver: Hepatoblastoma Overall Incidence	Total	2/50 (4%)	Mean 4%	SD 0%	Total	0/50 (0%)	Magn 00/	SD 00/		
Overall incidence	Total	2/50 (4%)	iviean 4%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		
*Liver: Hepatocellular Adenoma		35/50 (70%)				12/50 (24%)				
Overall Incidence	Total	35/50 (70%)	Mean 70%	SD 0%	Total	12/50 (24%)	Mean 24%	SD 0%		
*Liver: Hepatocellular Carcinoma		15/50 (30%)				5/50 (10%)				
Overall Incidence	Total	15/50 (30%)	Mean 30%	SD 0%	Total	5/50 (10%)	Mean 10%	SD 0%		
*Liver: Hepatocellular Carcinoma	or Hepatobla	astoma 17/50 (34%)				5/50 (10%)				
Overall Incidence	Total	17/50 (34%)	Mean 34%	SD 0%	Total	5/50 (10%)	Mean 10%	SD 0%		
*Liver: Hepatocellular Carcinoma	or Hepatoce	Ilular Adenoma 40/50 (80%)				14/50 (28%)				
Overall Incidence	Total	40/50 (80%)	Mean 80%	SD 0%	Total	14/50 (28%)	Mean 28%	SD 0%		
*Liver: Hepatocellular Carcinoma	, Hepatocellu	lar Adenoma, or Hepatobla 40/50 (80%)	astoma			14/50 (28%)				
Overall Incidence	Total	40/50 (80%)	Mean 80%	SD 0%	Total	14/50 (28%)	Mean 28%	SD 0%		

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page**: 49

		Male			Female							
*Liver: Hepatocholangiocarcinoma 0/50 (0%) 0/50 (0%)												
	0/50 (0%)				0/50 (0%)							
Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%					
	0/50 (0%)				0/50 (0%)							
Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%					
enoma	12/50 (24%)				5/50 (10%)							
Total	12/50 (24%)	Mean 24%	SD 0%	Total	5/50 (10%)	Mean 10%	SD 0%					
rcinoma					1/50 (29/)							
Total	2/50 (4%)	Mean 4%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%					
	eolar/Bronchiolar Adenor				6/50 (12%)							
Total	14/50 (28%)	Mean 28%	SD 0%	Total	6/50 (12%)	Mean 12%	SD 0%					
	0(50 (00))				0/50 (00/)							
Total	,	Moon 00/	SD 00/	Total	` '	Moon 09/	SD 0%					
	Total Protal Total Total Total Total	O/50 (0%) Total O/50 (0%) O/50 (0%) O/50 (0%) Total O/50 (0%) Penoma 12/50 (24%) Total 12/50 (24%) Total 2/50 (4%) Total 2/50 (4%) Total 2/50 (4%) Total 14/50 (28%) Total 14/50 (28%) O/50 (0%)	Oma O/50 (0%) Total O/50 (0%) Mean 0% O/50 (0%) Total O/50 (0%) Mean 0% enoma 12/50 (24%) Total 12/50 (24%) Mean 24% rcinoma 2/50 (4%) Total 2/50 (4%) Mean 4% rcinoma or Alveolar/Bronchiolar Adenoma 14/50 (28%) Total 14/50 (28%) Mean 28%	Oma O/50 (0%) Total O/50 (0%) Mean 0% SD 0% O/50 (0%) Total O/50 (0%) Mean 0% SD 0% Penoma 12/50 (24%) Total 12/50 (24%) Total 12/50 (4%) Total 2/50 (4%) Total 2/50 (4%) Mean 4% SD 0% Preinoma 2/50 (4%) Total 2/50 (4%) Total 2/50 (28%) Total 14/50 (28%) Total 14/50 (28%) Mean 28% SD 0%	Oma O/50 (0%) Total 0/50 (0%) Mean 0% SD 0% Total O/50 (0%) Total 0/50 (0%) Mean 0% SD 0% Total enoma 12/50 (24%) Total 12/50 (24%) Mean 24% SD 0% Total rcinoma 2/50 (4%) Total 2/50 (4%) Mean 4% SD 0% Total rcinoma or Alveolar/Bronchiolar Adenoma 14/50 (28%) Total 14/50 (28%) Total 14/50 (28%) Mean 28% SD 0% Total	Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Penoma 12/50 (24%) 5/50 (10%) Total 12/50 (24%) Mean 24% SD 0% Total 5/50 (10%) Total 2/50 (4%) Mean 4% SD 0% Total 1/50 (2%) Total 2/50 (4%) Mean 4% SD 0% Total 1/50 (2%) Total 2/50 (4%) Mean 4% SD 0% Total 1/50 (2%) Total 14/50 (28%) Mean 28% SD 0% Total 6/50 (12%) Total 14/50 (28%) Mean 28% SD 0% Total 6/50 (12%)	Display					

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page:** 50

			Male			Female			
*Lung: Mast Cell Tumor									
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
#Lymph Node: Hemangiosarcoma									
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
#Lymph Node: Mast Cell Tumor		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
#Lymph Node, Mandibular: Mast Cell Tumor		0/50 (0%)		OD 004		0/50 (0%)		OD 001	
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
#Lymph Node, Mesenteric: Hemangioma									
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
#Lymph Node, Mesenteric: Hemangiosarcoma		1/50 (2%)				0/50 (0%)			
Overall Incidence	Total	1/50 (2%) 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

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Vehicle: WATER

Page: 51

			Male				Female			
#Lymph Node, Mesenteric: Mast Cell Tumor		0/50 (0%)				0/50 (0%)				
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		
#Mammary Gland: Adenoma						(22)				
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%		
#Mammary Gland: Carcinoma		0/50 (0%)				0/50 (0%)				
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		
#Mammary Gland: Carcinoma or Adenoma		0/50 (0%)				0/50 (0%)				
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		
#Mammary Gland: Fibroma, Fibroadenoma or										
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%		
#Mammary Gland: Fibroma, Fibroadenoma, Ca						0/50 (0%)				
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE

Length of Study: CHRONIC

Vehicle: WATER

Page: 52

			Male				Female	
#Mesentery: Hemangioma Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Mesentery: Hemangiosarcoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Mesentery: Lipoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Mesentery: Sarcoma Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Nose: Adenoma		0/50 (0%)				1/48 (2%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/48 (2.08%)	Mean 2.08%	SD 0%
*Nose: Polyp		0/50 (0%)				0/48 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/48 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page:** 53

			Male				Female	
#Oral Cavity (Oral Mucos		nx, Tooth, Gingiva):						
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Oral Cavity (Oral Mucos								
Squamous Cell Carcine								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#0								
#Oral Cavity (Oral Mucos Squamous Cell Carcino		quamous, or Papilloma						
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Oral Mucosa:								
Squamous Cell Carcine	oma	0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Ovary:								
Cystadenocarcinoma						4/50 (20/)		
Overall Incidence					Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%
*Ovary: Cystadenoma								
- •						3/50 (6%)		
Overall Incidence					Total	3/50 (6%)	Mean 6%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER

Length of Study: CHRONIC

Page: 54

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

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER

Length of Study: CHRONIC

Male **Female** *Ovary: Luteoma 0/50 (0%)**Overall Incidence** Total 0/50 (0%) Mean 0% SD 0% *Ovary: Sarcoma 1/50 (2%)**Overall Incidence** Total 1/50 (2%) Mean 2% SD 0% *Ovary: **Thecoma Malignant** 0/50 (0%)Overall Incidence Total 0/50 (0%) Mean 0% SD 0% *Ovary: **Tubulostromal Adenoma** 0/50 (0%)SD 0% **Overall Incidence** Total Mean 0% 0/50 (0%) *Pancreas: **Mast Cell Tumor** 0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/50 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% *Parathyroid Gland: Adenoma 0/41 (0%)0/35 (0%)**Overall Incidence** Mean 0% Total 0/41 (0%) SD 0% Total Mean 0% SD 0% 0/35 (0%)

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Version: Aug2017 Contract/Lab: All Laboratories

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE

Length of Study: CHRONIC

Vehicle: WATER

Page: 56

			Male				Female	
*Pituitary Gland: Pars Dist Adenoma	alis or Unspec	ified Site:						
		1/49 (2%)				0/50 (0%)		
Overall Incidence	Total	1/49 (2.04%)	Mean 2.04%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Pituitary Gland: Pars Dist Carcinoma	alis or Unspec	ified Site:						
		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Pituitary Gland: Pars Dist Carcinoma or Adenoma								
		1/49 (2%)				0/50 (0%)		
Overall Incidence	Total	1/49 (2.04%)	Mean 2.04%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Pituitary Gland: Pars Intel								
		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Pituitary Gland: Pars Intel								
		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Pituitary Gland: Pars Intel Carcinoma or Adenoma								
		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page:** 57

			Male				Female	
*Pituitary Gland: Pars Interm Schwannoma Malignant	nedia:							
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Prostate: Mast Cell Tumor								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%				
*Salivary Glands: Adenoma		2/22 (201)				(201)		
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Salivary Glands: Carcinoma								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Salivary Glands: Carcinoma or Adenoma								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Salivary Glands: Hemangiosarcoma								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page:** 58

			Male				Female	
*Salivary Glands: Mast Cell Tumor								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Salivary Glands: Myxosarcoma								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Seminal Vesicle: Adenoma	•••••							
		0/50 (0%)						
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%				
#Seminal Vesicle: Fibroma		0/50 (0%)						
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%				
#Skeletal Muscle: Osteosarcoma								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skeletal Muscle: Rhabdomyosarcoma		0/50 (02/)				0/50 /40()		
Overell Incidence	Total	0/50 (0%)	Maan 00/	CD 00/	Total	2/50 (4%)	Maan 40/	CD 00/
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page:** 59

			Male				Female	
#Skeletal Muscle: Rhabdomyosarcoma or R	thabdomyoma	0/50 (0%)				2/50 (4%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	2/50 (4%)	Mean 4%	SD 0%
#Skeletal Muscle: Sarcoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Basal Cell Carcinoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Basal Cell Carcinoma or	Basosquamous	Tumor (malignant or N 0/50 (0%)	NOS)			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Basal Cell Carcinoma, Ba NOS), or Trichoepithelion		ma, Basosquamous Tu	mor (benign, maligna	ant or		0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Basal or Sq. Cell Carcino Adenoma, Papilloma, Sq	ma, Carcinoma	, Basosq. Tumor (M or	B), Basal Cell Adeno			0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Version: Aug2017 Contract/Lab: All Laboratories

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER

Length of Study: CHRONIC

GAVAGE E: WATER **Page:** 60

			Male				Female	
#Skin: Fibroma								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Fibroma, Fibrosarcom Hemangiopericytoma	a, Sarcoma, Myxc	oma, Myxosarcoma, Mali	gnant Fibrous Histic	ocytoma, or				
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Skin: Fibroma, Fibrosarcoma	a, Sarcoma, Myxo	oma, Myxosarcoma, or M 0/50 (0%) 0/50 (0%)	alignant Fibrous His	stiocytoma SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Skin: Fibrosarcoma	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
Fibrosarcoma Overall Incidence #Skin:		0/50 (0%)		SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
Fibrosarcoma Overall Incidence #Skin: Fibrosarcoma, Sarcom		0/50 (0%)			Total Total	` '	Mean 0% Mean 0%	SD 0% SD 0%
Fibrosarcoma Overall Incidence #Skin:	na, Myxosarcoma	0/50 (0%) , or Malignant Fibrous Hi 0/50 (0%)	stiocytoma			0/50 (0%)		

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page:** 61

			Male				Female	
#Skin: Hemangiosarcoma								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
	10tai	` ,				0/30 (0%)		
#Skin: Keratoacanthoma								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Lipoma		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Malignant Fibrous Histic						0/50 (00/)		
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Skin: Melanoma Benign								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Neurofibrosarcoma or S						0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

ontrol Animal Groups SE Page: 62

Report Date: 01/20/2018

Route: GAVAGE Vehicle: WATER

Length of Study: CHRONIC

			Male				Female	
#Skin: Neurofibrosarcoma, Ne	urofibroma, or S	Schwannoma (benign, ma	alignant or NOS)					
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Osteosarcoma								
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Pilomatrixoma		0/50 (00)				0/50 (00/)		
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Sarcoma		0/50 (00)				0/50 (00/)		
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Schwannoma Malignan	t							
J		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin:		Carcinoma, Basosquamo						
		0/50 (0%)				0/50 (0%)		
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page:** 63

			Male			Female			
#Skin: Squamous Cell Papilloma	a								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
#Skin:									
Squamous Cell Papilloma	a or Papilloma	0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
#Skin: Squamous Cell Papilloma Overall Incidence	a, Papilloma, So	quamous Cell Carcino 0/50 (0%) 0/50 (0%)	ma or Keratoacanthon Mean 0%	na SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
#Skin: Squamous Cell Papilloma Overall Incidence		r Keratoacanthoma 0/50 (0%) 0/50 (0%)	Mean 0%	05 av		0/50 (0%)			
		0/30 (0/8)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
*Spleen: Hemangiosarcoma			iviean 0%	SD 0%	Total		Mean 0%	SD 0%	
-	Total	2/50 (4%) 2/50 (4%)	Mean 4%	SD 0%	Total Total	0/50 (0%) 0/50 (0%) 0/50 (0%)	Mean 0% Mean 0%	SD 0% SD 0%	
Hemangiosarcoma		2/50 (4%)				0/50 (0%)			

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Tumor Incidence for Selected Control Animal Groups **Route:** GAVAGE Page: 64 Report Date: 01/20/2018

Species: MICE Strain: B6C3F1/N

Vehicle: WATER

Length of Study: CHRONIC

				Female									
#Stomach, Forestomach: Squamous Cell Carcinoma	Squamous Cell Carcinoma or Papilloma Squamous												
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	2/50 (4%) 2/50 (4%)	Mean 4%	SD 0%					
#Stomach, Forestomach: Squamous Cell Papilloma		0/50 (0%)				1/50 (2%)							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%					
#Stomach, Glandular: Adenoma		0/50 (0%)				0/50 (0%)							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%					
#Stomach, Glandular: Carcinoma		0/50 (0%)				0/50 (0%)							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%					
#Stomach, Glandular: Carcinoma or Adenoma		0/50 (0%)				0/50 (0%)							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%					
*Testis: Adenoma		(BC)											
Overall Incidence	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%									

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Tumor Incidence for Selected Control Animal Groups Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Route: GAVAGE Vehicle: WATER **Page:** 65

*Testis: Hemangioma			Male		Female				
		0/50 (0%)							
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%					
*Thymus: Thymoma Benign									
Overall Incidence	Total	0/44 (0%) 0/44 (0%)	Mean 0%	SD 0%	Total	0/47 (0%) 0/47 (0%)	Mean 0%	SD 0%	
*Thymus: Thymoma NOS		0/44 (0%)				0/47 (0%)			
Overall Incidence	Total	0/44 (0%)	Mean 0%	SD 0%	Total	0/47 (0%)	Mean 0%	SD 0%	
*Thymus: Thymoma: Benign, Malig		0/44 (0%)				0/47 (0%)			
Overall Incidence	Total	0/44 (0%)	Mean 0%	SD 0%	Total	0/47 (0%)	Mean 0%	SD 0%	
*Thyroid Gland: C-Cell: Adenoma									
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
*Thyroid Gland: C-Cell: Carcinoma		0/50 (0%)				0/50 (0%)			
Overall Incidence	Total	0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page:** 66

			Male	Female									
*Thyroid Gland: C-Cell: Carcinoma or Adenoma 0/50 (0%) 0/50 (0%)													
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%					
*Thyroid Gland: Follicular Cell: Adenoma	:	•••••			•••••		•••••	•••••					
Overall Incidence	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%					
*Thyroid Gland: Follicular Cell Carcinoma or Adenoma	:	1/50 (2%)				0/50 (0%)							
Overall Incidence	Total	1/50 (2%)	Mean 2%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%					
#Tongue: Squamous Cell Carcinoma o		a Squamous				0/50 (0%)							
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%					
#Tongue: Squamous Cell Papilloma													
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%					
#Tooth: Odontoma		0/50 (00/)				0/50 /00/							
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%					

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER

Length of Study: CHRONIC

Page: 67

			Male	Female				
*Urinary Bladder: Hemangiosarcoma								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
	ı Olal			3D 0%	ı Olal		iviean 0%	0% ط
'Urinary Bladder: Mast Cell Tumor								
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Uterus: Adenoma								
Overall Incidence					Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Uterus: Fibroma								
Overall Incidence					Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Uterus: Granular Cell Tumor B	enign					0/50 (00/)		
Overall Incidence					Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Uterus: Hemangioma								
Overall Incidence					Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*· Denominator is number of a			•••••				•••••	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER

Length of Study: CHRONIC

Contract/Lab: All Laboratories

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			Male		Female				
#Uterus: Hemangiosarcoma									
Overall Incidence					Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
#Uterus: Leiomyoma									
Overall Incidence					Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
#Uterus: Polyp Stromal									
Overall Incidence					Total	2/50 (4%) 2/50 (4%)	Mean 4%	SD 0%	
#Uterus: Sarcoma Stromal									
Overall Incidence					Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
#Uterus: Sarcoma Stromal or Polyp									
Overall Incidence					Total	2/50 (4%) 2/50 (4%)	Mean 4%	SD 0%	
#Zymbal's Gland: Carcinoma									
Overall Incidence	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: GAVAGE Vehicle: WATER **Page:** 69

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

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

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Report Date: 01/20/2018

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
					Male		
Battelle Northwest	052060104	10/06/08	729	50(5)	38(708)	52.1	Antimony trioxide
Battelle Northwest	052072504	08/31/09	729	50(5)	35(697)	51.1	2,3-Butanedione
Battelle Northwest	052051504	05/05/08	729	50(5)	39(709)	52.6	Metal Working Fluids: CIMSTAR 3800
Battelle Northwest	052052304	08/03/09	729	50(5)	38(692)	52.4	Metal Working Fluids: TRIM VX
Battelle Northwest	051047204	01/31/11	729	50(5)	40(705)	52.7	p-Chloro-a,a,a-trifluorotoluene
					Female		
Battelle Northwest	052060104	10/06/08	731	50(5)	36(692)	54.1	Antimony trioxide
Battelle Northwest	052072504	08/31/09	731	50(5)	36(697)	51.0	2,3-Butanedione
Battelle Northwest	052051504	05/05/08	731	50(5)	39(696)	59.2	Metal Working Fluids: CIMSTAR 3800
Battelle Northwest	052052304	08/03/09	731	50(5)	35(692)	57.9	Metal Working Fluids: TRIM VX
Battelle Northwest	051047204	01/31/11	731	50(5)	38(700)	55.9	p-Chloro-a,a,a-trifluorotoluene

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
#All Organs: Benign Tumors								
		37/50 (74%) 32/50 (64%)	22/50 (44%) 32/50 (64%)	39/50 (78%)		25/50 (50%) 23/50 (46%)	15/50 (30%) 24/50 (48%)	26/50 (52%)
Overall Incidence	Total	162/250 (64.8%)	Mean 64.8%	SD 13.16%	Total	113/250 (45.2%)	Mean 45.2%	SD 8.79%
#All Organs: Malignant Tumors								
		25/50 (50%) 32/50 (64%)	27/50 (54%) 25/50 (50%)	26/50 (52%)		25/50 (50%) 27/50 (54%)	24/50 (48%) 24/50 (48%)	30/50 (60%)
Overall Incidence	Total	135/250 (54%)	Mean 54%	SD 5.83%	Total	130/250 (52%)	Mean 52%	SD 5.1%
#All Organs: Malignant and Benign To	umors	45/50 (90%)	37/50 (74%)	46/50 (92%)		35/50 (70%)	34/50 (68%)	41/50 (82%)
		42/50 (84%)	44/50 (88%)	. ,		38/50 (76%)	38/50 (76%)	
Overall Incidence	Total	214/250 (85.6%)	Mean 85.6%	SD 7.13%	Total	186/250 (74.4%)	Mean 74.4%	SD 5.55%
All Organs: Hemangioma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	1/50 (2%)		0/50 (0%) 1/50 (2%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
All Organs: Hemangiosarcoma								
		2/50 (4%) 0/50 (0%)	1/50 (2%) 2/50 (4%)	1/50 (2%)		4/50 (8%) 2/50 (4%)	0/50 (0%) 3/50 (6%)	3/50 (6%)
Overall Incidence	Total	6/250 (2.4%)	Mean 2.4%	SD 1.67%	Total	12/250 (4.8%)	Mean 4.8%	SD 3.03%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories

/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

Length of Study: CHRONIC Male **Female** #All Organs: Hemangiosarcoma or Hemangioma 2/50 (4%)1/50 (2%)2/50 (4%)4/50 (8%)0/50 (0%)3/50 (6%)0/50 (0%)2/50 (4%)3/50 (6%)3/50 (6%)13/250 (5.2%) Overall Incidence Total 7/250 (2.8%) Mean 2.8% SD 1.79% Total Mean 5.2% SD 3.03% #All Organs: **Histiocytic Sarcoma** (0%) 1/50 (2%)0/50 1/50 (2%)3/50 (6%)1/50 (2%)2/50 (4%)0/50 (0%)0/50 (0%)4/50 (8%)2/50 (4%)Overall Incidence Total 2/250 (0.8%) Mean 0.8% SD 1.1% Total 12/250 (4.8%) Mean 4.8% SD 2.28% #All Organs: Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type 4/50 (8%)6/50 (12%)3/50 (6%)7/50 (14%)9/50 (18%)18/50 (36%)6/50 (12%)6/50 (12%)10/50 (20%)9/50 (18%)**Overall Incidence** Total 25/250 (10%) Mean 10% SD 2.83% Total 53/250 (21.2%) Mean 21.2% SD 8.56% **#All Organs: Malignant Schwannoma** 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%)0/50 (0%)**Overall Incidence** Total 1/250 (0.4%) Mean 0.4% SD 0.89% Total 0/250 (0%) Mean 0% SD 0% #All Organs: Osteosarcoma 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)

SD 0%

0/50

0/250 (0%)

Total

(0%)

0/50

(0%)

SD 0%

Mean 0%

Total

0/50

0/250 (0%)

(0%)

0/50

Mean 0%

(0%)

Overall Incidence

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
#All Organs: Osteosarcoma or Osteor	ma							
		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%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
Adrenal Cortex:								
		4/49 (8%) 3/50 (6%)	2/50 (4%) 0/50 (0%)	9/49 (18%)		1/50 (2%) 0/50 (0%)	1/50 (2%) 0/50 (0%)	0/49 (0%)
Overall Incidence	Total	18/248 (7.26%)	Mean 7.31%	SD 6.88%	Total	2/249 (0.8%)	Mean 0.8%	SD 1.1%
*Adrenal Medulla: Pheochromocytoma Ben								
		0/49 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	1/48 (2%)		0/50 (0%) 2/50 (4%)	1/50 (2%) 1/50 (2%)	1/49 (2%)
Overall Incidence	Total	1/247 (0.4%)	Mean 0.42%	SD 0.93%	Total	5/249 (2.01%)	Mean 2.01%	SD 1.41%
Adrenal Medulla: Pheochromocytoma Mal	ignant							
		0/49 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/48 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/49 (0%)
Overall Incidence	Total	0/247 (0%)	Mean 0%	SD 0%	Total	0/249 (0%)	Mean 0%	SD 0%
*Adrenal Medulla: Pheochromocytoma: Be	nign, Complex	, Malignant, NOS						
		0/49 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	1/48 (2%)		0/50 (0%) 2/50 (4%)	1/50 (2%) 1/50 (2%)	1/49 (2%)
Overall Incidence	Total	1/247 (0.4%)	Mean 0.42%	SD 0.93%	Total	5/249 (2.01%)	Mean 2.01%	SD 1.41%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/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	
#Blood Vessel: Hemangioma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
#Blood Vessel: Hemangiosarcoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 1/50 (2%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
*Bone Marrow: Hemangiosarcoma								
		0/49 (0%) 0/50 (0%)	0/48 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/49 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/247 (0%)	Mean 0%	SD 0%	Total	0/249 (0%)	Mean 0%	SD 0%
Bone Marrow: Mast Cell Tumor Malignant								
		0/49 (0%) 1/50 (2%)	1/48 (2%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/49 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	2/247 (0.81%)	Mean 0.82%	SD 1.12%	Total	0/249 (0%)	Mean 0%	SD 0%
Bone Marrow: Sarcoma								
		0/49 (0%) 0/50 (0%)	0/48 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/49 (0%)	0/50 (0%) 0/50 (0%)	1/50 (2%)
Overall Incidence	Total	0/247 (0%)	Mean 0%	SD 0%	Total	1/249 (0.4%)	Mean 0.4%	SD 0.89%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: INHALATION Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

			Male				Female	
#Bone: Fibroma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
#Bone: Hemangioma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
#Bone: Osteosarcoma								
		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%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)		SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
#Bone: Osteosarcoma or Osteoma								
		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%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)		SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
#Bone: Sarcoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	1/50 (2%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION

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Report Date: 01/20/2018

Vehicle: AIR

			Male				Female	
Clitoral/Preputial Gland: Mast Cell Tumor								
		0/50 (0%) 0/49 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/48 (0%) 0/46 (0%)	0/47 (0%) 0/48 (0%)	0/44 (0%)
Overall Incidence	Total	0/249 (0%)	Mean 0%	SD 0%	Total	0/233 (0%)	Mean 0%	SD 0%
Coagulating Gland: Granular Cell Tumor								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
Coagulating Gland:			•••••					
		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%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
Epididymis: Mast Cell Tumor								
		0/50 (0%) 0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/249 (0%)	Mean 0%	SD 0%				
#Harderian Gland: Adenoma								
		6/50 (12%) 4/50 (8%)	3/50 (6%) 5/50 (10%)	7/50 (14%)		3/50 (6%) 1/50 (2%)	3/50 (6%) 2/50 (4%)	2/50 (4%)
Overall Incidence	Total	25/250 (10%)	Mean 10%	SD 3.16%	Total	11/250 (4.4%)	Mean 4.4%	SD 1.67%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Version: Aug2017 Contract/Lab: All Laboratories

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: INHALATION Vehicle: AIR

			Male				Female	
#Harderian Gland: Carcinoma								
		1/50 (2%) 2/50 (4%)	0/50 (0%) 1/50 (2%)	5/50 (10%)		4/50 (8%) 3/50 (6%)	1/50 (2%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	9/250 (3.6%)	Mean 3.6%	SD 3.85%	Total	8/250 (3.2%)	Mean 3.2%	SD 3.63%
#Harderian Gland: Carcinoma or Adenoma								
		7/50 (14%) 6/50 (12%)	3/50 (6%) 6/50 (12%)	12/50 (24%)		7/50 (14%) 4/50 (8%)	4/50 (8%) 2/50 (4%)	2/50 (4%)
Overall Incidence	Total	34/250 (13.6%)	Mean 13.6%	SD 6.54%	Total	19/250 (7.6%)	Mean 7.6%	SD 4.1%
#Harderian Gland: Mast Cell Tumor								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
*Heart: Hemangiosarcoma								
-		0/50 (0%) 0/50 (0%)	1/50 (2%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	0/250 (0%)	Mean 0%	SD 0%
#Intestine Large: Cecum: Leiomyosarcoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/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	
fIntestine Small: Duodenum: Adenoma								
		2/50 (4%) 2/50 (4%)	0/50 (0%) 0/50 (0%)	1/50 (2%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	1/50 (2%)
Overall Incidence	Total	5/250 (2%)	Mean 2%	SD 2%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
fintestine Small: Duodenum: Carcinoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
fIntestine Small: Duodenum: Polyp Adenomatous								
		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%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	0/250 (0%)	Mean 0%	SD 0%
fintestine Small: Ileum: Adenoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 1/50 (2%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
fIntestine Small: Jejunum: Adenoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
#Intestine Small: Jejunum: Carcinoma								
		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%)	0/50 (0%)
Overall Incidence	Total	2/250 (0.8%)	Mean 0.8%	SD 1.1%	Total	0/250 (0%)	Mean 0%	SD 0%
#Intestine Small: Jejunum: Leiomyosarcoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
#Intestine Small: Jejunum: Mast Cell Tumor								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
#Intestine Small: Site Unspe Adenoma								
		2/50 (4%) 2/50 (4%)	0/50 (0%) 0/50 (0%)	1/50 (2%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 1/50 (2%)	1/50 (2%)
Overall Incidence	Total	5/250 (2%)	Mean 2%	SD 2%	Total	2/250 (0.8%)	Mean 0.8%	SD 1.1%
#Intestine Small: Site Unspec								
		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%)	0/50 (0%)
Overall Incidence	Total	2/250 (0.8%)	Mean 0.8%	SD 1.1%	Total	0/250 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
#Intestine Small: Site Uns Carcinoma or Adenoma								
		3/50 (6%) 2/50 (4%)	0/50 (0%) 1/50 (2%)	1/50 (2%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 1/50 (2%)	1/50 (2%)
Overall Incidence	Total	7/250 (2.8%)	Mean 2.8%	SD 2.28%	Total	2/250 (0.8%)	Mean 0.8%	SD 1.1%
#Intestine Small: Site Uns Leiomyosarcoma	specified:							
		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%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
#Intestine Small: Site Uns Mast Cell Tumor	specified:							
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/50 (0%) 0/250 (0%)	0/50 (0%) Mean 0%	SD 0%	Total	0/50 (0%) 0/250 (0%)	0/50 (0%) Mean 0%	SD 0%
#Intestine Small: Site Uns Polyp Adenomatous	specified:							
		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%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	0/250 (0%)	Mean 0%	SD 0%
'Islets, Pancreatic: Adenoma								
		0/49 (0%) 0/50 (0%)	0/48 (0%) 1/50 (2%)	2/50 (4%)		0/50 (0%) 0/50 (0%)	0/49 (0%) 0/50 (0%)	1/50 (2%)
Overall Incidence	Total	3/247 (1.21%)	Mean 1.2%	SD 1.79%	Total	1/249 (0.4%)	Mean 0.4%	SD 0.89%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/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	
*Islets, Pancreatic: Carcinoma								
		0/49 (0%) 0/50 (0%)	0/48 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/247 (0%)	Mean 0%	SD 0%	Total	0/249 (0%)	Mean 0%	SD 0%
*Islets, Pancreatic: Carcinoma or Adenoma								
		0/49 (0%) 0/50 (0%)	0/48 (0%) 1/50 (2%)	2/50 (4%)		0/50 (0%) 0/50 (0%)	0/49 (0%) 0/50 (0%)	1/50 (2%)
Overall Incidence	Total	3/247 (1.21%)	Mean 1.2%	SD 1.79%	Total	1/249 (0.4%)	Mean 0.4%	SD 0.89%
*Kidney: Renal Tubule: Adenoma								
		0/50 (0%) 0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/49 (0%)	0/50 (0%) 1/50 (2%)	0/50 (0%)
Overall Incidence	Total	0/249 (0%)	Mean 0%	SD 0%	Total	1/249 (0.4%)	Mean 0.4%	SD 0.89%
*Kidney: Renal Tubule: Carcinoma								
		0/50 (0%) 0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/49 (0%)	1/50 (2%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/249 (0%)	Mean 0%	SD 0%	Total	1/249 (0.4%)	Mean 0.4%	SD 0.89%
*Kidney: Renal Tubule: Carcinoma or Adenoma								
		0/50 (0%) 0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/49 (0%)	1/50 (2%) 1/50 (2%)	0/50 (0%)
Overall Incidence	Total	0/249 (0%)	Mean 0%	SD 0%	Total	2/249 (0.8%)	Mean 0.8%	SD 1.1%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
*Kidney: Renal Tubule: Mast Cell Tumor								
		0/50 (0%) 0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/49 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/249 (0%)	Mean 0%	SD 0%	Total	0/249 (0%)	Mean 0%	SD 0%
*Kidney: Renal Tubule: Renal Mesenchymal Tumor								
		0/50 (0%) 0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/49 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/249 (0%)	Mean 0%	SD 0%	Total	0/249 (0%)	Mean 0%	SD 0%
*Liver: Cholangiocarcinoma					•••••			
		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%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	0/250 (0%)	Mean 0%	SD 0%
Liver: Hemangioma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
Liver: Hemangiosarcoma								
		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%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
*Liver: Hepatoblastoma								
		2/50 (4%) 0/50 (0%)	1/50 (2%) 1/50 (2%)	0/50 (0%)		0/50 (0%) 1/50 (2%)	1/50 (2%) 0/50 (0%)	1/50 (2%)
Overall Incidence	Total	4/250 (1.6%)	Mean 1.6%	SD 1.67%	Total	3/250 (1.2%)	Mean 1.2%	SD 1.1%
*Liver: Hepatocellular Adenoma								
		30/50 (60%) 23/50 (46%)	17/50 (34%) 25/50 (50%)	24/50 (48%)		11/50 (22%) 9/50 (18%)	6/50 (12%) 12/50 (24%)	14/50 (28%)
Overall Incidence	Total	119/250 (47.6%)	Mean 47.6%	SD 9.32%	Total	52/250 (20.8%)	Mean 20.8%	SD 6.1%
*Liver: Hepatocellular Carcinon	na							
		15/50 (30%)	17/50 (34%)	11/50 (22%)		6/50 (12%)	5/50 (10%)	10/50 (20%)
Overall Incidence	Total	21/50 (42%) 72/250 (28.8%)	8/50 (16%) Mean 28.8%	SD 10.16%	Total	7/50 (14%) 35/250 (14%)	7/50 (14%) Mean 14%	SD 3.74%
*Liver: Hepatocellular Carcinon	na or Hepatobl	astoma						
•	·	16/50 (32%) 21/50 (42%)	18/50 (36%) 9/50 (18%)	11/50 (22%)		6/50 (12%) 7/50 (14%)	6/50 (12%) 7/50 (14%)	10/50 (20%)
Overall Incidence	Total	75/250 (30%)	Mean 30%	SD 9.9%	Total	36/250 (14.4%)	Mean 14.4%	SD 3.29%
*Liver: Hepatocellular Carcinon	na or Hepatoce	ellular Adenoma						
	-	39/50 (78%) 34/50 (68%)	31/50 (62%) 30/50 (60%)	32/50 (64%)		14/50 (28%) 15/50 (30%)	11/50 (22%) 18/50 (36%)	20/50 (40%)
Overall Incidence	Total	166/250 (66.4%)	Mean 66.4%	SD 7.13%	Total	78/250 (31.2%)	Mean 31.2%	SD 7.01%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories

Tumor Incidence for Selected Control Animal Groups
Route: INHALATION

Species: MICE Strain: B6C3F1/N

Vehicle: AIR

			Male				Female	
*Liver:								
Hepatocellular Carcinoma,	, Hepatocell	ular Adenoma, or Hepatol	blastoma					
		39/50 (78%) 34/50 (68%)	32/50 (64%) 31/50 (62%)	32/50 (64%)		14/50 (28%) 15/50 (30%)	12/50 (24%) 18/50 (36%)	20/50 (40%)
Overall Incidence	Total	168/250 (67.2%)	Mean 67.2%	SD 6.42%	Total	79/250 (31.6%)	Mean 31.6%	SD 6.39%
*Liver: Hepatocholangiocarcinom	a							
		1/50 (2%) 0/50 (0%)	1/50 (2%) 3/50 (6%)	0/50 (0%)		1/50 (2%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	5/250 (2%)	Mean 2%	SD 2.45%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
*Liver: Mast Cell Tumor								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
*Lung: Alveolar/Bronchiolar Aden	ıoma							
		10/50 (20%) 6/50 (12%)	5/50 (10%) 11/50 (22%)	5/50 (10%)		1/50 (2%) 4/50 (8%)	3/50 (6%) 5/50 (10%)	1/50 (2%)
Overall Incidence	Total	37/250 (14.8%)	Mean 14.8%	SD 5.76%	Total	14/250 (5.6%)	Mean 5.6%	SD 3.58%
*Lung: Alveolar/Bronchiolar Carci	inoma							
		4/50 (8%) 10/50 (20%)	5/50 (10%) 6/50 (12%)	8/50 (16%)		2/50 (4%) 5/50 (10%)	3/50 (6%) 0/50 (0%)	4/50 (8%)
Overall Incidence	Total	33/250 (13.2%)	Mean 13.2%	SD 4.82%	Total	14/250 (5.6%)	Mean 5.6%	SD 3.85%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Version: Aug2017 Contract/Lab: All Laboratories

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: INHALATION Vehicle: AIR

			Male				Female	
*Lung: Alveolar/Bronchiolar Ca	arcinoma or Alv	veolar/Bronchiolar Adeno	ma					
		13/50 (26%) 14/50 (28%)	9/50 (18%) 17/50 (34%)	13/50 (26%)		3/50 (6%) 9/50 (18%)	6/50 (12%) 5/50 (10%)	4/50 (8%)
Overall Incidence	Total	66/250 (26.4%)	Mean 26.4%	SD 5.73%	Total	27/250 (10.8%)	Mean 10.8%	SD 4.6%
*Lung: Hemangiosarcoma								
		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%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	0/250 (0%)	Mean 0%	SD 0%
*Lung: Mast Cell Tumor								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
#Lymph Node: Hemangiosarcoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		1/50 (2%) 1/50 (2%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	2/250 (0.8%)	Mean 0.8%	SD 1.1%
#Lymph Node: Mast Cell Tumor								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

			Male			Female	
#Lymph Node, Mandibular: Mast Cell Tumor							
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0/50 (0%)	0%)	0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0% SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
Lymph Node, Mesenteric: Hemangioma							
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0/50 (0%)	0%)	0/50 (0%) 1/50 (2%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0% SD 0%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
Lymph Node, Mesenteric: Hemangiosarcoma							
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0/50 (0%)	0%)	0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
verall Incidence	Total	0/250 (0%)	Mean 0% SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
Lymph Node, Mesenteric: Mast Cell Tumor							
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0/50 (0%)	0%)	0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
verall Incidence	Total	0/250 (0%)	Mean 0% SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
Mammary Gland: Adenoma							
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0/50 (0%)	0%)	0/50 (0%) 0/50 (0%)	1/50 (2%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0% SD 0%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

: Aug201/ Toxic

Contract/Lab: All Laboratories Species: MICE

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
#Mammary Gland: Carcinoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 1/50 (2%)	0/50 (0%)		1/50 (2%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	2/50 (4%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	3/250 (1.2%)	Mean 1.2%	SD 1.79%
#Mammary Gland: Carcinoma or Adenoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 1/50 (2%)	0/50 (0%)		1/50 (2%) 0/50 (0%)	1/50 (2%) 0/50 (0%)	2/50 (4%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	4/250 (1.6%)	Mean 1.6%	SD 1.67%
#Mammary Gland: Fibroma, Fibroadenoma	or Adenoma	0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)	0/50 (0%)
		0/50 (0%)	0/50 (0%) 0/50 (0%)	0/30 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
#Mammary Gland: Fibroma, Fibroadenoma,	, Carcinoma, oı	· Adenoma						
		0/50 (0%) 0/50 (0%)	0/50 (0%) 1/50 (2%)	0/50 (0%)		1/50 (2%) 0/50 (0%)	1/50 (2%) 0/50 (0%)	2/50 (4%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	4/250 (1.6%)	Mean 1.6%	SD 1.67%
#Mesentery: Hemangioma								
		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%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	0/250 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
#Mesentery: Hemangiosarcoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 1/50 (2%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
#Mesentery: Lipoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		1/50 (2%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
#Mesentery: Sarcoma				•••••				
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
Nose: Adenoma				•••••				
		0/50 (0%) 0/49 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/248 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
Nose:								
		0/50 (0%) 0/49 (0%)	1/49 (2%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/248 (0.4%)	Mean 0.41%	SD 0.91%	Total	0/250 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE
Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
#Oral Cavity (Oral Mucos Papilloma Squamous o	. •	ynx, Tooth, Gingiva):						
		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%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	0/250 (0%)	Mean 0%	SD 0%
#Oral Cavity (Oral Mucos Squamous Cell Carcino		ynx, Tooth, Gingiva):						
		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%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
#Oral Cavity (Oral Mucos Squamous Cell Carcino		ynx, Tooth, Gingiva): Squamous, or Papilloma 0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
Squamous Cell Carcino	oma, Papilloma S	Squamous, or Papilloma 0/50 (0%) 0/50 (0%)	1/50 (2%)	,	.	0/50 (0%)	0/50 (0%)	,
Squamous Cell Carcino Overall Incidence #Oral Mucosa:	oma, Papilloma S	Squamous, or Papilloma 0/50 (0%)	` ,	0/50 (0%) SD 0.89%	Total	` ,	` ,	0/50 (0%) SD 0%
	oma, Papilloma S	Squamous, or Papilloma 0/50 (0%) 0/50 (0%)	1/50 (2%)	,	Total	0/50 (0%)	0/50 (0%)	,
Squamous Cell Carcino Overall Incidence #Oral Mucosa: Squamous Cell Carcino	oma, Papilloma S	Squamous, or Papilloma 0/50 (0%) 0/50 (0%) 1/250 (0.4%) 0/50 (0%)	1/50 (2%) Mean 0.4% 0/50 (0%)	SD 0.89%	Total Total	0/50 (0%) 0/250 (0%) 0/50 (0%)	0/50 (0%) Mean 0% 0/50 (0%)	SD 0%
Squamous Cell Carcino Overall Incidence #Oral Mucosa: Squamous Cell Carcino Overall Incidence	oma, Papilloma S Total oma	Squamous, or Papilloma 0/50 (0%) 0/50 (0%) 1/250 (0.4%) 0/50 (0%) 0/50 (0%)	1/50 (2%) Mean 0.4% 0/50 (0%) 0/50 (0%)	SD 0.89%		0/50 (0%) 0/250 (0%) 0/50 (0%) 0/50 (0%)	0/50 (0%) Mean 0% 0/50 (0%) 0/50 (0%)	SD 0% 0/50 (0%)
Squamous Cell Carcino Overall Incidence #Oral Mucosa: Squamous Cell Carcino Overall Incidence	oma, Papilloma S Total oma	Squamous, or Papilloma 0/50 (0%) 0/50 (0%) 1/250 (0.4%) 0/50 (0%) 0/50 (0%)	1/50 (2%) Mean 0.4% 0/50 (0%) 0/50 (0%)	SD 0.89%		0/50 (0%) 0/250 (0%) 0/50 (0%) 0/50 (0%)	0/50 (0%) Mean 0% 0/50 (0%) 0/50 (0%)	SD 0% 0/50 (0%)

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: INHALATION Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** *Ovary: Cystadenoma 1/50 (2%)0/49 (0%)2/50 (4%)1/50 (2%)2/50 (4%)**Overall Incidence** Total 6/249 (2.41%) Mean 2.4% SD 1.67% *Ovary: **Granulosa Cell Tumor Benign** (0%) 0/50 (0%)0/49 1/50 (2%)1/50 (2%)0/50 (0%)**Overall Incidence** Total 2/249 (0.8%) Mean 0.8% SD 1.1% *Ovary: **Granulosa Cell Tumor Malignant** 1/50 (2%)0/49 (0%)0/50 (0%)0/50 (0%)0/50 (0%)**Overall Incidence** Total 1/249 (0.4%) Mean 0.4% SD 0.89% *Ovary: Granulosa Cell Tumor: Benign, Malignant, NOS 1/50 (2%)0/49 (0%)1/50 (2%)1/50 (2%)0/50 (0%)**Overall Incidence** Total 3/249 (1.2%) Mean 1.2% SD 1.1% *Ovary: **Granulosa-Theca Tumor Malignant** 0/50 (0%)1/49 (2%)0/50 (0%)0/50 (0%)1/50 (2%)**Overall Incidence** Total 2/249 (0.8%) Mean 0.81% SD 1.11%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Version: Aug2017 Contract/Lab: All Laboratories

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: INHALATION Vehicle: AIR

	Male			Female	
Ovary:					
Hemangioma			0/50 (0%)	0/49 (0%)	0/50 (0%)
			0/50 (0%)	0/49 (0%)	0/30 (0/8)
verall Incidence		Total	0/249 (0%)	Mean 0%	SD 0%
Ovary: Hemangiosarcoma					
-			1/50 (2%)	0/49 (0%)	0/50 (0%)
			0/50 (0%)	0/50 (0%)	
overall Incidence		Total	1/249 (0.4%)	Mean 0.4%	SD 0.89%
Ovary: Luteoma				•••••	
			0/50 (0%)	0/49 (0%)	1/50 (2%)
			0/50 (0%)	2/50 (4%)	
verall Incidence		Total	3/249 (1.2%)	Mean 1.2%	SD 1.79%
Ovary: Sarcoma					
			0/50 (0%)	0/49 (0%)	0/50 (0%)
			0/50 (0%)	0/50 (0%)	
verall Incidence		Total	0/249 (0%)	Mean 0%	SD 0%
Ovary: Thecoma Malignant					
-			0/50 (0%)	0/49 (0%)	0/50 (0%)
			0/50 (0%)	0/50 (0%)	
Overall Incidence		Total	0/249 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
Ovary: Tubulostromal Adenom	na							
						0/50 (0%) 0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence					Total	0/249 (0%)	Mean 0%	SD 0%
Pancreas: Mast Cell Tumor								
		0/49 (0%) 0/50 (0%)	0/48 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/247 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
Parathyroid Gland: Adenoma								
		0/27 (0%) 0/28 (0%)	0/40 (0%) 0/36 (0%)	0/34 (0%)		0/27 (0%) 1/35 (3%)	0/38 (0%) 0/36 (0%)	0/26 (0%)
Overall Incidence	Total	0/28 (0%)	Mean 0%	SD 0%	Total	1/162 (0.62%)	0/36 (0%) Mean 0.57%	SD 1.28%
Pituitary Gland: Pars Dis Adenoma	talis or Unspec	ified Site:						
		0/49 (0%) 1/50 (2%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		9/49 (18%) 8/48 (17%)	2/49 (4%) 4/50 (8%)	5/50 (10%)
Overall Incidence	Total	1/249 (0.4%)	Mean 0.4%	SD 0.89%	Total	28/246 (11.38%)	Mean 11.42%	SD 5.99%
Pituitary Gland: Pars Dis Carcinoma		ified Site:						
		0/49 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/49 (0%) 3/48 (6%)	0/49 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/249 (0%)	Mean 0%	SD 0%	Total	3/246 (1.22%)	Mean 1.25%	SD 2.8%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: INHALATION Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** *Pituitary Gland: Pars Distalis or Unspecified Site: Carcinoma or Adenoma 0/49 (0%)0/50 (0%)0/50 (0%)9/49 (18%)2/49 (4%)5/50 (10%) 1/50 (2%)0/50 (0%)11/48 (23%)4/50 (8%)**Overall Incidence** Total 1/249 (0.4%) Mean 0.4% SD 0.89% Total 31/246 (12.6%) Mean 12.67% SD 7.75% *Pituitary Gland: Pars Intermedia: Adenoma (0%) (0%) 0/49(0%)0/50 0/50 (0%)0/49(0%)0/49 0/50 (0%)0/50 (0%)0/50 (0%)0/48 (0%)0/50 (0%)Overall Incidence Total 0/249 (0%) Mean 0% SD 0% Total 0/246 (0%) Mean 0% SD 0% *Pituitary Gland: Pars Intermedia: Carcinoma 0/49 (0%)0/50 (0%)0/50 (0%)0/49 (0%)1/49 (2%)0/50 (0%)0/50 (0%)0/50 (0%)0/48 (0%)0/50 (0%)**Overall Incidence** Total 0/249 (0%) Mean 0% SD 0% Total 1/246 (0.41%) Mean 0.41% SD 0.91% *Pituitary Gland: Pars Intermedia: Carcinoma or Adenoma 0/49 (0%)0/50 (0%)0/50 (0%)0/49 (0%)1/49 (2%)0/50 (0%)0/50 (0%)0/50 (0%)0/48 (0%)0/50 (0%)**Overall Incidence** Total 0/249 (0%) Mean 0% SD 0% Total 1/246 (0.41%) Mean 0.41% SD 0.91% *Pituitary Gland: Pars Intermedia: Schwannoma Malignant 0/50 0/49 (0%)0/50 (0%)(0%)0/49 (0%)0/49 (0%)0/50 (0%)0/50 (0%)1/50 (2%)0/48 (0%)0/50 (0%)**Overall Incidence** Total 1/249 (0.4%) Mean 0.4% SD 0.89% Total 0/246 (0%) Mean 0% SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: INHALATION Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** *Prostate: **Mast Cell Tumor** 0/49 (0%)0/49 (0%)0/50 (0%)0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/248 (0%) Mean 0% SD 0% *Salivary Glands: Adenoma (0%) 0/50 (0%)0/50 0/50 (0%)0/50 (0%)0/49 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)Overall Incidence Total 0/250 (0%) Mean 0% SD 0% Total 0/249 (0%) Mean 0% SD 0% *Salivary Glands: Carcinoma 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/49 (0%)0/50 (0%)(0%)0/50 (0%)0/50 0/50 (0%)1/50 (2%)**Overall Incidence** Total 0/250 (0%) Mean 0% SD 0% Total 1/249 (0.4%) Mean 0.4% SD 0.89% *Salivary Glands: Carcinoma or Adenoma 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/49 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)1/50 (2%)**Overall Incidence** Total 0/250 (0%) Mean 0% SD 0% Total 1/249 (0.4%) Mean 0.4% SD 0.89% *Salivary Glands: Hemangiosarcoma 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/49 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/250 (0%) Mean 0% SD 0% Total 0/249 (0%) Mean 0% SD 0%

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^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Version: Aug2017 Contract/Lab: All Laboratories

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

			Male			Fe	male
*Salivary Glands: Mast Cell Tumor							
		0/50 (0%)	,	0/50 (0%)		,	(0%) 0/50 (0%)
Overall Incidence	Total	0/50 (0%) 0/250 (0%)	0/50 (0%) Mean 0% SI	D 0%	Total	0/50 (0%) 0/50 0/249 (0%) Mean	(0%) 0% SD 0%
*Salivary Glands: Myxosarcoma							
		0/50 (0%) 0/50 (0%)	0/50 (0%) (0/50 (0%)	0/50 (0%)		` ,	(0%) 0/50 (0%) (0%)
Overall Incidence	Total	0/250 (0%)	` '	D 0%	Total	1/249 (0.4%) Mean	
#Seminal Vesicle: Adenoma							
		1/50 (2%) 0/50 (0%)	0/50 (0%) (0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4% SD	0.89%			
#Seminal Vesicle: Fibroma							
		0/50 (0%) 0/50 (0%)	0/50 (0%) (0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	0/250 (0%)	Mean 0% SI	D 0%			
#Skeletal Muscle: Osteosarcoma							
		0/50 (0%) 0/50 (0%)	0/50 (0%) (0/50 (0%)	0/50 (0%)		` ,	(0%) 0/50 (0%) (0%)
Overall Incidence	Total	0/250 (0%)	` '	D 0%	Total	0/250 (0%) Mean	` '

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
#Skeletal Muscle: Rhabdomyosarcoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 1/50 (2%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 2/50 (4%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	2/250 (0.8%)	Mean 0.8%	SD 1.79%
#Skeletal Muscle: Rhabdomyosarcoma or R	Rhabdomyoma							
		0/50 (0%) 0/50 (0%)	0/50 (0%) 1/50 (2%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 2/50 (4%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	2/250 (0.8%)	Mean 0.8%	SD 1.79%
#Skeletal Muscle: Sarcoma								
		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%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
‡Skin: Basal Cell Carcinoma								
		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%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
#Skin: Basal Cell Carcinoma or I	Basosquamous	s Tumor (malignant or NO	DS)					
		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%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** #Skin: Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma 0/50 0/50 0/50 0/50 (0%)(2%)0/50 (0%)(0%)(0%)1/50 (0%)(0%)0/50 0/50 (0%)0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/250 (0%) Mean 0% SD 0% Total 1/250 (0.4%) Mean 0.4% SD 0.89% #Skin: Basal or Sq. Cell Carcinoma, Carcinoma, Basosq, Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)1/50 (2%)1/50 (2%)0/50 (0%)0/50 (0%)(0%)0/50 0/50 (0%)**Overall Incidence** Total 0/250 (0%) Mean 0% SD 0% Total 2/250 (0.8%) Mean 0.8% SD 1.1% #Skin: **Fibroma** 0/50 0/50 0/50 (0%)(0%)0/50 (0%)(0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/250 (0%) Mean 0% SD 0% Total 0/250 (0%) Mean 0% SD 0% #Skin: Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma 0/50 (0%)0/50 (0%)0/50 (0%)2/50 (4%)0/50 (0%)0/50 (0%)(0%)1/50 (2%)1/50 (2%)0/50 1/50 (2%)**Overall Incidence** Total 2/250 (0.8%) Mean 0.8% SD 1.1% Total 3/250 (1.2%) Mean 1.2% SD 1.79% #Skin: Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma 0/50 (0%)0/50 (0%)0/50 (0%)2/50 (4%)0/50 (0%)0/50 (0%)1/50 (2%)1/50 (2%)0/50 (0%)1/50 (2%)**Overall Incidence** 2/250 (0.8%) Mean 0.8% SD 1.1% 3/250 (1.2%) Mean 1.2% SD 1.79% Total Total

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^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Tumor Incidence for Selected Control Animal Groups
Route: INHALATION

Species: MICE Strain: B6C3F1/N

Vehicle: AIR

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Report Date: 01/20/2018

			Male				Female	
‡Skin: Fibrosarcoma								
		0/50 (0%) 1/50 (2%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		1/50 (2%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
Skin:								
Fibrosarcoma, Sarcoma	a, Myxosarcoma	a, or Malignant Fibrous H 0/50 (0%) 1/50 (2%)	0/50 (0%) 1/50 (2%)	0/50 (0%)		2/50 (4%) 0/50 (0%)	0/50 (0%) 1/50 (2%)	0/50 (0%)
Overall Incidence	Total	2/250 (0.8%)	Mean 0.8%	SD 1.1%	Total	3/250 (1.2%)	Mean 1.2%	SD 1.79%
Skin: Hemangioma								
· ·		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
verall Incidence	Total	0/50 (0%) 0/250 (0%)	0/50 (0%) Mean 0%	SD 0%	Total	0/50 (0%) 0/250 (0%)	0/50 (0%) Mean 0%	SD 0%
Skin: Hemangiosarcoma								
-		0/50 (0%) 0/50 (0%)	0/50 (0%) 2/50 (4%)	0/50 (0%)		1/50 (2%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	2/50 (4%)
verall Incidence	Total	2/250 (0.8%)	Mean 0.8%	SD 1.79%	Total	3/250 (1.2%)	Mean 1.2%	SD 1.79%
Skin: Keratoacanthoma								
		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%)	0/50 (0%)
Overall Incidence	Total	0/50 (0%)	0/50 (0%) Mean 0%	SD 0%	Total	0/50 (0%)	0/50 (0%) Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: INHALATION Vehicle: AIR

			Male				Female	
έSkin: Lipoma								
		0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	0/50 (0%)
verall Incidence	Total	0/50 (0%) 0/250 (0%)	0/50 (0%) Mean 0%	SD 0%	Total	0/50 (0%) 0/250 (0%)	0/50 (0%) Mean 0%	SD 0%
Skin: Malignant Fibrous Hist	tiocytoma							
J	•	0/50 (0%) 0/50 (0%)	0/50 (0%) 1/50 (2%)	0/50 (0%)		1/50 (2%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
Skin: Melanoma Benign			•••••					
_		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%)	0/50 (0%)
verall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	0/250 (0%)	Mean 0%	SD 0%
Skin: Neurofibrosarcoma or	Schwannoma (m	nalignant or NOS)						
		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%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
Skin:		Schwannoma (benign, ma						
,	,	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%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
#Skin: Osteosarcoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		` ,	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total 0/2	250 (0%)	Mean 0%	SD 0%
#Skin: Pilomatrixoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		` '	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total 0/2	250 (0%)	Mean 0%	SD 0%
≠Skin: Sarcoma							•••••	
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		` '	0/50 (0%) 1/50 (2%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)		SD 0%		50 (0.4%)		SD 0.89%
Skin: Schwannoma Malignant							•••••	
•		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		` '	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)		SD 0%		250 (0%)	Mean 0%	SD 0%
#Skin: Squamous Cell Carcinoma or Carcinoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		` ,	1/50 (2%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	` '	SD 0%		50 (0.4%)	` '	SD 0.89%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
#Skin: Squamous Cell Papillo	ma							
		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%)	1/50 (2%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
#Skin: Squamous Cell Papillo	ma or Papilloma	1						
		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%)	1/50 (2%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
Overall Incidence	Total	0/50 (0%) 0/50 (0%) 0/250 (0%)	0/50 (0%) 0/50 (0%) Mean 0%	0/50 (0%) SD 0%	Total	0/50 (0%) 0/50 (0%) 1/250 (0.4%)	0/50 (0%) 0/50 (0%) Mean 0.4%	1/50 (2%) SD 0.89%
#Skin:	- · · · · · · · · · · · · · · · · · · ·							
Squamous Cell Papillo	ma, Papilloma, c	or Keratoacanthoma 0/50 (0%)	0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	1/50 (2%)
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	0/50 (0%) 0/250 (0%)	0/50 (0%) Mean 0%	SD 0%	Total	0/50 (0%) 1/250 (0.4%)	0/50 (0%) Mean 0.4%	SD 0.89%
	Total	` '	` ,	SD 0%	Total	(,	` ,	SD 0.89%
Overall Incidence *Spleen: Hemangiosarcoma	Total	` '	` ,	SD 0% 0/50 (0%)	Total	(,	` ,	SD 0.89% 1/50 (2%)

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
#Stomach, Forestomach: Squamous Cell Carcinoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
#Stomach, Forestomach: Squamous Cell Carcinoma o	or Papillom	a Squamous						
·	•	1/50 (2%) 1/50 (2%)	0/50 (0%) 1/50 (2%)	0/50 (0%)		1/50 (2%) 1/50 (2%)	0/50 (0%) 1/50 (2%)	0/50 (0%)
Overall Incidence	Total	3/250 (1.2%)	Mean 1.2%	SD 1.1%	Total	3/250 (1.2%)	Mean 1.2%	SD 1.1%
#Stomach, Forestomach: Squamous Cell Papilloma								
		1/50 (2%) 1/50 (2%)	0/50 (0%) 1/50 (2%)	0/50 (0%)		1/50 (2%) 1/50 (2%)	0/50 (0%) 1/50 (2%)	0/50 (0%)
Overall Incidence	Total	3/250 (1.2%)	Mean 1.2%	SD 1.1%	Total	3/250 (1.2%)	Mean 1.2%	SD 1.1%
Stomach, Glandular: Adenoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
#Stomach, Glandular: Carcinoma								
		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%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	0/250 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: INHALATION Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

			Male				Female	
#Stomach, Glandular: Carcinoma or Adenoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	1/50 (2%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	0/250 (0%)	Mean 0%	SD 0%
Testis: Adenoma								
		0/49 (0%) 0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/248 (0%)	Mean 0%	SD 0%				
Testis: Hemangioma								
		0/49 (0%) 0/50 (0%)	0/49 (0%) 0/50 (0%)	0/50 (0%)				
Overall Incidence	Total	0/248 (0%)	Mean 0%	SD 0%				
Thymus: Thymoma Benign								
		0/41 (0%) 0/44 (0%)	0/43 (0%) 0/48 (0%)	0/41 (0%)		0/47 (0%) 0/48 (0%)	0/47 (0%) 0/50 (0%)	0/44 (0%)
Overall Incidence	Total	0/217 (0%)	Mean 0%	SD 0%	Total	0/236 (0%)	Mean 0%	SD 0%
Thymus: Thymoma NOS								
		0/41 (0%) 0/44 (0%)	0/43 (0%) 0/48 (0%)	0/41 (0%)		1/47 (2%) 0/48 (0%)	0/47 (0%) 0/50 (0%)	0/44 (0%)
Overall Incidence	Total	0/217 (0%)	Mean 0%	SD 0%	Total	1/236 (0.42%)	Mean 0.43%	SD 0.95%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/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	
*Thymus: Thymoma: Benign, Malign	ant, NOS							
		0/41 (0%) 0/44 (0%)	0/43 (0%) 0/48 (0%)	0/41 (0%)		1/47 (2%) 0/48 (0%)	0/47 (0%) 0/50 (0%)	0/44 (0%)
Overall Incidence	Total	0/217 (0%)	Mean 0%	SD 0%	Total	1/236 (0.42%)	Mean 0.43%	SD 0.95%
*Thyroid Gland: C-Cell: Adenoma								
		0/49 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/48 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/249 (0%)	Mean 0%	SD 0%	Total	0/248 (0%)	Mean 0%	SD 0%
*Thyroid Gland: C-Cell: Carcinoma								
		0/49 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/48 (0%) 1/50 (2%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/249 (0%)	Mean 0%	SD 0%	Total	1/248 (0.4%)	Mean 0.4%	SD 0.89%
Thyroid Gland: C-Cell: Carcinoma or Adenoma								
		0/49 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/48 (0%) 1/50 (2%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/249 (0%)	Mean 0%	SD 0%	Total	1/248 (0.4%)	Mean 0.4%	SD 0.89%
*Thyroid Gland: Follicular Co Adenoma	ell:		•••••					
		0/49 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/48 (0%) 0/50 (0%)	1/50 (2%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/249 (0%)	Mean 0%	SD 0%	Total	1/248 (0.4%)	Mean 0.4%	SD 0.89%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: INHALATION Vehicle: AIR

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			Male				Female	
Thyroid Gland: Follicular Ce Carcinoma or Adenoma	II:							
		0/49 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/48 (0%) 0/50 (0%)	1/50 (2%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/249 (0%)	Mean 0%	SD 0%	Total	1/248 (0.4%)	Mean 0.4%	SD 0.89%
#Tongue: Squamous Cell Carcinoma	or Papillom							
		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%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	0/250 (0%)	Mean 0%	SD 0%
#Tongue: Squamous Cell Papilloma								
		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%)	0/50 (0%)
Overall Incidence	Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%	Total	0/250 (0%)	Mean 0%	SD 0%
#Tooth: Odontoma								
		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%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
Urinary Bladder: Hemangiosarcoma								
		0/50 (0%) 0/50 (0%)	0/49 (0%) 0/50 (0%)	1/50 (2%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	1/249 (0.4%)	Mean 0.4%	SD 0.89%	Total	0/250 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: INHALATION Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** *Urinary Bladder: **Mast Cell Tumor** 0/50 (0%)0/49 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 0/50 (0%)0/50 (0%)0/50 (0%)(0%)**Overall Incidence** Total 0/249 (0%) Mean 0% SD 0% Total 0/250 (0%) Mean 0% SD 0% #Uterus: Adenoma (0%) 0/50 (0%)0/50 0/50 (0%)0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/250 (0%) Mean 0% SD 0% #Uterus: **Fibroma** 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/250 (0%) Mean 0% SD 0% #Uterus: **Granular Cell Tumor Benign** 1/50 (2%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)**Overall Incidence** Total 1/250 (0.4%) Mean 0.4% SD 0.89% #Uterus: Hemangioma 0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)0/50 (0%)**Overall Incidence** Total 0/250 (0%) Mean 0% SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Version: Aug2017 Contract/Lab: All Laboratories

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: INHALATION Vehicle: AIR

	Male			Female	
#Uterus:					
Hemangiosarcoma			1/50 (20/)	0/50 (00/)	4/50 (20/)
			1/50 (2%) 1/50 (2%)	0/50 (0%) 1/50 (2%)	1/50 (2%)
Overall Incidence		Total	4/250 (1.6%)	Mean 1.6%	SD 0.89%
Uterus:					•••••
Leiomyoma					
			0/50 (0%)	0/50 (0%)	1/50 (2%)
			0/50 (0%)	0/50 (0%)	, ,
verall Incidence		Total	1/250 (0.4%)	Mean 0.4%	SD 0.89%
Uterus:					•••••
Polyp Stromal					
			4/50 (8%)	0/50 (0%)	0/50 (0%)
			1/50 (2%)	0/50 (0%)	00 0 4004
verall Incidence		Total	5/250 (2%)	Mean 2%	SD 3.46%
Uterus:					
Sarcoma Stromal			0/50 (0%)	0/50 (0%)	0/50 (0%)
			0/50 (0%)	0/50 (0%)	0/30 (0/0)
overall Incidence		Total	0/250 (0%)	Mean 0%	SD 0%
Uterus:					
Sarcoma Stromal or Polyp Stromal					
••			4/50 (8%)	0/50 (0%)	0/50 (0%)
			1/50 (2%)	0/50 (0%)	
Overall Incidence		Total	5/250 (2%)	Mean 2%	SD 3.46%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/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	
#Zymbal's Gland: Carcinoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%
#Zymbal's Gland: Carcinoma or Adenoma								
		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)		0/50 (0%) 0/50 (0%)	0/50 (0%) 0/50 (0%)	0/50 (0%)
Overall Incidence	Total	0/250 (0%)	Mean 0%	SD 0%	Total	0/250 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED Page: 109

Report Date: 01/20/2018

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	051026002	07/16/10	727	49(1)	34(691)	47.6	2-Hydroxy-4-methoxybenzophenone
					Female		
Battelle Columbus Laboratory	051026002	07/15/10	726	50(4)	42(716)	54.7	2-Hydroxy-4-methoxybenzophenone

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** #All Organs: **Benign Tumors** 28/49 (57%)17/50 (34%)**Overall Incidence** Total 28/49 (57.14%) Mean 57.14% SD 0% Total 17/50 (34%) Mean 34% SD 0% #All Organs: **Malignant Tumors** 19/49 (39%)11/50 (22%)**Overall Incidence** Total 19/49 (38.78%) Mean 38.78% SD 0% Total 11/50 (22%) Mean 22% SD 0% #All Organs: **Malignant and Benign Tumors** 37/49 (76%)25/50 (50%)Overall Incidence Total 37/49 (75.51%) Mean 75.51% SD 0% Total 25/50 (50%) Mean 50% SD 0% #All Organs: Hemangioma 1/49 (2%)2/50 (4%)**Overall Incidence** Total 1/49 (2.04%) Mean 2.04% SD 0% Total 2/50 (4%) Mean 4% SD 0% **#All Organs:** Hemangiosarcoma 1/49 (2%)0/50 (0%)**Overall Incidence** Total 1/49 (2.04%) Mean 2.04% SD 0% Total 0/50 (0%) Mean 0% SD 0% **#All Organs:** Hemangiosarcoma or Hemangioma 2/49 (4%)2/50 (4%)**Overall Incidence** Total 2/49 (4.08%) Mean 4.08% SD 0% Total 2/50 (4%) SD 0% Mean 4%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male Female #All Organs: **Histiocytic Sarcoma** 0/49 (0%)1/50 (2%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 1/50 (2%) Mean 2% SD 0% #All Organs: Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type 5/50 (10%) **Overall Incidence** Total 3/49 (6.12%) Mean 6.12% SD 0% Total 5/50 (10%) Mean 10% SD 0% #All Organs: **Malignant Schwannoma** 0/49 (0%)0/50 (0%)Overall Incidence Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #All Organs: Osteosarcoma 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% **#All Organs:** Osteosarcoma or Osteoma 0/49 (0%)0/50 (0%)Overall Incidence Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% *Adrenal Cortex: Adenoma 1/48 (2%)0/50 (0%)**Overall Incidence** Total 1/48 (2.08%) Mean 2.08% SD 0% Total Mean 0% SD 0% 0/50 (0%)

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

			Male				Female	
*Adrenal Medulla: Pheochromocytoma Ber	nign							
Overell Instidence	Tatal	1/48 (2%)	Mana 2 000/	CD 00/	Tatal	0/50 (0%)	Maan 00/	CD 00/
Overall Incidence	Total	1/48 (2.08%)	Mean 2.08%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Adrenal Medulla: Pheochromocytoma Mal	lignant							
		0/48 (0%)				0/50 (0%)		
Overall Incidence	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Adrenal Medulla: Pheochromocytoma: Be	enign, Complex	, Malignant, NOS 1/48 (2%)				0/50 (0%)		
Overall Incidence	Total	1/48 (2.08%)	Mean 2.08%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Blood Vessel: Hemangioma		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Blood Vessel: Hemangiosarcoma		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Bone Marrow: Hemangiosarcoma	•••••							
•		0/47 (0%)				0/49 (0%)		
Overall Incidence	Total	0/47 (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

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** *Bone Marrow: **Mast Cell Tumor Malignant** 1/47 (2%)0/49 (0%)**Overall Incidence** Total 1/47 (2.13%) Mean 2.13% SD 0% Total 0/49 (0%) Mean 0% SD 0% *Bone Marrow: Sarcoma 0/47 (0%)0/49 (0%)**Overall Incidence** Total 0/47 (0%) Mean 0% SD 0% Total 0/49 (0%) Mean 0% SD 0% #Bone: **Fibroma** 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Bone: Hemangioma 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total Mean 0% SD 0% 0/50 (0%) #Bone: Osteosarcoma 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Bone: Osteosarcoma or Osteoma 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total SD 0% 0/50 (0%) Mean 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

			Male				Female		
#Bone: Sarcoma									
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
*Clitoral/Preputial Gland: Mast Cell Tumor	•••••	0/49 (0%)				0/50 (0%)			
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
#Coagulating Gland: Granular Cell Tumor						0/50 (0%)			
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%	
#Coagulating Gland: Sarcoma	•••••	0/40 (00/)				2/52 (224)			
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%	
*Epididymis: Mast Cell Tumor		0/49 (0%)							
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%					
#Harderian Gland: Adenoma		6/49 (12%)				1/50 (2%)			
Overall Incidence	Total	6/49 (12.24%)	Mean 12.24%	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

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED **Page:** 115

Report Date: 01/20/2018

			Male				Female	
#Harderian Gland: Carcinoma		4/40 (00%)				4/50 (00/)		
Overall Incidence	Total	1/49 (2%) 1/49 (2.04%)	Mean 2.04%	SD 0%	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%
#Harderian Gland: Carcinoma or Adenoma		7/40 (4.49/)				2/50 /40/)		
Overall Incidence	Total	7/49 (14%) 7/49 (14.29%)	Mean 14.29%	SD 0%	Total	2/50 (4%) 2/50 (4%)	Mean 4%	SD 0%
#Harderian Gland: Mast Cell Tumor								
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Heart: Hemangiosarcoma		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Intestine Large: Cecum: Leiomyosarcoma								
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Duodenum: Adenoma	:	-/						
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

			Male		Female			
#Intestine Small: Duodenum: Carcinoma								
		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Duodenum: Polyp Adenomatous								
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Ileum: Adenoma								
		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Jejunum: Adenoma								
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Jejunum: Carcinoma								
		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Intestine Small: Jejunum: Leiomyosarcoma		0/40 (001)				0/50 (00)		
Overell lesidence	Tatal	0/49 (0%)	Mana 00/	CD 00/	Total	0/50 (0%)	Mana 00/	CD 00/
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE
Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED Page: 117

Report Date: 01/20/2018

			Male				Female			
#Intestine Small: Jejunum: Mast Cell Tumor										
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%		
#Intestine Small: Site Unspec Adenoma	ified:									
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%		
#Intestine Small: Site Unspec Carcinoma						0/50 (00/)				
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%		
#Intestine Small: Site Unspec Carcinoma or Adenoma						0/50 (0%)				
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%		
#Intestine Small: Site Unspec Leiomyosarcoma										
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%		
#Intestine Small: Site Unspec Mast Cell Tumor										
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%		

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Page: 118

Report Date: 01/20/2018

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Male **Female** #Intestine Small: Site Unspecified: **Polyp Adenomatous** 0/49 (0%)0/50 (0%)0/49 (0%) **Overall Incidence** Total Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% *Islets, Pancreatic: Adenoma 1/47 (2%)0/49 (0%)**Overall Incidence** Total 1/47 (2.13%) Mean 2.13% SD 0% Total 0/49 (0%) Mean 0% SD 0% *Islets, Pancreatic: Carcinoma 0/47 (0%)0/49 (0%)**Overall Incidence** Total 0/47 (0%) Mean 0% SD 0% Total 0/49 (0%) Mean 0% SD 0% *Islets, Pancreatic: Carcinoma or Adenoma 1/47 (2%)0/49 (0%)**Overall Incidence** Total 1/47 (2.13%) Mean 2.13% SD 0% Total 0/49 (0%) Mean 0% SD 0% *Kidney: Renal Tubule: Adenoma 0/48 (0%)0/49 (0%)**Overall Incidence** Total 0/48 (0%) Mean 0% SD 0% Total 0/49 (0%) Mean 0% SD 0% *Kidney: Renal Tubule: Carcinoma 0/48 (0%)0/49 (0%)**Overall Incidence** Total 0/48 (0%) Mean 0% SD 0% Total SD 0% 0/49 (0%) Mean 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED **Page:** 119

Report Date: 01/20/2018

			Male				Female	
*Kidney: Renal Tubule: Carcinoma or Adenoma		0/48 (0%)				0/49 (0%)		
Overall Incidence	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0%	SD 0%
*Kidney: Renal Tubule: Mast Cell Tumor		0/48 (0%)				0/49 (0%)		
Overall Incidence	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0%	SD 0%
*Kidney: Renal Tubule: Renal Mesenchymal Tumor		0/48 (0%)				0/49 (0%)		
Overall Incidence	Total	0/48 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0%	SD 0%
*Liver: Cholangiocarcinoma		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Liver: Hemangioma		0/40 (004)				4/50 (00)		
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	1/50 (2%) 1/50 (2%)	Mean 2%	SD 0%
*Liver: Hemangiosarcoma								
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Male **Female** *Liver: Hepatoblastoma 1/49 (2%)0/50 (0%)**Overall Incidence** Total 1/49 (2.04%) Mean 2.04% SD 0% Total 0/50 (0%) Mean 0% SD 0% *Liver: Hepatocellular Adenoma 21/49 (43%)3/50 (6%)**Overall Incidence** Total 21/49 (42.86%) Mean 42.86% SD 0% Total 3/50 (6%) Mean 6% SD 0% *Liver: **Hepatocellular Carcinoma** 8/49 (16%) 1/50 (2%)**Overall Incidence** Total 8/49 (16.33%) Mean 16.33% SD 0% Total 1/50 (2%) Mean 2% SD 0% *Liver: Hepatocellular Carcinoma or Hepatoblastoma 8/49 (16%) 1/50 (2%)**Overall Incidence** Total 8/49 (16.33%) Mean 16.33% SD 0% Total Mean 2% SD 0% 1/50 (2%) *Liver: Hepatocellular Carcinoma or Hepatocellular Adenoma 26/49 (53%)4/50 (8%)**Overall Incidence** Total 26/49 (53.06%) Mean 53.06% SD 0% Total 4/50 (8%) Mean 8% SD 0% Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma 26/49 (53%) 4/50 (8%)**Overall Incidence** Total 26/49 (53.06%) Mean 53.06% SD 0% Mean 8% SD 0% Total 4/50 (8%)

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

SD 0%

Contract/Lab: All Laboratories

Species: MICE

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED

Male **Female** *Liver: Hepatocholangiocarcinoma 1/49 (2%)0/50 (0%)**Overall Incidence** Total 1/49 (2.04%) Mean 2.04% SD 0% Total 0/50 (0%) Mean 0% SD 0% *Liver: **Mast Cell Tumor** 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% *Lung: Alveolar/Bronchiolar Adenoma 7/49 (14%) 5/50 (10%) **Overall Incidence** Total 7/49 (14.29%) Mean 14.29% SD 0% Total 5/50 (10%) Mean 10% SD 0% *Lung: Alveolar/Bronchiolar Carcinoma 5/49 (10%) 0/50 (0%)Overall Incidence Total 5/49 (10.2%) Mean 10.2% SD 0% Total Mean 0% SD 0% 0/50 (0%) *Lung: Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma 11/49 (22%) 5/50 (10%) **Overall Incidence** Total 11/49 (22.45%) Mean 22.45% SD 0% Total 5/50 (10%) Mean 10% SD 0% *Lung:

SD 0%

0/50

0/50 (0%)

Total

(0%)

Mean 0%

Total

0/49

0/49 (0%)

(0%)

Mean 0%

Hemangiosarcoma

Overall Incidence

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED Page: 122

Report Date: 01/20/2018

			Male				Female			
*Lung: Mast Cell Tumor										
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%		
······										
#Lymph Node: Hemangiosarcoma										
		0/49 (0%)				0/50 (0%)				
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		
#Lymph Node: Mast Cell Tumor		0/40 (00/)				0/50 (00/)				
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		
		0/49 (0%)			10tai	0/50 (0%)	wean 0%	שט עס 🐃		
#Lymph Node, Mandibular: Mast Cell Tumor										
Occupation of James	T-1-1	0/49 (0%)	Maran 00/	OD 00/	T -1-1	0/50 (0%)	Maran 00/	00.00/		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		
#Lymph Node, Mesenteric: Hemangioma										
		0/49 (0%)				0/50 (0%)				
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		
#Lymph Node, Mesenteric: Hemangiosarcoma										
		0/49 (0%)				0/50 (0%)				
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%		

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Page: 123

Report Date: 01/20/2018

Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** #Lymph Node, Mesenteric: **Mast Cell Tumor** 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Mammary Gland: Adenoma 0/49 (0%)1/50 (2%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 1/50 (2%) Mean 2% SD 0% #Mammary Gland: Carcinoma 1/49 (2%)0/50 (0%)**Overall Incidence** Total 1/49 (2.04%) Mean 2.04% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Mammary Gland: Carcinoma or Adenoma 1/49 (2%)1/50 (2%)**Overall Incidence** Total Mean 2.04% SD 0% Total 1/50 (2%) Mean 2% SD 0% 1/49 (2.04%) **#Mammary Gland:** Fibroma, Fibroadenoma or Adenoma 0/49 (0%)1/50 (2%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 1/50 (2%) Mean 2% SD 0% #Mammary Gland: Fibroma, Fibroadenoma, Carcinoma, or Adenoma 1/49 (2%)1/50 (2%)**Overall Incidence** Total 1/49 (2.04%) Mean 2.04% SD 0% Mean 2% SD 0% Total 1/50 (2%)

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED Page: 124 Report Date: 01/20/2018

			Male				Female	
#Mesentery: Hemangioma		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Mesentery: Hemangiosarcoma		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Mesentery: Lipoma		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Mesentery: Sarcoma		0/49 (0%)				1/50 (2%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
*Nose: Adenoma								
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Nose: Polyp								
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Page: 125

Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female #Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):** Papilloma Squamous or Papilloma 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% **#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva): Squamous Cell Carcinoma** 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% **#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva):** Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma 0/49 (0%)0/50 (0%)Overall Incidence Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% **#Oral Mucosa: Squamous Cell Carcinoma** 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total Mean 0% SD 0% 0/50 (0%) *Ovarv: Cystadenocarcinoma 0/48 (0%)**Overall Incidence** Total 0/48 (0%) Mean 0% SD 0%

4/48

4/48 (8.33%)

Total

(8%)

Mean 8.33%

SD 0%

*Ovary:

Cystadenoma

Overall Incidence

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Version: Aug2017 Contract/Lab: All Laboratories

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Page: 126

Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

	Male			Female		
*Ovary: Granulosa Cell Tumor Benign						
Overall Incidence	Т		0/48 (0%) 0/48 (0%)	Mean 0%	SD 0%	
*Ovary: Granulosa Cell Tumor Malignant						
Overall Incidence	To	otal	0/48 (0%) 0/48 (0%)	Mean 0%	SD 0%	
*Ovary: Granulosa Cell Tumor: Benign, Malignant, NOS			(00)			
Overall Incidence	Т	otal	0/48 (0%) 0/48 (0%)	Mean 0%	SD 0%	
*Ovary: Granulosa-Theca Tumor Malignant					•••••	
Overall Incidence	Т	otal	0/48 (0%) 0/48 (0%)	Mean 0%	SD 0%	
*Ovary: Hemangioma						
Overall Incidence	Т	otal 1	1/48 (2%) 1/48 (2.08%)	Mean 2.08%	SD 0%	
*Ovary: Hemangiosarcoma						
Overall Incidence	Т	otal	0/48 (0%) 0/48 (0%)	Mean 0%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Page: 127

Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

			Male				Female			
*Ovary: Luteoma										
Overall Incidence					Total	0/48 (0%) 0/48 (0%)	Mean 0%	SD 0%		
*Ovary: Sarcoma										
Overall Incidence					Total	0/48 (0%) 0/48 (0%)	Mean 0%	SD 0%		
*Ovary: Thecoma Malignant										
Overall Incidence					Total	0/48 (0%) 0/48 (0%)	Mean 0%	SD 0%		
*Ovary: Tubulostromal Adenoma				•••••	•••••					
Overall Incidence					Total	0/48 (0%) 0/48 (0%)	Mean 0%	SD 0%		
*Pancreas: Mast Cell Tumor										
		0/49 (0%)				0/49 (0%)				
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/49 (0%)	Mean 0%	SD 0%		
*Parathyroid Gland: Adenoma										
		0/32 (0%)				0/21 (0%)				
Overall Incidence	Total	0/32 (0%)	Mean 0%	SD 0%	Total	0/21 (0%)	Mean 0%	SD 0%		

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Page: 128

Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Strain: B6C3F1/N Vehicle

			Male				Female	
*Pituitary Gland: Pars Di	stalis or Unspeci	fied Site:						
		0/45 (0%)				0/47 (0%)		
Overall Incidence	Total	0/45 (0%)	Mean 0%	SD 0%	Total	0/47 (0%)	Mean 0%	SD 0%
*Pituitary Gland: Pars Di								
		0/45 (0%)				0/47 (0%)		
Overall Incidence	Total	0/45 (0%)	Mean 0%	SD 0%	Total	0/47 (0%)	Mean 0%	SD 0%
*Pituitary Gland: Pars Di Carcinoma or Adenom	stalis or Unspeci							
		0/45 (0%)				0/47 (0%)		
Overall Incidence	Total	0/45 (0%)	Mean 0%	SD 0%	Total	0/47 (0%)	Mean 0%	SD 0%
*Pituitary Gland: Pars Int Adenoma								
		0/45 (0%)				1/47 (2%)		
Overall Incidence	Total	0/45 (0%)	Mean 0%	SD 0%	Total	1/47 (2.13%)		SD 0%
*Pituitary Gland: Pars Int								
		0/45 (0%)				0/47 (0%)		
Overall Incidence	Total	0/45 (0%)	Mean 0%	SD 0%	Total	0/47 (0%)	Mean 0%	SD 0%
*Pituitary Gland: Pars Int Carcinoma or Adenom		0/45 (09/)				1/47 (20/)		
Overell Incidence	Total	0/45 (0%)	Maan 00/	CD 00/	Total	1/47 (2%)	Maan 2 120/	CD 00/
Overall Incidence	Total	0/45 (0%)	Mean 0%	SD 0%	Total	1/47 (2.13%)	Mean 2.13%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Page: 129

Report Date: 01/20/2018

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Male **Female** *Pituitary Gland: Pars Intermedia: **Schwannoma Malignant** 0/45 (0%)0/47 (0%)0/45 (0%) **Overall Incidence** Total Mean 0% SD 0% Total 0/47 (0%) Mean 0% SD 0% *Prostate: **Mast Cell Tumor** 0/49 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% *Salivary Glands: Adenoma 0/49 (0%)0/49 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/49 (0%) Mean 0% SD 0% *Salivary Glands: Carcinoma 0/49 (0%)0/49 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/49 (0%) Mean 0% SD 0% *Salivary Glands: Carcinoma or Adenoma 0/49 (0%)0/49 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/49 (0%) Mean 0% SD 0% *Salivary Glands: Hemangiosarcoma 0/49 (0%)0/49 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total Mean 0% SD 0% 0/49 (0%)

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Page: 130

Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** *Salivary Glands: **Mast Cell Tumor** 0/49 (0%)0/49 (0%)0/49 (0%) **Overall Incidence** Total Mean 0% SD 0% Total 0/49 (0%) Mean 0% SD 0% *Salivary Glands: Myxosarcoma 0/49 (0%)0/49 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/49 (0%) Mean 0% SD 0% **#Seminal Vesicle:** Adenoma 0/49 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% **#Seminal Vesicle: Fibroma** 0/49 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% **#Skeletal Muscle:** Osteosarcoma 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% **#Skeletal Muscle:** Rhabdomyosarcoma 0/49 (0%)1/50 (2%)**Overall Incidence** Total 0/49 (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: Aug2017 Contract/Lab: All Laboratories

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Page: 131

Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

			Male				Female	
#Skeletal Muscle: Rhabdomyosarcoma or F	Rhabdomyoma							
•	•	0/49 (0%)				1/50 (2%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
#Skeletal Muscle: Sarcoma								
		0/49 (0%)				1/50 (2%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	1/50 (2%)	Mean 2%	SD 0%
#Skin: Basal Cell Carcinoma		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
······								
#Skin: Basal Cell Carcinoma or	Basosquamous	s Tumor (malignant or NO 0/49 (0%)	OS)			0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin:								
Basal Cell Carcinoma, Ba NOS), or Trichoepithelion		ma, Basosquamous Tum	or (benign, maligna	ant or				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Basal or Sq. Cell Carcino Adenoma, Papilloma, Sq				ma,		0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Page: 132

Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** #Skin: **Fibroma** 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) SD 0% Mean 0% #Skin: Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, Malignant Fibrous Histiocytoma, or Hemangiopericytoma (0%)(0%)0/50 **Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Skin: Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Malignant Fibrous Histiocytoma 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Skin: **Fibrosarcoma** (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Skin: Fibrosarcoma, Sarcoma, Myxosarcoma, or Malignant Fibrous Histiocytoma 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Skin: Hemangioma (0%)0/50 (0%)Mean 0% **Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Page: 133

Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** #Skin: Hemangiosarcoma 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Skin: Keratoacanthoma 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Skin: Lipoma 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Skin: **Malignant Fibrous Histiocytoma** 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total Mean 0% SD 0% 0/50 (0%) #Skin: Melanoma Benign 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Skin: Neurofibrosarcoma or Schwannoma (malignant or NOS) 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total SD 0% 0/50 (0%) Mean 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Version: Aug2017 Contract/Lab: All Laboratories

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Strain: B6C3F1/N Length of Study: CHRONIC

			Male				Female	
#Skin:								
Neurofibrosarcoma, Ne	urofibroma, or S		alignant or NOS)			0/50 (00/)		
		0/49 (0%)	••	00.00/		0/50 (0%)		00.007
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin:								
Osteosarcoma								
		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin:								
Pilomatrixoma								
		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin:						• • • • • • • • • • • • • • • • • • • •		
Sarcoma								
		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin:								
Schwannoma Malignan	t							
J		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin:								
Squamous Cell Carcino or Carcinoma	ma, Basal Cell C	Carcinoma, Basosquam	ous Tumor (malignan	it or NOS),				
		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED **Page:** 135

Report Date: 01/20/2018

			Male				Female	
#Skin: Squamous Cell Papillom		0/49 (0%)	Mara 2007	OD 004	Total	0/50 (0%)	M 00/	OD OV
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Squamous Cell Papillom	a or Papilloma							
Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
#Skin: Squamous Cell Papillom	a, Papilloma, S	quamous Cell Carcinom 0/49 (0%)	a or Keratoacanthom	na		0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Skin: Squamous Cell Papillom		r Keratoacanthoma 0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
*Spleen: Hemangiosarcoma								
Overall Incidence	Total	1/48 (2%) 1/48 (2.08%)	Mean 2.08%	SD 0%	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%
#Stomach, Forestomach: Squamous Cell Carcinon	na	0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female #Stomach**, Forestomach: Squamous Cell Carcinoma or Papilloma Squamous 2/49 (4%)1/50 (2%)**Overall Incidence** Total 2/49 (4.08%) Mean 4.08% SD 0% Total 1/50 (2%) Mean 2% SD 0% **#Stomach**, Forestomach: **Squamous Cell Papilloma** 2/49 (4%)1/50 (2%)**Overall Incidence** Total 2/49 (4.08%) Mean 4.08% SD 0% Total 1/50 (2%) Mean 2% SD 0% #Stomach, Glandular: Adenoma 0/49 (0%)1/50 (2%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 1/50 (2%) Mean 2% SD 0% #Stomach, Glandular: Carcinoma 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total Mean 0% SD 0% 0/50 (0%) #Stomach, Glandular: Carcinoma or Adenoma 0/49 (0%)1/50 (2%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 1/50 (2%) Mean 2% SD 0% *Testis: Adenoma 0/49 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

			Male				Female	
*Testis: Hemangioma								
_		1/49 (2%)						
Overall Incidence	Total	1/49 (2.04%)	Mean 2.04%	SD 0%				
*Thymus: Thymoma Benign								
Overall Incidence	Total	0/45 (0%) 0/45 (0%)	Mean 0%	SD 0%	Total	0/48 (0%) 0/48 (0%)	Mean 0%	SD 0%
*Thymus: Thymoma NOS		0/45 /00()						
Overall Incidence	Total	0/45 (0%) 0/45 (0%)	Mean 0%	SD 0%	Total	0/48 (0%) 0/48 (0%)	Mean 0%	SD 0%
*Thymus: Thymoma: Benign, Malign		0/45 (0%)				0/48 (0%)		
Overall Incidence	Total	0/45 (0%)	Mean 0%	SD 0%	Total	0/48 (0%)	Mean 0%	SD 0%
*Thyroid Gland: C-Cell: Adenoma								
		0/49 (0%)				0/48 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/48 (0%)	Mean 0%	SD 0%
*Thyroid Gland: C-Cell: Carcinoma								
		0/49 (0%)				0/48 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/48 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

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Report Date: 01/20/2018

SD 0%

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC Male Female *Thyroid Gland: C-Cell: Carcinoma or Adenoma 0/49 (0%)0/48 (0%)0/49 (0%) **Overall Incidence** Total Mean 0% SD 0% Total 0/48 (0%) Mean 0% SD 0% *Thyroid Gland: Follicular Cell: Adenoma 0/49 (0%)1/48 (2%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 1/48 (2.08%) Mean 2.08% SD 0% *Thyroid Gland: Follicular Cell: Carcinoma or Adenoma 0/49 (0%)1/48 (2%)Overall Incidence Total 0/49 (0%) Mean 0% SD 0% Total 1/48 (2.08%) Mean 2.08% SD 0% #Tongue: Squamous Cell Carcinoma or Papilloma Squamous 0/49 (0%)0/50 (0%)Overall Incidence Total 0/49 (0%) Mean 0% SD 0% Total Mean 0% SD 0% 0/50 (0%) #Tongue: **Squamous Cell Papilloma** 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0% #Tooth:

SD 0%

0/50

0/50 (0%)

Total

(0%)

Mean 0%

Total

0/49

0/49 (0%)

(0%)

Mean 0%

Odontoma

Overall Incidence

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Version: Aug2017 Contract/Lab: All Laboratories

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: ORAL

Length of Study: CHRONIC

Vehicle: FEED

			Male		Female			
*Urinary Bladder: Hemangiosarcoma Overall Incidence	Total	0/49 (0%) 0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%
*Urinary Bladder: Mast Cell Tumor		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%
#Uterus: Adenoma						0/50 (0%)		
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
#Uterus: Fibroma						0/50 (0%)		
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
#Uterus: Granular Cell Tumor Be	nign					0/50 (0%)		
Overall Incidence					Total	0/50 (0%)	Mean 0%	SD 0%
#Uterus: Hemangioma								
Overall Incidence					Total	0/50 (0%) 0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: ORAL Vehicle: FEED

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female #Uterus:** Hemangiosarcoma 0/50 (0%)SD 0% **Overall Incidence** Total 0/50 (0%) Mean 0% #Uterus: Leiomyoma 0/50 (0%)**Overall Incidence** Total 0/50 (0%) Mean 0% SD 0% #Uterus: **Polyp Stromal** 1/50 (2%)**Overall Incidence** Total 1/50 (2%) Mean 2% SD 0% #Uterus: Sarcoma Stromal 0/50 (0%)**Overall Incidence** SD 0% Total 0/50 (0%) Mean 0% #Uterus: Sarcoma Stromal or Polyp Stromal 1/50 (2%)**Overall Incidence** Total 1/50 (2%) Mean 2% SD 0% #Zymbal's Gland: Carcinoma 0/49 (0%)0/50 (0%)**Overall Incidence** Total 0/49 (0%) Mean 0% SD 0% Total 0/50 (0%) Mean 0% SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: ORAL Vehicle: FEED Page: 141

Report Date: 01/20/2018

			Male				Female	
#Zymbal's Gland: Carcinoma or Adenoma		2/12 (221)				(00)		
		0/49 (0%)				0/50 (0%)		
Overall Incidence	Total	0/49 (0%)	Mean 0%	SD 0%	Total	0/50 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

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Report Date: 01/20/2018

Study Summary

Laboratory Name	Study Number	Study Start Date	Length of Study in Days	Number of Animals Total and (#/Cage)	Number Surviving and (Mean Life Span)	Maximum Mean Weekly Body Weight	Chemical
					Male		
I. I. T. Research Institute	052010578	06/18/12	729	90(1)	66(687)	51.5	Radiofrequency Radiation
					Female		
I. I. T. Research Institute	052010578	06/18/12	739	90(1)	67(704)	62.6	Radiofrequency Radiation

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Page: 143

Report Date: 01/20/2018

Vehicle: AIR

Length of Study: CHRONIC

			Male			Female				
#All Organs: Benign Tumors Overall Incidence	Total	61/90 (68%) 61/90 (67.78%)	Mean 67.78%	SD 0%	Total	36/90 (40%) 36/90 (40%)	Mean 40%	SD 0%		
Overall incidence		01/90 (07.76%)	iviean 67.76%	טט טא U%	ı olal	36/90 (40%)	wiean 40%	טע ט%		
#All Organs: Malignant Tumors										
	.	49/90 (54%)		00.00/	-	33/90 (37%)	M 00.070/	00.00/		
Overall Incidence	Total	49/90 (54.44%)	Mean 54.44%	SD 0%	Total	33/90 (36.67%)	Mean 36.67%	SD 0%		
#All Organs: Malignant and Benign Tu	ımors	79/90 (88%)				59/90 (66%)				
Overall Incidence	Total	79/90 (87.78%)	Mean 87.78%	SD 0%	Total	59/90 (65.56%)	Mean 65.56%	SD 0%		
All Organs: Hemangioma		1/90 (1%)				4/90 (4%)				
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	4/90 (4.44%)	Mean 4.44%	SD 0%		
All Organs: Hemangiosarcoma										
		2/90 (2%)				2/90 (2%)				
Overall Incidence	Total	2/90 (2.22%)	Mean 2.22%	SD 0%	Total	2/90 (2.22%)	Mean 2.22%	SD 0%		
#All Organs: Hemangiosarcoma or He						6/00 (79/)				
Overall Incidence	Total	3/90 (3%)	Mean 3.33%	SD 00/	Total	6/90 (7%)	Mean 6.67%	SD 0%		
	Total	3/90 (3.33%)	Mean 3.33%	SD 0%	Total	6/90 (6.67%)	iviean 6.67%	3D 0%		

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories

Species: MICE

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

			Male				Female	
All Organs: Histiocytic Sarcoma								
		0/90 (0%)				8/90 (9%)		
verall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	8/90 (8.89%)	Mean 8.89%	SD 0%
All Organs:								
Malignant Lymphoma: Histi	ocytic, Lym	phocytic, Mixed, NOS, o	r Undifferentiated Cel	II Type				
		6/90 (7%)				2/90 (2%)		
verall Incidence	Total	6/90 (6.67%)	Mean 6.67%	SD 0%	Total	2/90 (2.22%)	Mean 2.22%	SD 0%
All Organs: Malignant Schwannoma		0/90 (0%)				0/90 (0%)		
verall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
All Organs: Osteosarcoma		0/90 (0%)				3/90 (3%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	3/90 (3.33%)	Mean 3.33%	SD 0%
All Organs: Osteosarcoma or Osteoma		0/00 /02/				2/00 /20/		
Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	3/90 (3%) 3/90 (3.33%)	Mean 3.33%	SD 0%
Adrenal Cortex: Adenoma								
		0/90 (0%)				1/84 (1%)		
verall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	1/84 (1.19%)	Mean 1.19%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

			Male			Female				
			wiaie				remale			
Adrenal Medulla: Pheochromocytoma Bei	nign									
		0/90 (0%)				0/83 (0%)				
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/83 (0%)	Mean 0%	SD 0%		
Adrenal Medulla: Pheochromocytoma Ma	lignant	0/90 (0%)				2/83 (2%)				
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	2/83 (2.41%)	Mean 2.41%	SD 0%		
'Adrenal Medulla: Pheochromocytoma: Be	enign, Complex,	Malignant, NOS 0/90 (0%)				2/83 (2%)				
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	2/83 (2.41%)	Mean 2.41%	SD 0%		
Blood Vessel: Hemangioma		2(22 (22))				2/22 (221)				
Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%		
#Blood Vessel: Hemangiosarcoma		0/00 (00)				0/00 (00/)				
Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%		
Bone Marrow: Hemangiosarcoma		0/90 (0%)				0/90 (0%)				
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%		

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

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			Male			Female			
*Bone Marrow: Mast Cell Tumor Malignant		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
*Bone Marrow: Sarcoma		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Bone: Fibroma		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Bone: Hemangioma		0/90 (0%)				1/90 (1%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	
#Bone: Osteosarcoma		0.400 (004)				(10)			
Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	1/90 (1%) 1/90 (1.11%)	Mean 1.11%	SD 0%	
#Bone: Osteosarcoma or Osteoma		0/90 (0%)				1/90 (1%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE
Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

Page: 147 Report Date: 01/20/2018

			Male				Female			
#Bone: Sarcoma										
		0/90 (0%)				0/90 (0%)				
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%		
*Clitoral/Preputial Gland: Mast Cell Tumor										
		1/89 (1%)				0/82 (0%)				
Overall Incidence	Total	1/89 (1.12%)	Mean 1.12%	SD 0%	Total	0/82 (0%)	Mean 0%	SD 0%		
#Coagulating Gland: Granular Cell Tumor										
Occupation distance	T-1-1	0/90 (0%)	M 00/	OD 00/	Tatal	0/90 (0%)	Maran 00/	OD 00/		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%		
#Coagulating Gland: Sarcoma										
		0/90 (0%)				0/90 (0%)				
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%		
*Epididymis: Mast Cell Tumor		4/00 (40()								
Overall Incidence	Total	1/90 (1%) 1/90 (1.11%)	Mean 1.11%	SD 0%						
		1/90 (1.11/6)								
#Harderian Gland: Adenoma										
		6/90 (7%)		05.00/		4/90 (4%)		05.00/		
Overall Incidence	Total	6/90 (6.67%)	Mean 6.67%	SD 0%	Total	4/90 (4.44%)	Mean 4.44%	SD 0%		

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

SD 0%

Mean 0%

Route: Whole Body Exposure

Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** #Harderian Gland: Carcinoma 3/90 (3%)0/90 (0%)**Overall Incidence** Total 3/90 (3.33%) Mean 3.33% SD 0% Total 0/90 (0%) Mean 0% SD 0% #Harderian Gland: Carcinoma or Adenoma 9/90 (10%)4/90 (4%)**Overall Incidence** Total 9/90 (10%) Mean 10% SD 0% Total 4/90 (4.44%) Mean 4.44% SD 0% #Harderian Gland: **Mast Cell Tumor** 1/90 (1%)0/90 (0%)**Overall Incidence** Total 1/90 (1.11%) Mean 1.11% SD 0% Total 0/90 (0%) Mean 0% SD 0% *Heart: Hemangiosarcoma 0/90 (0%)0/90 (0%)**Overall Incidence** Total 0/90 (0%) Mean 0% SD 0% Total 0/90 (0%) Mean 0% SD 0% #Intestine Large: Cecum: Leiomyosarcoma 0/90 (0%)0/90 (0%)**Overall Incidence** Total 0/90 (0%) Mean 0% SD 0% Total 0/90 (0%) Mean 0% SD 0% #Intestine Small: Duodenum: Adenoma 0/90 (0%)0/90 (0%)

SD 0%

Total

0/90 (0%)

Total

0/90 (0%)

Mean 0%

Overall Incidence

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

			Male			Female			
#Intestine Small: Duodenum: Carcinoma									
		1/90 (1%)				0/90 (0%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Intestine Small: Duodenum: Polyp Adenomatous									
		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Intestine Small: Ileum: Adenoma		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Intestine Small: Jejunum: Adenoma		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Intestine Small: Jejunum: Carcinoma		2/22 /22/				0/00 /00/			
Overall Incidence	Total	2/90 (2%) 2/90 (2.22%)	Mean 2.22%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	
#Intestine Small: Jejunum: Leiomyosarcoma									
		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

			Male			Female			
#Intestine Small: Jejunum: Mast Cell Tumor									
		1/90 (1%)				0/90 (0%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Intestine Small: Site Unspe									
		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Intestine Small: Site Unspec	cified:								
		3/90 (3%)				0/90 (0%)			
Overall Incidence	Total	3/90 (3.33%)	Mean 3.33%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Intestine Small: Site Unspec Carcinoma or Adenoma	cified:								
		3/90 (3%)				0/90 (0%)			
Overall Incidence	Total	3/90 (3.33%)	Mean 3.33%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Intestine Small: Site Unspec Leiomyosarcoma	cified:								
		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Intestine Small: Site Unspe Mast Cell Tumor	cified:								
		1/90 (1%)				0/90 (0%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Toxicology Data Management System

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Mean 0%

SD 0%

Report Date: 01/20/2018

Contract/Lab: All Laboratories

Species: MICE

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

			Ma!-				Famala	
			Male				Female	
Intestine Small: Site Unspec Polyp Adenomatous	cified:	0/90 (0%)				0/90 (0%)		
verall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
slets, Pancreatic: Adenoma		0/88 (0%)				0/87 (0%)		
verall Incidence	Total	0/88 (0%)	Mean 0%	SD 0%	Total	0/87 (0%)	Mean 0%	SD 0%
slets, Pancreatic: Carcinoma								
verall Incidence	Total	0/88 (0%) 0/88 (0%)	Mean 0%	SD 0%	Total	1/87 (1%) 1/87 (1.15%)	Mean 1.15%	SD 0%
slets, Pancreatic: Carcinoma or Adenoma		0/88 (0%)				1/87 (1%)		
verall Incidence	Total	0/88 (0%)	Mean 0%	SD 0%	Total	1/87 (1.15%)	Mean 1.15%	SD 0%
Kidney: Renal Tubule: Adenoma		0/90 (0%)				2/89 (2%)		
verall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	2/89 (2.25%)	Mean 2.25%	SD 0%
Kidney: Renal Tubule: Carcinoma		0/00 /00/				0/00 /00/		
		0/90 (0%)				0/89 (0%)		

SD 0%

Total

0/89 (0%)

Total

0/90 (0%)

Mean 0%

Overall Incidence

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

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			Male			Female			
*Kidney: Renal Tubule: Carcinoma or Adenoma									
		0/90 (0%)				2/89 (2%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	2/89 (2.25%)	Mean 2.25%	SD 0%	
*Kidney: Renal Tubule: Mast Cell Tumor									
		1/90 (1%)				0/89 (0%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/89 (0%)	Mean 0%	SD 0%	
*Kidney: Renal Tubule: Renal Mesenchymal Tumor									
Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	1/89 (1%) 1/89 (1.12%)	Mean 1.12%	SD 0%	
		(,				` '			
*Liver: Cholangiocarcinoma		0/90 (0%)				0/89 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/89 (0%)	Mean 0%	SD 0%	
*Liver: Hemangioma									
_		0/90 (0%)				0/89 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/89 (0%)	Mean 0%	SD 0%	
*Liver: Hemangiosarcoma									
		1/90 (1%)				0/89 (0%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/89 (0%)	Mean 0%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

			Male			Female			
*Liver: Hepatoblastoma									
		6/90 (7%)				1/89 (1%)			
Overall Incidence	Total	6/90 (6.67%)	Mean 6.67%	SD 0%	Total	1/89 (1.12%)	Mean 1.12%	SD 0%	
*Liver: Hepatocellular Adenom	a								
		52/90 (58%)				19/89 (21%)			
Overall Incidence	Total	52/90 (57.78%)	Mean 57.78%	SD 0%	Total	19/89 (21.35%)	Mean 21.35%	SD 0%	
*Liver: Hepatocellular Carcino									
		28/90 (31%)				8/89 (9%)			
Overall Incidence	Total	28/90 (31.11%)	Mean 31.11%	SD 0%	Total	8/89 (8.99%)	Mean 8.99%	SD 0%	
*Liver: Hepatocellular Carcino						9/89 (10%)			
Overall Incidence	Total	32/90 (35.56%)	Mean 35.56%	SD 0%	Total	9/89 (10.11%)	Mean 10.11%	SD 0%	
*Liver: Hepatocellular Carcino		ellular Adenoma 67/90 (74%)				25/89 (28%)			
Overall Incidence	Total	67/90 (74.44%)	Mean 74.44%	SD 0%	Total	25/89 (28.09%)	Mean 28.09%	SD 0%	
*Liver: Hepatocellular Carcino	ma, Hepatocell	ular Adenoma, or Hepatol 68/90 (76%)	blastoma			25/89 (28%)			
Overall Incidence	Total	68/90 (75.56%)	Mean 75.56%	SD 0%	Total	25/89 (28.09%)	Mean 28.09%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

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Report Date: 01/20/2018

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

			Male			Female			
*Liver: Hepatocholangiocarcin	oma	1/90 (1%)				0/89 (0%)			
Overall Incidence	Total	1/90 (1%) 1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/89 (0%) 0/89 (0%)	Mean 0%	SD 0%	
*Liver: Mast Cell Tumor			•••••						
Overall Incidence	Total	1/90 (1%) 1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/89 (0%) 0/89 (0%)	Mean 0%	SD 0%	
*Lung: Alveolar/Bronchiolar Ad	denoma	13/90 (14%)				3/90 (3%)			
Overall Incidence	Total	13/90 (14.44%)	Mean 14.44%	SD 0%	Total	3/90 (3.33%)	Mean 3.33%	SD 0%	
*Lung: Alveolar/Bronchiolar Ca		13/90 (14%)				3/90 (3%)			
Overall Incidence	Total	13/90 (14.44%)	Mean 14.44%	SD 0%	Total	3/90 (3.33%)	Mean 3.33%	SD 0%	
*Lung:		veolar/Bronchiolar Adeno 23/90 (26%)				6/90 (7%)			
Overall Incidence	Total	23/90 (25.56%)	Mean 25.56%	SD 0%	Total	6/90 (6.67%)	Mean 6.67%	SD 0%	
*Lung: Hemangiosarcoma									
Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

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Report Date: 01/20/2018

			Male			Female			
*Lung: Mast Cell Tumor									
		1/90 (1%)				0/90 (0%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Lymph Node: Hemangiosarcoma		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Lymph Node: Mast Cell Tumor									
		1/90 (1%)				0/90 (0%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Lymph Node, Mandibular: Mast Cell Tumor									
	.	1/90 (1%)		00.00/	+	0/90 (0%)	14 00/	05.00/	
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Lymph Node, Mesenteric: Hemangioma									
		1/90 (1%)				0/90 (0%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Lymph Node, Mesenteric: Hemangiosarcoma									
		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE
Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

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			Male			Female			
#Lymph Node, Mesenteric: Mast Cell Tumor									
		1/90 (1%)				0/90 (0%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Mammary Gland: Adenoma									
		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Mammary Gland: Carcinoma									
		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Mammary Gland: Carcinoma or Adenoma									
		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Mammary Gland: Fibroma, Fibroadenoma or	Adenoma								
		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Mammary Gland: Fibroma, Fibroadenoma, C	arcinoma, or	· Adenoma		•••••					
		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Length of Study: CHRONIC

Vehicle: AIR

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			Male			Female			
#Mesentery: Hemangioma Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	1/90 (1%) 1/90 (1.11%)	Mean 1.11%	SD 0%	
#Mesentery: Hemangiosarcoma		1/90 (1%)				0/90 (0%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	
#Mesentery: Lipoma									
Overall Incidence	Total	1/90 (1%) 1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	
#Mesentery: Sarcoma Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	
*Nose: Adenoma		0/90 (0%)				0/89 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/89 (0%)	Mean 0%	SD 0%	
*Nose: Polyp		0/90 (0%)				0/89 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/89 (0%)	Mean 0%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Contract/Lab: All Laboratories

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: Whole Body Exposure

Vehicle: AIR

			Male				Female					
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva): Papilloma Squamous or Papilloma												
		0/90 (0%)		05.00		0/90 (0%)		05.00/				
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%				
#Oral Cavity (Oral Mucosa Squamous Cell Carcinor		vnx, Tooth, Gingiva):										
		0/90 (0%)				0/90 (0%)						
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%				
#Oral Cavity (Oral Mucosa Squamous Cell Carcinor		Squamous, or Papilloma 0/90 (0%)				0/90 (0%)						
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%				
#Oral Mucosa: Squamous Cell Carcinor	na	0/90 (0%)				0/90 (0%)						
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%				
*Ovary: Cystadenocarcinoma												
						0/75 (0%)						
Overall Incidence					Total	0/75 (0%)	Mean 0%	SD 0%				
*Ovary: Cystadenoma												
O					T-1-1	2/75 (3%)	Maria 0.070/	OD 00/				
Overall Incidence					Total	2/75 (2.67%)	Mean 2.67%	SD 0%				

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Contract/Lab: All Laboratories

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: Whole Body Exposure

Vehicle: AIR

Male Female *Ovary: **Granulosa Cell Tumor Benign** 1/75 (1%) **Overall Incidence** Total 1/75 (1.33%) Mean 1.33% SD 0% *Ovary: **Granulosa Cell Tumor Malignant** 0/75 (0%)**Overall Incidence** Total 0/75 (0%) Mean 0% SD 0% *Ovary: Granulosa Cell Tumor: Benign, Malignant, NOS 1/75 (1%) **Overall Incidence** Total 1/75 (1.33%) Mean 1.33% SD 0% *Ovary: **Granulosa-Theca Tumor Malignant** 0/75 (0%)**Overall Incidence** Total 0/75 (0%) Mean 0% SD 0% *Ovary: Hemangioma 2/75 (3%)**Overall Incidence** Total 2/75 (2.67%) Mean 2.67% SD 0% *Ovary: Hemangiosarcoma 0/75 (0%)**Overall Incidence** Total Mean 0% SD 0% 0/75 (0%)

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

*Ovary: Luteoma

*Ovary: Sarcoma

Strain: B6C3F1/N

Overall Incidence

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** 0/75 (0%)SD 0% Total 0/75 (0%) Mean 0%

0/75

(0%)

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Report Date: 01/20/2018

Overall Incidence	Total	0/75 (0%)	Mean 0%	SD 0%
			• • • • • • • • • • • • • • • • • • • •	
*Ovary:				

Thecoma Malignant
Thecoma Malignant

1/75 (1%)Overall Incidence Total 1/75 (1 33%) Mean 1 33% SD 0%

Overall indiaction	Total	1770 (1.0070)	Wicaii 1.0070	OD 070
		• • • • • • • • • • • • • • • • • • • •		

*Ovary: **Tubulostromal Adenoma**

0/75 (0%)**Overall Incidence** SD 0% Total 0/75 (0%) Mean 0%

..... *Pancreas: **Mast Cell Tumor**

1/87 (1%) 0/87 (0%)**Overall Incidence** Total 1/87 (1.15%) Mean 1.15% SD 0% Total 0/87 (0%) Mean 0% SD 0%

*Parathyroid Gland:

Adenoma 0/68 (0%)0/60 (0%)

Overall Incidence Total 0/68 (0%) Mean 0% SD 0% Total 0/60 (0%) Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

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				Male				Female				
*Pituitary Gland: Pars Distalis or Unspecified Site: Adenoma												
	-		(0%)		OD 00/	-	6/80 (8%)	7.50/	OD .00/			
Overall Incidence	Total	0/86 (0%)		Mean 0%	SD 0%	Total	6/80 (7.5%)	Mean 7.5%	SD 0%			
*Pituitary Gland: Pars Dis Carcinoma	talis or Unspecif	ied Site:										
		0/86	(0%)				0/80 (0%)					
Overall Incidence	Total	0/86 (0%)		Mean 0%	SD 0%	Total	0/80 (0%)	Mean 0%	SD 0%			
*Pituitary Gland: Pars Dis Carcinoma or Adenoma	talis or Unspecif	ied Site:										
			(0%)				6/80 (8%)					
Overall Incidence	Total	0/86 (0%)		Mean 0%	SD 0%	Total	6/80 (7.5%)	Mean 7.5%	SD 0%			
*Pituitary Gland: Pars Inte Adenoma												
		0/86	(0%)				0/80 (0%)					
Overall Incidence	Total	0/86 (0%)		Mean 0%	SD 0%	Total	0/80 (0%)	Mean 0%	SD 0%			
*Pituitary Gland: Pars Inte Carcinoma	ermedia:											
		0/86	(0%)				0/80 (0%)					
Overall Incidence	Total	0/86 (0%)		Mean 0%	SD 0%	Total	0/80 (0%)	Mean 0%	SD 0%			
*Pituitary Gland: Pars Inte Carcinoma or Adenoma												
		0/86	(0%)				0/80 (0%)					
Overall Incidence	Total	0/86 (0%)		Mean 0%	SD 0%	Total	0/80 (0%)	Mean 0%	SD 0%			

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

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			Male			Female							
*Pituitary Gland: Pars Intermedia: Schwannoma Malignant													
_		0/86 (0%)				0/80 (0%)							
Overall Incidence	Total	0/86 (0%)	Mean 0%	SD 0%	Total	0/80 (0%)	Mean 0%	SD 0%					
*Prostate: Mast Cell Tumor	•••••												
		1/90 (1%)											
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%									
*Salivary Glands: Adenoma													
		0/90 (0%)				0/89 (0%)							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/89 (0%)	Mean 0%	SD 0%					
*Salivary Glands: Carcinoma													
		0/90 (0%)				0/89 (0%)							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/89 (0%)	Mean 0%	SD 0%					
*Salivary Glands: Carcinoma or Adenoma													
		0/90 (0%)				0/89 (0%)							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/89 (0%)	Mean 0%	SD 0%					
*Salivary Glands: Hemangiosarcoma													
		0/90 (0%)				0/89 (0%)							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/89 (0%)	Mean 0%	SD 0%					

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** *Salivary Glands: **Mast Cell Tumor** 1/90 (1%)0/89 (0%)**Overall Incidence** Total 1/90 (1.11%) Mean 1.11% SD 0% Total 0/89 (0%) Mean 0% SD 0% *Salivary Glands: Myxosarcoma 0/90 (0%)0/89 (0%)**Overall Incidence** Total 0/90 (0%) Mean 0% SD 0% Total 0/89 (0%) Mean 0% SD 0% **#Seminal Vesicle:** Adenoma 0/90 (0%)**Overall Incidence** Total 0/90 (0%) Mean 0% SD 0% **#Seminal Vesicle: Fibroma** 1/90 (1%)

#Skeletal Muscle: Osteosarcoma

Overall Incidence

Overall Incidence

Overall Incidence

0/90 (0%)0/90 (0%)

1/90 (1.11%)

Mean 0% SD 0%

Mean 1.11%

1/90 (1%) Total 1/90 (1.11%)

Mean 1.11%

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SD 0%

#Skeletal Muscle: Rhabdomyosarcoma

> 0/90 (0%)0/90 (0%)

Mean 0%

SD 0%

SD 0%

Total 0/90 (0%)

0/90

(0%)

Mean 0%

SD 0%

*: Denominator is number of animals with tissues examined microscopically

Total

Total

Total

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

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			Male				Female						
Skeletal Muscle: Rhabdomyosarcoma or Rhabdomyoma 0/90 (0%) 0/90 (0%)													
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%					
#Skeletal Muscle: Sarcoma					•••••	(20)							
Overall Incidence	Total	1/90 (1%) 1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%					
#Skin: Basal Cell Carcinoma		0/90 (0%)				0/90 (0%)							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%					
#Skin: Basal Cell Carcinoma or	-	0/90 (0%)	-			0/90 (0%)							
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%					
#Skin:		oma, Basosquamous Tu	mor (benign, maligna	nt or									
Basal Cell Carcinoma, Ba NOS), or Trichoepithelior	na												
Basal Cell Carcinoma, Ba NOS), or Trichoepithelion		0/90 (0%)	Moon 09/	SD 09/	Total	0/90 (0%)	Moon 00/	CD 00/					
Basal Cell Carcinoma, Ba NOS), or Trichoepithelior Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%					
Basal Cell Carcinoma, Ba	Total	0/90 (0%)a, Basosq. Tumor (M or	B), Basal Cell Adenor			0/90 (0%)							

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

Strain: B6C3F1/N Length of Study: CHRONIC

			Male			Female						
#Skin: Fibroma												
		0/90 (0%)				1/90 (1%)						
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11%	SD 0%				
#Skin: Fibroma, Fibrosarcoma Hemangiopericytoma	a, Sarcoma, Myx	oma, Myxosarcoma, Mal	lignant Fibrous Histio	cytoma, or								
		1/90 (1%)				6/90 (7%)						
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	6/90 (6.67%)	Mean 6.67%	SD 0%				
#Skin: Fibroma, Fibrosarcoma	a, Sarcoma, Myx	oma, Myxosarcoma, or I	Malignant Fibrous His	tiocytoma		6/90 (7%)						
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	6/90 (6.67%)	Mean 6.67%	SD 0%				
#Skin: Fibrosarcoma												
		0/90 (0%)				3/90 (3%)						
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	3/90 (3.33%)	Mean 3.33%	SD 0%				
#Skin: Fibrosarcoma, Sarcom	ıa, Myxosarcoma	a, or Malignant Fibrous F	Histiocytoma			F/00 (COV)						
Overall Incidence	Total	1/90 (1%) 1/90 (1.11%)	Mean 1.11%	SD 0%	Total	5/90 (6%) 5/90 (5.56%)	Mean 5.56%	SD 0%				
	1 Olai		wican 1.11/0				MEGII 3.30/0					
#Skin: Hemangioma		0/00 (00%)				0/00 (00%)						
		0/90 (0%)	• • • • • • • • • • • • • • • • • • • •	OD .00/		0/90 (0%)		05 00/				
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%				

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

			Male			Female			
#Skin: Hemangiosarcoma									
		1/90 (1%)				2/90 (2%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	2/90 (2.22%)	Mean 2.22%	SD 0%	
#Skin: Keratoacanthoma									
		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Skin: Lipoma		4/00 (404)				4/00 (40)			
Overall Incidence	Total	1/90 (1%) 1/90 (1.11%)	Mean 1.11%	SD 0%	Total	1/90 (1%) 1/90 (1.11%)	Mean 1.11%	SD 0%	
	ı Olai					1/90 (1.11/0)			
#Skin: Malignant Fibrous Histic	ocytoma								
		1/90 (1%)				0/90 (0%)			
Overall Incidence	Total	1/90 (1.11%)	Mean 1.11%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Skin: Melanoma Benign									
		0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
#Skin: Neurofibrosarcoma or S	Schwannoma (m	nalignant or NOS)							
	· · · · · · · · · · · · · · · · · · ·	0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Strain: B6C3F1/N

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: Whole Body Exposure

Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

Male **Female** #Skin: Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS) 0/90 (0%)0/90 (0%)**Overall Incidence** Total 0/90 (0%) Mean 0% SD 0% Total 0/90 (0%) Mean 0% SD 0% #Skin: Osteosarcoma 0/90 (0%)1/90 (1%)**Overall Incidence** Total 0/90 (0%) Mean 0% SD 0% Total 1/90 (1.11%) Mean 1.11% SD 0% #Skin: Pilomatrixoma 1/90 (1%)0/90 (0%)**Overall Incidence** Total 1/90 (1.11%) Mean 1.11% SD 0% Total 0/90 (0%) Mean 0% SD 0% #Skin: Sarcoma 0/90 (0%)2/90 (2%)**Overall Incidence** Total 0/90 (0%) Mean 0% SD 0% Total 2/90 (2.22%) Mean 2.22% SD 0% #Skin: Schwannoma Malignant 0/90 (0%)0/90 (0%)**Overall Incidence** Total 0/90 (0%) Mean 0% SD 0% Total 0/90 (0%) Mean 0% SD 0% Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma 0/90 (0%)0/90 (0%)0/90 (0%) Mean 0% **Overall Incidence** Total Mean 0% SD 0% Total 0/90 (0%) SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

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			Male			Female			
#Skin: Squamous Cell Papilloma Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	
#Skin: Squamous Cell Papilloma	or Papilloma								
Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	
#Skin: Squamous Cell Papilloma, Overall Incidence	Papilloma, S	quamous Cell Carcinom 0/90 (0%) 0/90 (0%)	na or Keratoacanthon Mean 0%	na SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	
#Skin: Squamous Cell Papilloma,	Papilloma, o	r Keratoacanthoma 0/90 (0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	
*Spleen: Hemangiosarcoma		0/87 (0%)			•••••	0/86 (0%)			
Overall Incidence	Total	0/87 (0%)	Mean 0%	SD 0%	Total	0/86 (0%)	Mean 0%	SD 0%	
#Stomach, Forestomach: Squamous Cell Carcinoma	······	0/00 //02/				0/00 (00/)			
Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

Strain: B6C3F1/N Length of Study: CHRONIC

			Male				Female	
#Stomach, Forestomach: Squamous Cell Carcinoma	or Papilloma	a Squamous						
Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	1/90 (1%) 1/90 (1.11%)	Mean 1.11%	SD 0%
#Stomach, Forestomach: Squamous Cell Papilloma		0/90 (0%)				1/90 (1%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	1/90 (1.11%)	Mean 1.11%	SD 0%
#Stomach, Glandular: Adenoma								
Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%
#Stomach, Glandular: Carcinoma		0/90 (0%)				0/90 (0%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%
#Stomach, Glandular: Carcinoma or Adenoma								
Overall Incidence	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%
*Testis: Adenoma	•••••	2/90 (2%)						
Overall Incidence	Total	2/90 (2.22%)	Mean 2.22%	SD 0%				

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Toxicology Data Management System

Contract/Lab: All Laboratories

Species: MICE
Strain: B6C3F1/N

Length of Study: CHRONIC

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

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			Male			Female				
*Testis: Hemangioma		0/90 (0%)								
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%						
*Thymus: Thymoma Benign		0(75 (00))				0/05 (00/)				
Overall Incidence	Total	0/75 (0%) 0/75 (0%)	Mean 0%	SD 0%	Total	0/85 (0%) 0/85 (0%)	Mean 0%	SD 0%		
*Thymus: Thymoma NOS		0/75 (0%)				0/85 (0%)				
Overall Incidence	Total	0/75 (0%)	Mean 0%	SD 0%	Total	0/85 (0%)	Mean 0%	SD 0%		
*Thymus: Thymoma: Benign, Maliç		0/75 (0%)				0/85 (0%)				
Overall Incidence	Total	0/75 (0%)	Mean 0%	SD 0%	Total	0/85 (0%)	Mean 0%	SD 0%		
*Thyroid Gland: C-Cell: Adenoma										
Overall Incidence	Total	0/89 (0%) 0/89 (0%)	Mean 0%	SD 0%	Total	0/86 (0%) 0/86 (0%)	Mean 0%	SD 0%		
*Thyroid Gland: C-Cell: Carcinoma		0/89 (0%)				1/86 (1%)				
Overall Incidence	Total	0/89 (0%)	Mean 0%	SD 0%	Total	1/86 (1.16%)	Mean 1.16%	SD 0%		

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

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Report Date: 01/20/2018

Contract/Lab: All Laboratories Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

	Male						Female			
*Thyroid Gland: C-Cell: Carcinoma or Adenoma Overall Incidence	Total	0/89 0/89 (0%)	(0%)	Mean 0%	SD 0%	Total	1/86 (1%) 1/86 (1.16%)	Mean 1.16%	SD 0%	
*Thyroid Gland: Follicular Cell: Adenoma		0/00	(00()				0/00 /00/)			
Overall Incidence	Total	0/89 0/89 (0%)	(0%)	Mean 0%	SD 0%	Total	0/86 (0%) 0/86 (0%)	Mean 0%	SD 0%	
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma Overall Incidence	Total	0/89 0/89 (0%)	(0%)	Mean 0%	SD 0%	Total	0/86 (0%) 0/86 (0%)	Mean 0%	SD 0%	
#Tongue: Squamous Cell Carcinoma o Overall Incidence	r Papillom	a Squamous 0/90 0/90 (0%)	(0%)	Mean 0%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	
#Tongue: Squamous Cell Papilloma Overall Incidence	Total	0/90 0/90 (0%)	(0%)	Mean 0%	SD 0%	Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%	
#Tooth: Odontoma		0/90	(0%)				0/90 (0%)			
Overall Incidence	Total	0/90 (0%)		Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%	

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Strain: B6C3F1/N

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: Whole Body Exposure

Vehicle: AIR

Length of Study: CHRONIC

Contract/Lab: All Laboratories

			Male	Female				
*Urinary Bladder: Hemangiosarcoma								
_		0/87 (0%)				0/86 (0%)		
Overall Incidence	Total	0/87 (0%)	Mean 0%	SD 0%	Total	0/86 (0%)	Mean 0%	SD 0%
*Urinary Bladder: Mast Cell Tumor								
		1/87 (1%)				0/86 (0%)		
Overall Incidence	Total	1/87 (1.15%)	Mean 1.15%	SD 0%	Total	0/86 (0%)	Mean 0%	SD 0%
#Uterus: Adenoma								
						0/90 (0%)		
Overall Incidence					Total	0/90 (0%)	Mean 0%	SD 0%
#Uterus: Fibroma								
						1/90 (1%)		
Overall Incidence					Total	1/90 (1.11%)	Mean 1.11%	SD 0%
#Uterus: Granular Cell Tumor Benigi								
J						0/90 (0%)		
Overall Incidence					Total	0/90 (0%)	Mean 0%	SD 0%
#Uterus: Hemangioma		•••••						
						0/90 (0%)		
Overall Incidence					Total	0/90 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Species: MICE

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

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Report Date: 01/20/2018

Route: Whole Body Exposure

Vehicle: AIR

Strain: B6C3F1/N Length of Study: CHRONIC

Contract/Lab: All Laboratories

			Male				Female	
#Uterus: Hemangiosarcoma								
Overall Incidence					Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%
#Uterus: Leiomyoma								
Overall Incidence					Total	1/90 (1%) 1/90 (1.11%)	Mean 1.11%	SD 0%
#Uterus: Polyp Stromal								
Overall Incidence					Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%
#Uterus: Sarcoma Stromal						•••••		
Overall Incidence					Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%
#Uterus: Sarcoma Stromal or Poly	n Stromal							
Overall Incidence	p on omai				Total	0/90 (0%) 0/90 (0%)	Mean 0%	SD 0%
#Zymbal's Gland: Carcinoma								
		0/90 (0%)			_	0/90 (0%)		
Overall Incidence	Total	0/90 (0%)	Mean 0%	SD 0%	Total	0/90 (0%)	Mean 0%	SD 0%

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied

Contract/Lab: All Laboratories

Species: MICE Strain: B6C3F1/N

Length of Study: CHRONIC

Toxicology Data Management System

Tumor Incidence for Selected Control Animal Groups

Route: Whole Body Exposure

Vehicle: AIR

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

^{*:} Denominator is number of animals with tissues examined microscopically

^{#:} Denominator is number of animals necropsied