

Version: Nov2014
Contract/Lab: All Laboratories
Species: MICE
Strain: B6C3F1
Length of Study: CHRONIC

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

Page: 112
Report Date: 11/11/2014

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	052000904	11/09/04	730	50(1)	24(645)	57.1	beta-Picoline
Battelle Columbus Laboratory	059601406	09/26/06	730	50(1)	25(660)	55.9	Water disinfection byproducts (Bromodichloroacetic acid)
Female							
Battelle Columbus Laboratory	052000904	11/08/04	729	50(5)	38(702)	67.4	beta-Picoline
Battelle Columbus Laboratory	059601406	09/25/06	729	50(5)	30(680)	63.5	Water disinfection byproducts (Bromodichloroacetic acid)

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 113
 Report Date: 11/11/2014

		Male			Female		
#All Organs:							
Benign Tumors							
		36/50 (72%)	43/50 (86%)		40/50 (80%)	36/50 (72%)	
Overall Incidence	Total	79/100 (79%)	Mean 79%	SD 9.9%	Total	76/100 (76%)	Mean 76% SD 5.66%
.....							
#All Organs:							
Malignant Tumors							
		36/50 (72%)	30/50 (60%)		29/50 (58%)	31/50 (62%)	
Overall Incidence	Total	66/100 (66%)	Mean 66%	SD 8.49%	Total	60/100 (60%)	Mean 60% SD 2.83%
.....							
#All Organs:							
Malignant and Benign Tumors							
		48/50 (96%)	48/50 (96%)		43/50 (86%)	45/50 (90%)	
Overall Incidence	Total	96/100 (96%)	Mean 96%	SD 0%	Total	88/100 (88%)	Mean 88% SD 2.83%
.....							
#All Organs:							
Hemangioma							
		1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)	
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	0/100 (0%)	Mean 0% SD 0%
.....							
#All Organs:							
Hemangiosarcoma							
		6/50 (12%)	5/50 (10%)		3/50 (6%)	6/50 (12%)	
Overall Incidence	Total	11/100 (11%)	Mean 11%	SD 1.41%	Total	9/100 (9%)	Mean 9% SD 4.24%
.....							
#All Organs:							
Hemangiosarcoma or Hemangioma							
		7/50 (14%)	5/50 (10%)		3/50 (6%)	6/50 (12%)	
Overall Incidence	Total	12/100 (12%)	Mean 12%	SD 2.83%	Total	9/100 (9%)	Mean 9% SD 4.24%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 114
 Report Date: 11/11/2014

		Male				Female			
#All Organs:									
Histiocytic Sarcoma									
		0/50 (0%)	1/50 (2%)		1/50 (2%)	2/50 (4%)			
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	3/100 (3%)	Mean 3%	SD 1.41%	
.....									
#All Organs:									
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type									
		0/50 (0%)	0/50 (0%)		14/50 (28%)	6/50 (12%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	20/100 (20%)	Mean 20%	SD 11.31%	
.....									
#All Organs:									
Mesothelioma: Benign									
		1/50 (2%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#All Organs:									
Mesothelioma: Benign, Malignant, NOS									
		1/50 (2%)	1/50 (2%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#All Organs:									
Mesothelioma: Malignant									
		0/50 (0%)	1/50 (2%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	1/100 (1%)	Mean 1%	SD 1.41%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#All Organs:									
Osteoma									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	1/50 (2%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	1/100 (1%)	Mean 1%	SD 1.41%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 115
 Report Date: 11/11/2014

		Male				Female			
#All Organs:									
Osteosarcoma									
		0/50 (0%)	0/50 (0%)		2/50 (4%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	2/100 (2%)	Mean 2%	SD 2.83%	
.....									
#All Organs:									
Osteosarcoma or Osteoma									
		0/50 (0%)	0/50 (0%)		2/50 (4%)	1/50 (2%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	3/100 (3%)	Mean 3%	SD 1.41%	
.....									
*Adrenal Cortex:									
Adenoma									
		2/49 (4%)	2/50 (4%)		0/49 (0%)	0/49 (0%)			
Overall Incidence	Total	4/99 (4.04%)	Mean 4.04%	SD 0.06%	Total	0/98 (0%)	Mean 0%	SD 0%	
.....									
*Adrenal Medulla:									
Pheochromocytoma Benign									
		0/49 (0%)	0/50 (0%)		1/49 (2%)	0/50 (0%)			
Overall Incidence	Total	0/99 (0%)	Mean 0%	SD 0%	Total	1/99 (1.01%)	Mean 1.02%	SD 1.44%	
.....									
*Adrenal Medulla:									
Pheochromocytoma Malignant									
		0/49 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)			
Overall Incidence	Total	0/99 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0%	SD 0%	
.....									
*Adrenal Medulla:									
Pheochromocytoma: Benign, Complex, Malignant, NOS									
		0/49 (0%)	0/50 (0%)		1/49 (2%)	0/50 (0%)			
Overall Incidence	Total	0/99 (0%)	Mean 0%	SD 0%	Total	1/99 (1.01%)	Mean 1.02%	SD 1.44%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 116
 Report Date: 11/11/2014

		Male				Female			
#Blood Vessel:									
Hemangioma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
*Bone Marrow:									
Hemangioma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									
*Bone Marrow:									
Hemangiosarcoma									
		2/50	(4%)	0/50	(0%)	1/49	(2%)	0/50	(0%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	1/99	(1.01%)	Mean 1.02%
									SD 1.44%
.....									
*Bone Marrow:									
Mast Cell Tumor Malignant									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									
*Bone Marrow:									
Sarcoma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									
#Bone:									
Fibroma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 117
 Report Date: 11/11/2014

		Male				Female			
#Bone:									
Hemangiosarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Bone:									
Osteoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%
									SD 1.41%
.....									
#Bone:									
Osteosarcoma									
		0/50	(0%)	0/50	(0%)	2/50	(4%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	2/100	(2%)	Mean 2%
									SD 2.83%
.....									
#Bone:									
Osteosarcoma or Osteoma									
		0/50	(0%)	0/50	(0%)	2/50	(4%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	3/100	(3%)	Mean 3%
									SD 1.41%
.....									
#Bone:									
Sarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
*Brain:									
Granular Cell Tumor Benign									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%
									SD 0%
.....									

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 118
 Report Date: 11/11/2014

		Male				Female					
*Brain:											
Meningioma Malignant											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/49	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/99	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
Meningioma: Benign, Malignant, NOS											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/49	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/99	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
Oligodendroglioma Malignant											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%	SD 0%	
.....											
*Brain:											
Oligodendroglioma, Glioma, or Astrocytoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/99	(0%)	Mean 0%	SD 0%	
.....											
*Clitoral/Preputial Gland:											
Hemangioma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/47	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/97	(0%)	Mean 0%	SD 0%	
.....											
*Clitoral/Preputial Gland:											
Hemangiosarcoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/47	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/97	(0%)	Mean 0%	SD 0%	

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 119
 Report Date: 11/11/2014

		Male				Female					
#Coagulating Gland:											
Granular Cell Tumor											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Coagulating Gland:											
Sarcoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Eye:											
Melanoma Malignant											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Harderian Gland:											
Adenoma											
		5/50	(10%)	6/50	(12%)			2/50	(4%)	5/50	(10%)
Overall Incidence	Total	11/100	(11%)	Mean 11%	SD 1.41%	Total	7/100	(7%)	Mean 7%	SD 4.24%	
.....											
#Harderian Gland:											
Carcinoma											
		2/50	(4%)	0/50	(0%)			2/50	(4%)	0/50	(0%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 2.83%	Total	2/100	(2%)	Mean 2%	SD 2.83%	
.....											
#Harderian Gland:											
Carcinoma or Adenoma											
		7/50	(14%)	6/50	(12%)			4/50	(8%)	5/50	(10%)
Overall Incidence	Total	13/100	(13%)	Mean 13%	SD 1.41%	Total	9/100	(9%)	Mean 9%	SD 1.41%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 120
 Report Date: 11/11/2014

		Male				Female					
*Heart:											
Hemangiosarcoma											
		1/50	(2%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Large: Cecum:											
Adenoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Large: Cecum:											
Carcinoma											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Large: Cecum:											
Carcinoma or Adenoma											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Large: Cecum:											
Leiomyosarcoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Duodenum:											
Adenoma											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 121
 Report Date: 11/11/2014

		Male				Female					
#Intestine Small: Duodenum:											
Carcinoma											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Ileum:											
Adenoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Ileum:											
Carcinoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Jejunum:											
Adenoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Jejunum:											
Carcinoma											
		2/50	(4%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	3/100	(3%)	Mean 3%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Jejunum:											
Leiomyosarcoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 122
 Report Date: 11/11/2014

		Male				Female					
#Intestine Small: Site Unspecified:											
Adenoma											
		0/50	(0%)	1/50	(2%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Site Unspecified:											
Carcinoma											
		2/50	(4%)	2/50	(4%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	4/100	(4%)	Mean 4%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Site Unspecified:											
Carcinoma or Adenoma											
		2/50	(4%)	3/50	(6%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	5/100	(5%)	Mean 5%	SD 1.41%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
#Intestine Small: Site Unspecified:											
Leiomyosarcoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%	SD 0%	
.....											
*Islets, Pancreatic:											
Adenoma											
		1/49	(2%)	0/50	(0%)			0/48	(0%)	0/49	(0%)
Overall Incidence	Total	1/99	(1.01%)	Mean 1.02%	SD 1.44%	Total	0/97	(0%)	Mean 0%	SD 0%	
.....											
*Islets, Pancreatic:											
Carcinoma											
		0/49	(0%)	0/50	(0%)			0/48	(0%)	0/49	(0%)
Overall Incidence	Total	0/99	(0%)	Mean 0%	SD 0%	Total	0/97	(0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 123
 Report Date: 11/11/2014

		Male			Female		
*Islets, Pancreatic:							
 Carcinoma or Adenoma							
		1/49 (2%)	0/50 (0%)		0/48 (0%)	0/49 (0%)	
Overall Incidence	Total	1/99 (1.01%)	Mean 1.02%	SD 1.44%	Total	0/97 (0%)	Mean 0% SD 0%
.....							
*Kidney: Pelvis and Transitional Epithelium:							
 Carcinoma							
		0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0% SD 0%
.....							
*Kidney: Pelvis and Transitional Epithelium:							
 Carcinoma or Adenoma							
		0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule:							
 Adenoma							
		0/50 (0%)	2/50 (4%)		0/49 (0%)	0/50 (0%)	
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 2.83%	Total	0/99 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule:							
 Carcinoma							
		0/50 (0%)	0/50 (0%)		0/49 (0%)	0/50 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/99 (0%)	Mean 0% SD 0%
.....							
*Kidney: Renal Tubule:							
 Carcinoma or Adenoma							
		0/50 (0%)	2/50 (4%)		0/49 (0%)	0/50 (0%)	
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 2.83%	Total	0/99 (0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 124
 Report Date: 11/11/2014

		Male				Female			
*Kidney: Renal Tubule:									
Hemangioma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/99	(0%)	Mean 0%	SD 0%
.....									
*Kidney: Renal Tubule:									
Hemangiosarcoma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/99	(0%)	Mean 0%	SD 0%
.....									
*Liver:									
Hemangioma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/49	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/98	(0%)	Mean 0%	SD 0%
.....									
*Liver:									
Hemangiosarcoma									
		5/50	(10%)	1/50	(2%)	2/49	(4%)	2/49	(4%)
Overall Incidence	Total	6/100	(6%)	Mean 6%	SD 5.66%	4/98	(4.08%)	Mean 4.08%	SD 0%
.....									
*Liver:									
Hepatoblastoma									
		6/50	(12%)	4/50	(8%)	1/49	(2%)	0/49	(0%)
Overall Incidence	Total	10/100	(10%)	Mean 10%	SD 2.83%	1/98	(1.02%)	Mean 1.02%	SD 1.44%
.....									
*Liver:									
Hepatocellular Adenoma									
		33/50	(66%)	39/50	(78%)	38/49	(78%)	33/49	(67%)
Overall Incidence	Total	72/100	(72%)	Mean 72%	SD 8.49%	71/98	(72.45%)	Mean 72.45%	SD 7.22%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 125
 Report Date: 11/11/2014

		Male			Female		
*Liver:							
Hepatocellular Carcinoma							
		26/50 (52%)	12/50 (24%)		11/49 (22%)	9/49 (18%)	
Overall Incidence	Total	38/100 (38%)	Mean 38%	SD 19.8%	Total	20/98 (20.41%)	Mean 20.41% SD 2.89%
.....							
*Liver:							
Hepatocellular Carcinoma or Hepatoblastoma							
		26/50 (52%)	15/50 (30%)		12/49 (24%)	9/49 (18%)	
Overall Incidence	Total	41/100 (41%)	Mean 41%	SD 15.56%	Total	21/98 (21.43%)	Mean 21.43% SD 4.33%
.....							
*Liver:							
Hepatocellular Carcinoma or Hepatocellular Adenoma							
		45/50 (90%)	42/50 (84%)		40/49 (82%)	36/49 (73%)	
Overall Incidence	Total	87/100 (87%)	Mean 87%	SD 4.24%	Total	76/98 (77.55%)	Mean 77.55% SD 5.77%
.....							
*Liver:							
Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma							
		45/50 (90%)	42/50 (84%)		40/49 (82%)	36/49 (73%)	
Overall Incidence	Total	87/100 (87%)	Mean 87%	SD 4.24%	Total	76/98 (77.55%)	Mean 77.55% SD 5.77%
.....							
*Liver:							
Hepatocholangiocarcinoma							
		2/50 (4%)	0/50 (0%)		0/49 (0%)	0/49 (0%)	
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 2.83%	Total	0/98 (0%)	Mean 0% SD 0%
.....							
*Liver:							
Ito Cell Tumor Benign							
		0/50 (0%)	0/50 (0%)		0/49 (0%)	0/49 (0%)	
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/98 (0%)	Mean 0% SD 0%

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 126
 Report Date: 11/11/2014

		Male				Female			
*Liver:									
Mast Cell Tumor Malignant									
		0/50 (0%)	0/50 (0%)		0/49 (0%)	0/49 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/98 (0%)	Mean 0%	SD 0%	
.....									
*Liver:									
Sarcoma									
		0/50 (0%)	0/50 (0%)		0/49 (0%)	0/49 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/98 (0%)	Mean 0%	SD 0%	
.....									
*Lung:									
Alveolar/Bronchiolar Adenoma									
		6/50 (12%)	13/50 (26%)		5/50 (10%)	3/50 (6%)			
Overall Incidence	Total	19/100 (19%)	Mean 19%	SD 9.9%	Total	8/100 (8%)	Mean 8%	SD 2.83%	
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma									
		9/50 (18%)	7/50 (14%)		7/50 (14%)	2/50 (4%)			
Overall Incidence	Total	16/100 (16%)	Mean 16%	SD 2.83%	Total	9/100 (9%)	Mean 9%	SD 7.07%	
.....									
*Lung:									
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma									
		14/50 (28%)	19/50 (38%)		11/50 (22%)	5/50 (10%)			
Overall Incidence	Total	33/100 (33%)	Mean 33%	SD 7.07%	Total	16/100 (16%)	Mean 16%	SD 8.49%	
.....									
*Lung:									
Hemangiosarcoma									
		2/50 (4%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 2.83%	Total	0/100 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 127
 Report Date: 11/11/2014

		Male				Female			
#Lymph Node, Mandibular: Mast Cell Tumor Malignant									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Lymph Node, Mediastinal: Mast Cell Tumor Malignant									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Lymph Node, Mesenteric: Hemangiosarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Mammary Gland: Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1% SD 1.41%
.....									
#Mammary Gland: Carcinoma or Adenoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1% SD 1.41%
.....									
#Mammary Gland: Fibroma, Fibroadenoma, Carcinoma, or Adenoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1% SD 1.41%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 128
 Report Date: 11/11/2014

		Male				Female			
#Mesentery:									
Hemangioma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Mesentery:									
Hemangiosarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	1/100	(1%)	Mean 1%	SD 1.41%
.....									
#Mesentery:									
Lipoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Mesentery:									
Sarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
*Nose:									
Adenoma									
		0/50	(0%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/99	(0%)	Mean 0%	SD 0%
.....									
*Nose:									
Hemangiosarcoma									
		1/50	(2%)	0/50	(0%)	0/49	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	0/99	(0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 129
 Report Date: 11/11/2014

	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%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva): Squamous Cell Carcinoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva): Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Oral Mucosa: Squamous Cell Carcinoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
*Ovary: Choriocarcinoma								
					0/49 (0%)	0/50 (0%)		
Overall Incidence					Total	0/99 (0%)	Mean 0%	SD 0%
.....								
*Ovary: Cystadenocarcinoma								
					0/49 (0%)	0/50 (0%)		
Overall Incidence					Total	0/99 (0%)	Mean 0%	SD 0%

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 130
 Report Date: 11/11/2014

	Male	Female
*Ovary:		
Cystadenoma		
	3/49 (6%)	1/50 (2%)
Overall Incidence	Total 4/99 (4.04%)	Mean 4.06% SD 2.92%
.....		
*Ovary:		
Granulosa Cell Tumor Benign		
	0/49 (0%)	0/50 (0%)
Overall Incidence	Total 0/99 (0%)	Mean 0% SD 0%
.....		
*Ovary:		
Granulosa Cell Tumor: Benign, Malignant, NOS		
	0/49 (0%)	0/50 (0%)
Overall Incidence	Total 0/99 (0%)	Mean 0% SD 0%
.....		
*Ovary:		
Hemangioma		
	0/49 (0%)	0/50 (0%)
Overall Incidence	Total 0/99 (0%)	Mean 0% SD 0%
.....		
*Ovary:		
Hemangiosarcoma		
	0/49 (0%)	0/50 (0%)
Overall Incidence	Total 0/99 (0%)	Mean 0% SD 0%
.....		
*Ovary:		
Luteoma		
	0/49 (0%)	0/50 (0%)
Overall Incidence	Total 0/99 (0%)	Mean 0% SD 0%
.....		

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 131
 Report Date: 11/11/2014

Male					Female						
*Ovary:											
Sarcoma											
					0/49	(0%)	0/50	(0%)			
Overall Incidence					Total	0/99	(0%)	Mean	0%	SD	0%
.....											
*Ovary:											
Tubulostromal Adenoma											
					0/49	(0%)	0/50	(0%)			
Overall Incidence					Total	0/99	(0%)	Mean	0%	SD	0%
.....											
*Ovary:											
Yolk Sac Carcinoma											
					0/49	(0%)	0/50	(0%)			
Overall Incidence					Total	0/99	(0%)	Mean	0%	SD	0%
.....											
*Pancreas:											
Carcinoma											
					0/49	(0%)	0/50	(0%)			
Overall Incidence					Total	0/99	(0%)	Mean	0%	SD	0%
					0/48	(0%)	0/49	(0%)			
Overall Incidence					Total	0/97	(0%)	Mean	0%	SD	0%
.....											
*Pancreas:											
Carcinoma or Adenoma											
					0/49	(0%)	0/50	(0%)			
Overall Incidence					Total	0/99	(0%)	Mean	0%	SD	0%
					0/48	(0%)	0/49	(0%)			
Overall Incidence					Total	0/97	(0%)	Mean	0%	SD	0%
.....											
*Pituitary Gland: Pars Distalis or Unspecified Site:											
Adenoma											
					0/47	(0%)	0/50	(0%)			
Overall Incidence					Total	0/97	(0%)	Mean	0%	SD	0%
					4/50	(8%)	2/49	(4%)			
Overall Incidence					Total	6/99	(6.06%)	Mean	6.04%	SD	2.77%

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 132
 Report Date: 11/11/2014

		Male				Female			
*Pituitary Gland: Pars Distalis or Unspecified Site:									
 Carcinoma or Adenoma									
		0/47	(0%)	0/50	(0%)	4/50	(8%)	2/49	(4%)
Overall Incidence	Total	0/97	(0%)	Mean 0%	SD 0%	Total 6/99	(6.06%)	Mean 6.04%	SD 2.77%
.....									
*Pituitary Gland: Pars Intermedia:									
 Adenoma									
		0/47	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/97	(0%)	Mean 0%	SD 0%	Total 0/99	(0%)	Mean 0%	SD 0%
.....									
*Pituitary Gland: Pars Intermedia:									
 Carcinoma or Adenoma									
		0/47	(0%)	0/50	(0%)	0/50	(0%)	0/49	(0%)
Overall Incidence	Total	0/97	(0%)	Mean 0%	SD 0%	Total 0/99	(0%)	Mean 0%	SD 0%
.....									
*Salivary Glands:									
 Adenoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/48	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total 0/98	(0%)	Mean 0%	SD 0%
.....									
*Salivary Glands:									
 Carcinoma or Adenoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/48	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total 0/98	(0%)	Mean 0%	SD 0%
.....									
*Salivary Glands:									
 Hemangiosarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/48	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total 0/98	(0%)	Mean 0%	SD 0%

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 133
 Report Date: 11/11/2014

		Male				Female			
*Salivary Glands:									
Myxoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/48	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/98	(0%)	Mean 0%
									SD 0%
#Skeletal Muscle:									
Hemangiosarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%
									SD 1.41%
#Skeletal Muscle:									
Rhabdomyosarcoma									
		1/50	(2%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%
									SD 0%
#Skeletal Muscle:									
Rhabdomyosarcoma or Rhabdomyoma									
		1/50	(2%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0%
									SD 0%
#Skeletal Muscle:									
Sarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
#Skin:									
Basal Cell Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 134
 Report Date: 11/11/2014

		Male				Female			
#Skin:									
Basal Cell Carcinoma or Basosquamous Tumor (malignant or NOS)									
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma									
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Basal 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%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma									
		1/50 (2%)	1/50 (2%)			2/50 (4%)	4/50 (8%)		
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 0%	Total	6/100 (6%)	Mean 6%	SD 2.83%	
.....									
#Skin:									
Fibrosarcoma									
		0/50 (0%)	0/50 (0%)			0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Skin:									
Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma									
		1/50 (2%)	1/50 (2%)			2/50 (4%)	4/50 (8%)		
Overall Incidence	Total	2/100 (2%)	Mean 2%	SD 0%	Total	6/100 (6%)	Mean 6%	SD 2.83%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 135
 Report Date: 11/11/2014

		Male				Female			
#Skin:									
Fibrous Histiocytoma									
		1/50	(2%)	1/50	(2%)	0/50	(0%)	3/50	(6%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 0%	Total	3/100	(3%)	Mean 3% SD 4.24%
.....									
#Skin:									
Granular Cell Tumor Benign									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Hemangioma									
		1/50	(2%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Hemangiosarcoma									
		1/50	(2%)	1/50	(2%)	2/50	(4%)	1/50	(2%)
Overall Incidence	Total	2/100	(2%)	Mean 2%	SD 0%	Total	3/100	(3%)	Mean 3% SD 1.41%
.....									
#Skin:									
Keratoacanthoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Lipoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	Total	0/100	(0%)	Mean 0% SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 136
 Report Date: 11/11/2014

		Male				Female			
#Skin:									
Liposarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Skin:									
Mast Cell Tumor Benign									
		0/50	(0%)	0/50	(0%)	1/50	(2%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%
									SD 1.41%
.....									
#Skin:									
Mast Cell Tumor Malignant									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Skin:									
Melanoma Benign									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Skin:									
Melanoma Malignant									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Skin:									
Neural Crest Tumor									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 137
 Report Date: 11/11/2014

	Male				Female			
#Skin:								
Neurofibroma or Schwannoma benign								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Neurofibrosarcoma or Schwannoma (malignant or NOS)								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	3/50 (6%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	3/100 (3%)	Mean 3%	SD 4.24%
.....								
#Skin:								
Neurofibrosarcoma, Neurofibroma, or Schwannoma (benign, malignant or NOS)								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	3/50 (6%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	3/100 (3%)	Mean 3%	SD 4.24%
.....								
#Skin:								
Osteosarcoma								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%
.....								
#Skin:								
Sarcoma								
		0/50 (0%)	0/50 (0%)		2/50 (4%)	1/50 (2%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	3/100 (3%)	Mean 3%	SD 1.41%
.....								
#Skin:								
Schwannoma Benign								
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)		
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 138
 Report Date: 11/11/2014

		Male				Female			
#Skin:									
Schwannoma Malignant									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	3/50	(6%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	3/100	(3%)	Mean 3% SD 4.24%
.....									
#Skin:									
Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Squamous Cell Papilloma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Squamous Cell Papilloma or Papilloma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%
.....									
#Skin:									
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0% SD 0%

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 139
 Report Date: 11/11/2014

		Male				Female			
#Spinal Cord:									
Hemangiosarcoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
*Spleen:									
Hemangiosarcoma									
		1/46	(2%)	2/50	(4%)	1/46	(2%)	0/49	(0%)
Overall Incidence	Total	3/96	(3.12%)	Mean 3.09%	SD 1.29%	Total	1/95	(1.05%)	Mean 1.09%
									SD 1.54%
.....									
*Spleen:									
Mast Cell Tumor Malignant									
		0/46	(0%)	0/50	(0%)	0/46	(0%)	0/49	(0%)
Overall Incidence	Total	0/96	(0%)	Mean 0%	SD 0%	Total	0/95	(0%)	Mean 0%
									SD 0%
.....									
#Stomach, Forestomach:									
Squamous Cell Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	0/100	(0%)	Mean 0%
									SD 0%
.....									
#Stomach, Forestomach:									
Squamous Cell Carcinoma or Papilloma Squamous									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%
									SD 1.41%
.....									
#Stomach, Forestomach:									
Squamous Cell Papilloma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	1/50	(2%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total	1/100	(1%)	Mean 1%
									SD 1.41%

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 140
 Report Date: 11/11/2014

		Male				Female			
#Stomach, Glandular:									
Adenoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Stomach, Glandular:									
Carcinoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Stomach, Glandular:									
Carcinoma or Adenoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
*Testes:									
Adenoma									
		0/50	(0%)	1/50	(2%)				
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%				
.....									
*Testes:									
Hemangioma									
		0/50	(0%)	0/50	(0%)				
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%				
.....									
*Thymus:									
Neoplasm NOS									
		0/41	(0%)	0/45	(0%)	0/45	(0%)	0/50	(0%)
Overall Incidence	Total	0/86	(0%)	Mean 0%	SD 0%	0/95	(0%)	Mean 0%	SD 0%

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 141
 Report Date: 11/11/2014

		Male				Female			
*Thymus:									
Thymoma Benign									
		0/41	(0%)	0/45	(0%)	0/45	(0%)	0/50	(0%)
Overall Incidence	Total	0/86	(0%)	Mean 0%	SD 0%	Total	0/95	(0%)	Mean 0%
.....									
*Thymus:									
Thymoma Malignant									
		0/41	(0%)	0/45	(0%)	0/45	(0%)	0/50	(0%)
Overall Incidence	Total	0/86	(0%)	Mean 0%	SD 0%	Total	0/95	(0%)	Mean 0%
.....									
*Thymus:									
Thymoma: Benign, Malignant, NOS									
		0/41	(0%)	0/45	(0%)	0/45	(0%)	0/50	(0%)
Overall Incidence	Total	0/86	(0%)	Mean 0%	SD 0%	Total	0/95	(0%)	Mean 0%
.....									
*Thyroid Gland: C-Cell:									
Adenoma									
		0/49	(0%)	0/50	(0%)	0/48	(0%)	0/49	(0%)
Overall Incidence	Total	0/99	(0%)	Mean 0%	SD 0%	Total	0/97	(0%)	Mean 0%
.....									
*Thyroid Gland: C-Cell:									
Carcinoma									
		0/49	(0%)	0/50	(0%)	0/48	(0%)	0/49	(0%)
Overall Incidence	Total	0/99	(0%)	Mean 0%	SD 0%	Total	0/97	(0%)	Mean 0%
.....									
*Thyroid Gland: C-Cell:									
Carcinoma or Adenoma									
		0/49	(0%)	0/50	(0%)	0/48	(0%)	0/49	(0%)
Overall Incidence	Total	0/99	(0%)	Mean 0%	SD 0%	Total	0/97	(0%)	Mean 0%

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 142
 Report Date: 11/11/2014

		Male				Female			
*Thyroid Gland: Follicular Cell: Adenoma									
		1/49 (2%)	1/50 (2%)		0/48 (0%)	0/49 (0%)			
Overall Incidence	Total	2/99 (2.02%)	Mean 2.02%	SD 0.03%	Total	0/97 (0%)	Mean 0%	SD 0%	
.....									
*Thyroid Gland: Follicular Cell: Carcinoma or Adenoma									
		1/49 (2%)	1/50 (2%)		0/48 (0%)	0/49 (0%)			
Overall Incidence	Total	2/99 (2.02%)	Mean 2.02%	SD 0.03%	Total	0/97 (0%)	Mean 0%	SD 0%	
.....									
#Tissue NOS: Fibrosarcoma									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Tissue NOS: Hemangiosarcoma									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Tongue: Squamous Cell Carcinoma or Papilloma Squamous									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	
.....									
#Tongue: Squamous Cell Papilloma									
		0/50 (0%)	0/50 (0%)		0/50 (0%)	0/50 (0%)			
Overall Incidence	Total	0/100 (0%)	Mean 0%	SD 0%	Total	0/100 (0%)	Mean 0%	SD 0%	

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 143
 Report Date: 11/11/2014

		Male				Female			
#Tooth:									
Odontoma									
		0/50	(0%)	0/50	(0%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	0/100	(0%)	Mean 0%	SD 0%
.....									
#Urethra:									
Hemangiosarcoma									
		0/50	(0%)	1/50	(2%)	0/50	(0%)	0/50	(0%)
Overall Incidence	Total	1/100	(1%)	Mean 1%	SD 1.41%	0/100	(0%)	Mean 0%	SD 0%
.....									
*Urinary Bladder:									
Hemangiosarcoma									
		0/45	(0%)	0/50	(0%)	0/44	(0%)	0/50	(0%)
Overall Incidence	Total	0/95	(0%)	Mean 0%	SD 0%	0/94	(0%)	Mean 0%	SD 0%
.....									
#Uterus:									
Adenoma									
						1/50	(2%)	0/50	(0%)
Overall Incidence	Total					1/100	(1%)	Mean 1%	SD 1.41%
.....									
#Uterus:									
Carcinoma									
						0/50	(0%)	0/50	(0%)
Overall Incidence	Total					0/100	(0%)	Mean 0%	SD 0%
.....									
#Uterus:									
Hemangioma									
						0/50	(0%)	0/50	(0%)
Overall Incidence	Total					0/100	(0%)	Mean 0%	SD 0%

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 144
 Report Date: 11/11/2014

	Male	Female
#Uterus: Hemangiosarcoma		
Overall Incidence	Total 0/50 (0%) 1/100 (1%)	1/50 (2%) Mean 1% SD 1.41%
#Uterus: Leiomyoma		
Overall Incidence	Total 0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0% SD 0%
#Uterus: Polyp Stromal		
Overall Incidence	Total 2/50 (4%) 6/100 (6%)	4/50 (8%) Mean 6% SD 2.83%
#Uterus: Sarcoma		
Overall Incidence	Total 0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0% SD 0%
#Uterus: Sarcoma Stromal		
Overall Incidence	Total 0/50 (0%) 0/100 (0%)	0/50 (0%) Mean 0% SD 0%
#Uterus: Sarcoma Stromal or Polyp Stromal		
Overall Incidence	Total 2/50 (4%) 6/100 (6%)	4/50 (8%) Mean 6% SD 2.83%

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

Version: Nov2014
 Contract/Lab: All Laboratories
 Species: MICE
 Strain: B6C3F1
 Length of Study: CHRONIC

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

Page: 145
 Report Date: 11/11/2014

		Male				Female					
#Zymbal's Gland:											
Carcinoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total		0/100	(0%)	Mean 0%	SD 0%
.....											
#Zymbal's Gland:											
Carcinoma or Adenoma											
		0/50	(0%)	0/50	(0%)			0/50	(0%)	0/50	(0%)
Overall Incidence	Total	0/100	(0%)	Mean 0%	SD 0%	Total		0/100	(0%)	Mean 0%	SD 0%
.....											

*: Denominator is number of animals with tissues examined microscopically

#: Denominator is number of animals necropsied