

TDMS No. 20007 - 06
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
Time Report Requested: 10:57:30
First Dose M/F: 08/24/04 / 08/23/04
Lab: BAT

F_M3

C Number: C20007
Lock Date: 05/10/2007
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 2.1.0

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	5	5	6	6	7	6	7	7	5	7	7	4	6	6	7	7	7	7	3	6	7	7	
ANIMAL ID	3	3	3	7	7	6	5	3	6	3	3	8	3	3	5	4	4	3	0	3	3	6	4	3	3	
	1	2	2	9	0	8	2	2	8	1	1	7	1	0	5	4	7	2	3	1	0	9	8	2	1	
B6C3F1 MICE MALE 0 G/KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	

males (cont...)

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Gallbladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Infiltration Cellular, Mononuclear Cell																									
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Amyloid Deposition																									
Serosa, Inflammation, Granulomatous				2																					
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic										2															
Epithelium, Hyperplasia										2															
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis																									
Basophilic Focus				X	X																				
Clear Cell Focus			X	X			X	X									X	X							X

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	5	5	6	6	7	6	7	7	5	7	7	4	6	6	7	7	7	7	3	6	7	7
B6C3F1 MICE MALE 0 G/KG	3	3	3	7	7	6	5	3	6	3	3	8	3	3	5	4	4	3	0	3	3	6	4	3	3
	1	2	2	9	0	8	2	2	8	1	1	7	1	0	5	4	7	2	3	1	0	9	8	2	1
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
Degeneration, Cystic Eosinophilic Focus																									
Fatty Change	2		1	2	2																				
Fibrosis																									
Hematopoietic Cell Proliferation																									
Infiltration Cellular, Mononuclear Cell	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1
Mineralization																									
Mixed Cell Focus	X	X	X																						
Necrosis																									
Tension Lipidosis																							X		X
Mesentery	+																								
Inflammation, Chronic																									
Fat, Necrosis	2																								
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Acinus, Atrophy																									
Acinus, Hypertrophy																									
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Infiltration Cellular, Mononuclear Cell	1	1	2		2	1	1	1	1	1															
Parotid Gland, Atrophy																									
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic																									
Necrosis																									
Epithelium, Hyperplasia																									
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

males (cont...)

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DAY ON TEST	0 0																								
	7 7 7 5 5 6 6 7 6 7 7 5 7 7 4 6 6 7 7 7 7 3 6 7 7																								
ANIMAL ID	3 3 3 7 7 6 5 3 6 3 3 8 3 3 5 4 4 3 0 3 3 6 4 3 3																								
	1 2 2 9 0 8 2 2 8 1 1 7 1 0 5 4 7 2 3 1 0 9 8 2 1																								
B6C3F1 MICE MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0 G/KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males
(cont...)

Adrenal Medulla Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Islets, Pancreatic Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Parathyroid Gland Cyst Infiltration Cellular, Mononuclear Cell	M	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pituitary Gland Cyst Pars Distalis, Hyperplasia	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+
Thyroid Gland Atrophy Cyst Follicle, Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis Granuloma Sperm Infiltration Cellular, Mononuclear Cell	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	1		1			1	1	1		1					1	1	1	1	1				1	

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	DAY ON TEST																								
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	5	5	6	6	7	6	7	7	5	7	7	4	6	6	7	7	7	7	3	6	7	7
	3	3	3	7	7	6	5	3	6	3	3	8	3	3	5	4	4	3	0	3	3	6	4	3	3
	1	2	2	9	0	8	2	2	8	1	1	7	1	0	5	4	7	2	3	1	0	9	8	2	1
B6C3F1 MICE MALE																								
	ANIMAL ID																								males (cont...)
0 G/KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst															2	2					2				
Inflammation							1		1				1	2			1				2				
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia																					1				
Infiltration Cellular, Mononuclear Cell			1					1		1		1	1				1	1	1		1			1	
Inflammation				1	2	3																			
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Fibrosis	2		1																						
Infiltration Cellular, Mononuclear Cell				1																					
Inflammation	1		1			1																			
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation																									
Mineralization																									
Germinal Epithelium, Atrophy																									

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy						3																			

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DAY ON TEST	0 0																																																	
	7	7	7	5	5	6	6	7	6	7	7	5	7	7	4	6	6	7	7	7	7	3	6	7	7																									
B6C3F1 MICE MALE 0 G/KG	ANIMAL ID																									males (cont...)																								
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																									
																										1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hematopoietic Cell Proliferation	2					3				2		3					1		3						
Hyperplasia, Lymphoid																									
Lymphoid Follicle, Atrophy				3	2	4						2												2	

Thymus	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+
Atrophy			1	3	4	4	2	1	4	2	4	4	3	4	1		1		2		2			2	4
Hyperplasia, Histiocytic	3																								

INTEGUMENTARY SYSTEM

Mammary Gland	M	M	M	M	M	+	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic																									
Ulcer																									

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cranium, Hyperostosis																									
Skeletal Muscle																									

NERVOUS SYSTEM

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DAY ON TEST	0 0																								
	7	7	7	5	5	6	6	7	6	7	7	5	7	7	4	6	6	7	7	7	7	3	6	7	7
ANIMAL ID	3 3 3 7 7 6 5 3 6 3 3 8 3 3 5 4 4 3 0 3 3 6 4 3 3																								
	1	2	2	9	0	8	2	2	8	1	1	7	1	0	5	4	7	2	3	1	0	9	8	2	1
B6C3F1 MICE MALE 0 G/KG	0 0																								
	0 0																								
	0 0																								
	0 0																								
	1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 2 3 4 5 males (cont...)																								

Brain +

RESPIRATORY SYSTEM

Lung +
 Alveolar Epithelium, Hyperplasia +
 Alveolus, Infiltration Cellular, Histiocyte 1 2 1
 Bronchus, Hyperplasia 2

Nose +
 Inflammation, Suppurative +
 Inflammation, Chronic 1 1 1 1
 Nasolacrimal Duct, Inflammation, Suppurative 2
 Respiratory Epithelium, Hyperplasia 2

Trachea +

SPECIAL SENSES SYSTEM

Eye +

Harderian Gland +
 Fibrosis +
 Hyperplasia 2 1
 Infiltration Cellular, Mononuclear Cell 1

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	7 7 7 5 5 6 6 7 6 7 7 5 7 7 4 6 6 7 7 7 7 3 6 7 7																								
ANIMAL ID	3 3 3 7 7 6 5 3 6 3 3 8 3 3 5 4 4 3 0 3 3 6 4 3 3																								
	1 2 2 9 0 8 2 2 8 1 1 7 1 0 5 4 7 2 3 1 0 9 8 2 1																								
B6C3F1 MICE MALE 0 G/KG	0 0																								
	0 0																								
	0 0																								
	0 0																								
	1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5																								

males
(cont...)

URINARY SYSTEM

Kidney	+ +																								
Hydronephrosis																									
Inflammation	2 2 3																								
Mineralization	3																								
Nephropathy	2 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																								
Cortex, Medulla, Necrosis	3 3 3																								
Papilla, Necrosis	3																								
Renal Tubule, Hyperplasia	1																								
Renal Tubule, Mineralization	1 1 2 2 1																								
Renal Tubule, Pigmentation, Lipofuscin																									
Urethra	+																								
Inflammation	3																								
Urinary Bladder	+ +																								
Infiltration Cellular, Mononuclear Cell	1 1																								
Inflammation	1 1 3																								

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DAY ON TEST	0 0																								* TOTALS
	7 7 7 7 7 7 6 7 7 7 7 7 7 7 5 7 7 7 6 7 7 7 7 6																								
B6C3F1 MICE MALE 0 G/KG	3 3 3 3 3 3 1 3 3 3 3 3 3 3 3 3 3 3 2 3 3 3 3 8																								
	2 2 0 1 0 2 7 2 2 1 1 1 2 1 0 3 2 2 2 6 2 1 0 0 3																								
ANIMAL ID	0 0																								
	0 0																								
0 G/KG	2 2 2 2 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 5																								
	6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0																								

ALIMENTARY SYSTEM

Esophagus	+ +																								50			
Gallbladder	+ M + + +																								49			
Infiltration Cellular, Mononuclear Cell																									1	1 1.0		
Intestine Large, Cecum	+ +																								50			
Amyloid Deposition																									2	1 2.0		
Serosa, Inflammation, Granulomatous																									1	2.0		
Intestine Large, Colon	+ +																								50			
Intestine Large, Rectum	+ +																								50			
Intestine Small, Duodenum	+ +																								50			
Intestine Small, Ileum	+ +																								50			
Inflammation, Chronic																									1	2.0		
Epithelium, Hyperplasia																									1	2.0		
Intestine Small, Jejunum	+ +																								50			
Liver	+ +																								50			
Angiectasis	1																								1	1	3 1.0	
Basophilic Focus																										2		
Clear Cell Focus	X X X																								X X	X X	X X X X	18

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	DAY ON TEST																								
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B6C3F1 MICE MALE 0 G/KG	ANIMAL ID																								* TOTALS
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Degeneration, Cystic Eosinophilic Focus		X		X	X	X	X	X		X		X	X	X			X	X		X	X	X		1 1.0 28	
Fatty Change	2	1	1	1	1	1			1	2	1	1	1		1	1	1	2	1					32 1.3	
Fibrosis														2										1 2.0	
Hematopoietic Cell Proliferation						2																		1 2.0	
Infiltration Cellular, Mononuclear Cell	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	49 1.0	
Mineralization																								1 1.0	
Mixed Cell Focus	X				X						X		X				X	X	X					15	
Necrosis														1										3 1.7	
Tension Lipidosis	X											X				X								5	
Mesentery																								3	
Inflammation, Chronic																								1 3.0	
Fat, Necrosis														2										2 2.0	
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Acinus, Atrophy																								1 4.0	
Acinus, Hypertrophy		2								1														2 1.5	
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Infiltration Cellular, Mononuclear Cell	1	1	1		1		2	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	43 1.1	
Parotid Gland, Atrophy																								1 2.0	
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Chronic		2			1	2		2				1					2	1		1			2	19 1.7	
Necrosis						2		1									2						2	8 2.0	
Epithelium, Hyperplasia		3			1	2		3			2						2	3		3			2	18 2.3	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	

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+ .. Tissue examined microscopically
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1-4 .. Lesion qualified as:
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	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		7	7	7	7	7	6	7	7	7	7	7	7	7	7	5	7	7	7	6	7	7	7	7	6	6
		3	3	3	3	3	1	3	3	3	3	3	3	3	1	3	3	3	2	3	3	3	3	3	8	8
		2	2	0	1	0	2	7	2	2	1	1	1	2	1	0	3	2	2	2	6	2	1	0	0	3
B6C3F1 MICE MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0 G/KG		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
* TOTALS																										

Infiltration Cellular, Mononuclear Cell																											2	1.0	
Ulcer																											1	2.0	
Epithelium, Hyperplasia																											2	2.0	
Glands, Ectasia																										1	1	2	1.0

Tooth	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	33	
Dysplasia	1	1	2	1	4		2	1		4	2		3	1		4	1		3									33	2.3

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cardiomyopathy						1			1		1		1	1	1												2	14	1.2
Artery, Infiltration Cellular, Mononuclear Cell																		1										2	1.0
Myocardium, Mineralization																												1	2.0

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50			
Hypertrophy																												1	1	1.0	
Infiltration Cellular, Mononuclear Cell																												1	1.0		
Vacuolization Cytoplasmic										1																		2	1.5		
Subcapsular, Hyperplasia		1	1	1		2	1	1	1	1	2	1	2	1	1	1	1		1	2							2	1	1	44	1.3
Zona Reticularis, Hyperplasia										2			2															2	5	2.0	

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DAY ON TEST	0																								* TOTALS	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	7	7	7	7	7	7	6	7	7	7	7	7	7	7	5	7	7	7	6	7	7	7	7	6		
	3	3	3	3	3	3	1	3	3	3	3	3	3	3	1	3	3	3	2	3	3	3	3	8		
	2	2	0	1	0	2	7	2	2	1	1	1	2	1	0	3	2	2	2	6	2	1	0	0	3	
B6C3F1 MICE MALE 0 G/KG	0																								* TOTALS	
	0																									
	0																									
	0																									
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	

Adrenal Medulla Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
																												1 2.0
Islets, Pancreatic Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
	2	1	2	2	3	3		3	1	2	2	2	1	1			2	1	2	3	1	1	1				37 1.9	
Parathyroid Gland Cyst	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47		
Infiltration Cellular, Mononuclear Cell																	2										1 1.0 1 2.0	
Pituitary Gland Cyst	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49		
Pars Distalis, Hyperplasia																											1 1.0 1 2.0	
Thyroid Gland Atrophy	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Cyst																											1 3.0 4 1.8	
Follicle, Hyperplasia																											1 2.0	

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Granuloma Sperm																											2 2.5
Infiltration Cellular, Mononuclear Cell																											29 1.0

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DAY ON TEST	0																								* TOTALS
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	5	7	7	7	6	7	7	7	7	6
	3	3	3	3	3	3	1	3	3	3	3	3	3	3	3	1	3	3	3	2	3	3	3	3	8
	2	2	0	1	0	2	7	2	2	1	1	1	2	1	0	3	2	2	2	6	2	1	0	0	3
B6C3F1 MICE MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0 G/KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50					
Cyst					2																				4	2.0				
Inflammation						3														4				3	3	10	2.1			
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50				
Hyperplasia																										1	1.0			
Infiltration Cellular, Mononuclear Cell	1	1	1	2	1			1	1	1		1		1	1		1	1	1				1	1	1	1	29	1.0		
Inflammation																			2								4	2.0		
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50				
Fibrosis																											2	1.5		
Infiltration Cellular, Mononuclear Cell											1			1									1				4	1.0		
Inflammation				1										1									1				6	1.0		
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50				
Inflammation																												1	2.0	
Mineralization											1																	1	1.0	
Germinal Epithelium, Atrophy																													2	2.0

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50				
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50			
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50			
Atrophy																													1	3.0

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DAY ON TEST	0 0																								* TOTALS
	7	7	7	7	7	7	6	7	7	7	7	7	7	7	5	7	7	7	6	7	7	7	7	6	
	3	3	3	3	3	3	1	3	3	3	3	3	3	3	3	1	3	3	3	2	3	3	3	8	
	2	2	0	1	0	2	7	2	2	1	1	1	2	1	0	3	2	2	2	6	2	1	0	3	
B6C3F1 MICE MALE 0 G/KG	ANIMAL ID																								
	0 0																								
	0 0																								
	2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 5																								
6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0																									

Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hematopoietic Cell Proliferation		1				4	3				2	3			1	3					2			16 2.4
Hyperplasia, Lymphoid								2						2										3 2.0
Lymphoid Follicle, Atrophy														3						2				6 2.7
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Atrophy	1	4		2	1	4	4	2	4	2	2	2	2	4	3	2	3	3		3	2	4	3	41 2.7
Hyperplasia, Histiocytic																								1 3.0

INTEGUMENTARY SYSTEM

Mammary Gland	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	1
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Chronic																								2	1 2.0
Ulcer																								3	1 3.0

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cranium, Hyperostosis													2												1 2.0
Skeletal Muscle																								2	

NERVOUS SYSTEM

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DAY ON TEST	0																								* TOTALS		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	
	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	5	7	7	7	6	7	7	7	7	6		
	3	3	3	3	3	3	1	3	3	3	3	3	3	3	3	1	3	3	3	2	3	3	3	3	8		
	2	2	0	1	0	2	7	2	2	1	1	1	2	1	0	3	2	2	2	6	2	1	0	0	3		
B6C3F1 MICE MALE 0 G/KG	ANIMAL ID																								* TOTALS		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5		
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0		

Brain + 50

RESPIRATORY SYSTEM

Lung	+ +	50
Alveolar Epithelium, Hyperplasia		2 1.5
Alveolus, Infiltration Cellular, Histiocyte		2 1.5
Bronchus, Hyperplasia		2 2.0
Nose	+ +	50
Inflammation, Suppurative		1 2.0
Inflammation, Chronic		9 1.0
Nasolacrimal Duct, Inflammation, Suppurative		1 2.0
Respiratory Epithelium, Hyperplasia		1 2.0
Trachea	+ +	50

SPECIAL SENSES SYSTEM

Eye	+ +	50
Harderian Gland	+ +	50
Fibrosis		2 1.0
Hyperplasia		4 2.0
Infiltration Cellular, Mononuclear Cell		36 1.1

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TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

DAY ON TEST	0 0																								
	7 7 7 7 7 7 6 7 7 7 7 7 7 7 7 5 7 7 7 6 7 7 7 7 6																								
ANIMAL ID	3 3 3 3 3 3 1 3 3 3 3 3 3 3 3 1 3 3 3 2 3 3 3 3 8																								
	2 2 0 1 0 2 7 2 2 1 1 1 2 1 0 3 2 2 2 6 2 1 0 0 3																								
B6C3F1 MICE MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0 G/KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
																								* TOTALS	

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hydronephrosis					2				2													2			6 2.2	
Inflammation													3												2 3.0	
Mineralization																				1					3 1.0	
Nephropathy		1	1	1	3	2	2		1	1			1		1	1		1	1	1	1	4	3	2	2	32 1.4
Cortex, Medulla, Necrosis													3							4						6 3.2
Papilla, Necrosis					2																		2	2		3 2.0
Renal Tubule, Hyperplasia							2						1							2						6 1.3
Renal Tubule, Mineralization	1		1	1						1	1		1	1	1		1		1	1	1		1	1		31 1.1
Renal Tubule, Pigmentation, Lipofuscin						2																				1 2.0
Urethra																										
Inflammation																							+		2	2 2.5
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Infiltration Cellular, Mononuclear Cell						1		1				1			1	1			1	1						20 1.0
Inflammation													3													4 2.0

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	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		5	4	7	6	7	7	7	7	7	7	4	6	7	7	7	7	5	6	7	7	7	7	7	3	
		4	3	3	9	3	3	0	2	3	3	3	6	3	3	3	3	5	2	3	3	3	3	3	1	
		6	7	1	3	2	2	7	0	1	1	2	1	4	1	1	2	2	3	3	2	2	1	1	2	9
B6C3F1 MICE MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
0.25 G/KG																										

males (cont...)

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Gallbladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum Epithelium, Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis					1	1																		
Basophilic Focus																								
Clear Cell Focus			X			X					X			X	X					X	X			
Eosinophilic Focus	X		X			X		X	X	X		X	X	X	X		X		X	X	X	X		
Fatty Change	1	2		1	1	1	2		1	1		1	1	1	1	2	1	2				2	2	1
Hematopoietic Cell Proliferation							4																	
Infarct																								

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

DAY ON TEST	0 0																								
	5 4 7 6 7 7 7 7 7 7 7 4 6 7 7 7 7 5 6 7 7 7 7 7 3																								
ANIMAL ID	4 3 3 9 3 3 0 2 3 3 3 3 6 3 3 3 3 5 2 3 3 3 3 3 1																								
	6 7 1 3 2 2 7 0 1 1 2 1 4 1 1 2 2 3 3 2 2 1 1 2 9																								
B6C3F1 MICE MALE 0.25 G/KG	0 0																								
	0 0																								
	0 0																								
	5 5 5 5 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 7																								
	1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5																								
	males (cont...)																								
Infiltration Cellular, Mononuclear Cell	1	2	1	1	1	1		1	1	1	1	1		1	1	1		1	1	1	1	1	1	1	1
Mineralization																									
Mixed Cell Focus				X	X	X		X		X		X	X	X						X		X	X		
Necrosis				1										3				2	2						
Tension Lipidosis															X										
Vacuolization Cytoplasmic Centrilobular, Fatty Change Centrilobular, Hypertrophy		1	1		1	1				1		1	1	1		1	1	1	1		1	1	1	1	1
Mesentery				+						+						+									+
Fat, Necrosis				2						2						2									2
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Infiltration Cellular, Mononuclear Cell				1						1	1	1	1	1	1	1				1	1	1	1	1	1
Parotid Gland, Mineralization																									
Submandibular Gland, Atrophy										2															
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic	2							1						1			1			1	2	1			2
Necrosis	1																				2				
Epithelium, Hyperplasia	1							2					1			1			1		3	2			1
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Mineralization																									
Glands, Ectasia																									
Tooth				+	+	+	+	+		+	+			+	+	+	+	+		+	+				+

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

DAY ON TEST	0																								
	5	4	7	6	7	7	7	7	7	7	7	7	4	6	7	7	7	7	5	6	7	7	7	7	3
4	3	3	9	3	3	0	2	3	3	3	3	6	3	3	3	3	5	2	3	3	3	3	3	1	
6	7	1	3	2	2	7	0	1	1	2	1	4	1	1	2	2	3	3	2	2	1	1	2	9	
ANIMAL ID	0																								
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	

males (cont...)

Dysplasia	2	2	4	3	3	1	2	4	2	3	1	1	3	2	1	2
Inflammation, Suppurative														3		

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cardiomyopathy			1			1	3								1	1				1	1			
Inflammation, Suppurative			2																					
Inflammation, Chronic							3																	
Artery, Infiltration Cellular, Mononuclear Cell								1																
Myocardium, Mineralization								1				1												

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hypertrophy																								
Vacuolization Cytoplasmic																								
Subcapsular, Hyperplasia	1	2	2	1	2	1	1	1	1	1	2	1	1	1	2			1		1	2	2	2	
Zona Reticularis, Hyperplasia						2															2			
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia	3		2	2	1	2	1		3	2	2		2	2		3	1		2		1	2	1	1

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

	DAY ON TEST																									males (cont...)
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	4	7	6	7	7	7	7	7	7	7	4	6	7	7	7	7	5	6	7	7	7	7	3		
	4	3	3	9	3	3	0	2	3	3	3	3	6	3	3	3	3	5	2	3	3	3	3	1		
	6	7	1	3	2	2	7	0	1	1	2	1	4	1	1	2	2	3	3	2	2	1	1	2	9	
B6C3F1 MICE MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0.25 G/KG	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7		
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	

Parathyroid Gland
Cyst

+ + + M + + + + + + + M M + + + + + + + M + + + +

Pituitary Gland

+ +

Thyroid Gland

+ +

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Coagulating Gland
Hyperplasia

+
2

Epididymis
Infiltration Cellular, Mononuclear Cell
Inflammation, Chronic

+
1 2 1 1 1 1 1 1 1

Penis
Infiltration Cellular, Polymorphonuclear

+
1

Preputial Gland
Cyst
Inflammation

+
2 2
1

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 21

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 5 | 4 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 6 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 3 | |
| | 4 | 3 | 3 | 9 | 3 | 3 | 0 | 2 | 3 | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 3 | 5 | 2 | 3 | 3 | 3 | 3 | 3 | 1 | |
| | 6 | 7 | 1 | 3 | 2 | 2 | 7 | 0 | 1 | 1 | 2 | 1 | 4 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 9 | |
| B6C3F1 MICE MALE | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0.25 G/KG | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | males (cont...) |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Infiltration Cellular, Mononuclear Cell | | | 1 | | | 1 | | | 1 | 1 | 1 | | | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Inflammation | 3 | | 1 | 3 | | | 2 | | | | | | | | | | 2 | 2 | | | | | | | |
| Mineralization | | | | | | | | | | | | | 1 | | | | | | | | | | | | |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | 1 | | | | | | | | | | | | |
| Inflammation | 2 | | | | | | | | | | | | | | | | | 1 | 2 | | | | | | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Germinal Epithelium, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | 1 | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | 3 | | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia, Lymphoid | | | | 3 | | | | | | | | | | | | | | | | | | | | | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hematopoietic Cell Proliferation | | | | | | | 3 | 3 | | | | | 2 | | 1 | | 2 | | 2 | 2 | | | | 1 | |
| Hyperplasia, Lymphoid | | | | | | | | | 2 | | | | | | | | | | | | | | | | |
| Lymphoid Follicle, Atrophy | | | | 2 | | | | | | | | | | | | | | | 4 | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 5 | 4 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 6 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 3 | |
| | 4 | 3 | 3 | 9 | 3 | 3 | 0 | 2 | 3 | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 3 | 5 | 2 | 3 | 3 | 3 | 3 | 3 | 1 | |
| | 6 | 7 | 1 | 3 | 2 | 2 | 7 | 0 | 1 | 1 | 2 | 1 | 4 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 9 | |
| B6C3F1 MICE MALE | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0.25 G/KG | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | males (cont...) |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Atrophy | | | 3 | 3 | | 3 | | 4 | 2 | 2 | 2 | | 4 | 2 | 4 | 2 | 1 | | 3 | 2 | 4 | 2 | 2 | 1 | 4 |
| Ectopic Thyroid | | | | | | | | | | | | | | 1 | | | | | | | | | | | |
| Hyperplasia, Histiocytic | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epithelial Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | |

RESPIRATORY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 4 7 6 7 7 7 7 7 7 7 4 6 7 7 7 7 5 6 7 7 7 7 7 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 4 3 3 9 3 3 0 2 3 3 3 3 6 3 3 3 3 5 2 3 3 3 3 3 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6 7 1 3 2 2 7 0 1 1 2 1 4 1 1 2 2 3 3 2 2 1 1 2 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.25 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

males (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | 1 | + |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | 1 | | | | | | | | | | | 1 | | | | | |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | 1 | 1 | | | | | | | | | | | | | 3 |
| Bronchus, Hyperplasia | | | | | | | | | | | 1 | | | | | | | | | | | 1 | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | 1 | | | | | | | | | | 1 | | | | | 1 | | 1 | 1 | | | |
| Polyp, Inflammatory | | | | | 2 | | | | | | | | | | | | | | | | | | | | |
| Nasolacrimal Duct, Inflammation, Suppurative | | | | | | | | 2 | | | | | | | | | | | | | | | | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | 2 | + |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cornea, Inflammation, Chronic | | | | 3 | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | 3 | | |
| Infiltration Cellular, Mononuclear Cell | | | | | | 1 | 1 | 1 | 1 | | | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
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 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 5 4 7 6 7 7 7 7 7 7 7 4 6 7 7 7 7 5 6 7 7 7 7 7 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 4 3 3 9 3 3 0 2 3 3 3 3 6 3 3 3 3 5 2 3 3 3 3 3 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6 7 1 3 2 2 7 0 1 1 2 1 4 1 1 2 2 3 3 2 2 1 1 2 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE
0.25 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5 5 5 5 5 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | | |

males
(cont...)

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Kidney | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydronephrosis | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | 2 1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Thrombosis | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Dilatation | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Hyperplasia | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Mineralization | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Urethra | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyst | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 3 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation | 1 4 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| Transitional Epithelium, Hyperplasia | 4 | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------------|
| | 7 5 7 7 6 7 4 7 7 7 7 6 4 7 7 7 7 6 7 5 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 9 3 3 9 3 2 3 3 3 3 6 8 3 3 3 3 8 3 5 3 3 3 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 6 2 1 5 2 3 1 2 2 2 4 4 2 1 2 1 7 1 3 2 1 0 2 | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE
0.25 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 7 7 7 7 8 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|-----------|------------|------------|
| Esophagus | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| Gallbladder | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| Intestine Large, Cecum | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| Intestine Large, Colon | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| Intestine Large, Rectum | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| Intestine Small, Duodenum | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| Intestine Small, Ileum | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| Intestine Small, Jejunum Epithelium, Hyperplasia | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 3 | 2 | 3.0 | |
| Liver | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1.0 |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3 |
| Clear Cell Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | 18 |
| Eosinophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | X | X | 32 |
| Fatty Change | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1.3 |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.5 |
| Infarct | | | | | | | | | | | | | | | | | | | | | | | | | | | 3.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|--|
| | 0731 | 0756 | 0773 | 0776 | 0674 | 0747 | 0477 | 0777 | 0777 | 0777 | 0777 | 0676 | 0474 | 0777 | 0777 | 0777 | 0777 | 0676 | 0775 | 0777 | 0777 | 0777 | 0777 | 0777 | | |
| B6C3F1 MICE MALE | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | |
| 0.25 G/KG | 7766 | 7787 | 7788 | 7799 | 8800 | 8811 | 8822 | 8833 | 8844 | 8855 | 8866 | 8877 | 8888 | 8899 | 9900 | 9911 | 9922 | 9933 | 9944 | 9955 | 9966 | 9977 | 9988 | 9999 | 9900 | |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 47 1.1 | |
| Mineralization | | | | | | 2 | | | | | | | | | | | | 1 | | | | | | | 2 1.5 | |
| Mixed Cell Focus | X | | X | X | | | | X | X | X | | | X | X | X | X | | X | X | X | X | X | X | | 28 | |
| Necrosis | | 2 | | 2 | 3 | | | | 1 | | | | | | | | | 2 | | | | | | 2 | 10 2.0 | |
| Tension Lipidosis | | | | | | | | | | | | | | | | | | | X | | | | | | 2 | |
| Vacuolization Cytoplasmic | | | | | 2 | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Centrilobular, Fatty Change | | | | | | | | | | | | | | | | | | 3 | | | | | | | 1 3.0 | |
| Centrilobular, Hypertrophy | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | | | | 2 | 1 | | 1 | 1 | 1 | 1 | 34 1.0 | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | 6 | |
| Fat, Necrosis | | 3 | | | 2 | | | | | | | | | | | | | | | | | | | | 6 2.2 | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Infiltration Cellular, Mononuclear Cell | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 2 | 1 | | 1 | 1 | | 1 | 1 | 1 | 36 1.1 | |
| Parotid Gland, Mineralization | | | | | | | | | | | | | | 1 | | | | | | | | | | | 1 1.0 | |
| Submandibular Gland, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation, Chronic | 2 | 2 | | | | 2 | | 1 | 2 | | | 2 | 2 | | | | 2 | | 1 | 2 | | 1 | | 2 | 22 1.6 | |
| Necrosis | 2 | | | 2 | | 2 | | | | | | | | | 2 | | | 2 | 2 | | | | | 2 | 11 1.9 | |
| Epithelium, Hyperplasia | 2 | 1 | | 2 | | 2 | | 2 | | | | 2 | 2 | | | | 2 | | 1 | 2 | | 1 | | 1 | 22 1.6 | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 1.0 | |
| Glands, Ectasia | | | | | | 1 | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Tooth | | + | + | + | | | | | | + | + | + | + | | | | | + | + | + | + | + | + | + | 32 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 20007 - 06

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 04/13/2009

Time Report Requested: 10:57:30

First Dose M/F: 08/24/04 / 08/23/04

Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|-------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|
| | 7 5 7 7 6 7 4 7 7 7 7 6 4 7 7 7 7 6 7 5 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 9 3 3 9 3 2 3 3 3 3 6 8 3 3 3 3 8 3 5 3 3 3 3 3 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| | 1 6 2 1 5 2 3 1 2 2 2 4 4 2 1 2 1 7 1 3 2 1 0 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| 0.25 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 7 7 7 7 8 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| | 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|
| Dysplasia | 1 | 2 | 3 | 2 | 1 | 3 | 1 | 1 | 3 | 3 | 1 | 2 | 1 | 1 | 4 | 2 | 32 | 2.1 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | 1 | 3.0 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------|------------|--|--|--|--|--|--|-----------|
| Blood Vessel | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Heart | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Cardiomyopathy | 1 | | 1 | | | | | | | | | | | | | | 16 | 1.1 | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | 1 | 2.0 | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | 1 | 3.0 | | | | | | | |
| Artery, Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | | | | 1 | 1.0 | | | | | | | |
| Myocardium, Mineralization | 1 | | | | | | | | | | | | | | | | 4 | 1.0 | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|------------|--|--|--|--|--|-----------|
| Adrenal Cortex | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Hypertrophy | | | | | | | | | | | | | | | | | 2 | 1.0 | | | | | | | |
| Vacuolization Cytoplasmic | | | | 1 | | | | | | | | | | | | | 2 | 1.0 | | | | | | | |
| Subcapsular, Hyperplasia | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 45 | 1.3 | | | | | | | |
| Zona Reticularis, Hyperplasia | | | | | | | | | | | | | | | | | 3 | 1.7 | | | | | | | |
| Adrenal Medulla | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Islets, Pancreatic | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Hyperplasia | 2 | | 1 | 2 | | 1 | 2 | | | | 2 | 2 | 2 | 1 | 1 | 3 | 2 | 35 | 1.7 | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
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2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
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 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|--|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 5 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 7 | 7 | 6 | 4 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 7 | 7 | |
| | 3 | 9 | 3 | 3 | 9 | 3 | 2 | 3 | 3 | 3 | 3 | 6 | 8 | 3 | 3 | 3 | 3 | 8 | 3 | 5 | 3 | 3 | 3 | |
| | 1 | 6 | 2 | 1 | 5 | 2 | 3 | 1 | 2 | 2 | 2 | 4 | 4 | 2 | 1 | 2 | 1 | 7 | 1 | 3 | 2 | 1 | 0 | |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0.25 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | * TOTALS | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Parathyroid Gland
Cyst | + | + | + | + | + | + | M | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | 44 |
| | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---------------|
| Coagulating Gland
Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 2.0 |
| Epididymis
Infiltration Cellular, Mononuclear Cell
Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 22 1.2 |
| | | 2 | | | 1 | 2 | | | 2 | | | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 2.0 |
| Penis
Infiltration Cellular, Polymorphonuclear | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 1.0 |
| Preputial Gland
Cyst
Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 5 2.0 |
| | 1 | | | | 2 | | | | | | | | | | | 2 | | | | | | 2 | | 4 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|-------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|
| | 7 5 7 7 6 7 4 7 7 7 7 6 4 7 7 7 7 6 7 5 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 9 3 3 9 3 2 3 3 3 3 6 8 3 3 3 3 8 3 5 3 3 3 3 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 6 2 1 5 2 3 1 2 2 2 4 4 2 1 2 1 7 1 3 2 1 0 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.25 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 7 7 7 7 8 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Prostate | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation | 1 1 1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | 31 1.0 |
| Mineralization | 2 2 2 | | | | | | | | | | | | | | | | | | | | | | | | 9 2.1 |
| Seminal Vesicle | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Infiltration Cellular, Mononuclear Cell | 1 | | | | | | | | | | | | | | | | | | | | | | | | 4 1.0 |
| Inflammation | 1 1 | | | | | | | | | | | | | | | | | | | | | | | | 5 1.4 |
| Testes | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Germinal Epithelium, Atrophy | 2 3 2 | | | | | | | | | | | | | | | | | | | | | | | | 4 2.0 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Bone Marrow | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Lymph Node | + | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mandibular | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Hyperplasia, Lymphoid | 3 4 | | | | | | | | | | | | | | | | | | | | | | | | 3 3.3 |
| Lymph Node, Mesenteric | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Spleen | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Hematopoietic Cell Proliferation | 3 2 1 1 1 4 3 1 1 2 | | | | | | | | | | | | | | | | | | | | | | | | 19 1.9 |
| Hyperplasia, Lymphoid | 2 | | | | | | | | | | | | | | | | | | | | | | | | 3 2.0 |
| Lymphoid Follicle, Atrophy | 3 2 | | | | | | | | | | | | | | | | | | | | | | | | 5 2.4 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 5 7 7 6 7 4 7 7 7 7 6 4 7 7 7 7 6 7 5 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 9 3 3 9 3 2 3 3 3 3 6 8 3 3 3 3 8 3 5 3 3 3 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 6 2 1 5 2 3 1 2 2 2 4 4 2 1 2 1 7 1 3 2 1 0 2 2 | | | | | | | | | | | | | | | | | | | | | | | |
| * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |

B6C3F1 MICE MALE
0.25 G/KG

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Thymus | + M + + + M + | | | | | | | | | | | | | | | | | | | | | | | | 47 |
| Atrophy | 4 | | | | | | | | | | | | | | | | | | | | | | | | 41 2.8 |
| Ectopic Thyroid | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Hyperplasia, Histiocytic | 2 | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Epithelial Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-------|
| Mammary Gland | M | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| Skin | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 1 3.0 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 1 4.0 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|
| Bone | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
|------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------|
| Brain | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |

RESPIRATORY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Page 31

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|-------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|
| | 7 5 7 7 6 7 4 7 7 7 7 6 4 7 7 7 7 6 7 5 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 9 3 3 9 3 2 3 3 3 3 6 8 3 3 3 3 8 3 5 3 3 3 3 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 6 2 1 5 2 3 1 2 2 2 4 4 2 1 2 1 7 1 3 2 1 0 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.25 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 7 7 7 7 8 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------|
| Lung | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Inflammation | 2 | | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 3 1.0 |
| Alveolus, Infiltration Cellular, Histiocyte | 3 | | | | | | | | | | | | | | | | | | | | | | | | 6 1.8 |
| Bronchus, Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 |
| Nose | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | 8 1.0 |
| Polyp, Inflammatory | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Nasolacrimal Duct, Inflammation, Suppurative | 2 | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Trachea | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Eye | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Degeneration | 4 | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Cornea, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Harderian Gland | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 3 2.3 |
| Infiltration Cellular, Mononuclear Cell | 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | 30 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 32

TDMS No. 20007 - 06
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
Time Report Requested: 10:57:30
First Dose M/F: 08/24/04 / 08/23/04
Lab: BAT

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 7 | 7 | 6 | 4 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 7 | 7 | 7 | 7 |
| ANIMAL ID | 3 | 9 | 3 | 3 | 9 | 3 | 2 | 3 | 3 | 3 | 3 | 6 | 8 | 3 | 3 | 3 | 3 | 8 | 3 | 5 | 3 | 3 | 3 | 3 | 3 |
| | 1 | 6 | 2 | 1 | 5 | 2 | 3 | 1 | 2 | 2 | 2 | 4 | 4 | 2 | 1 | 2 | 1 | 7 | 1 | 3 | 2 | 1 | 0 | 2 | 2 |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.25 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Inflammation | | | | | | | | | | | | | | 1 | | | | | | | | | | | | 2 |
| Metaplasia, Osseous | | | | | | | | | | | | | | 2 | | | | | | | 2 | | | | | 2 |
| Mineralization | | | | | | 1 | | | | | | | | | | | | | | | | | | | | 1 |
| Nephropathy | | | | | | | | | | | | | | | | | | | | | | | | | | 40 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Renal Tubule, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Renal Tubule, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 20 |
| Renal Tubule, Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | 42 |
| Urethra | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Urinary Bladder | | | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | | | | | | | | | | | | | 25 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
Page 33

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 7 7 7 7 7 7 7 7 6 7 6 6 7 7 7 6 5 7 7 7 5 6 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 3 3 3 3 3 3 3 3 1 3 2 7 3 3 3 7 3 3 3 3 8 0 3 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 1 2 2 1 1 1 1 6 2 3 0 0 1 2 9 4 0 1 1 0 5 1 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE
0.5 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | | |

males
(cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Esophagus | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Gallbladder
Infiltration Cellular, Mononuclear Cell
Inflammation, Granulomatous | + + M +
1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Cecum | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Colon | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Rectum | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Ileum
Inflammation, Chronic | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum
Peyer's Patch, Hyperplasia, Lymphoid | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver
Amyloid Deposition
Angiectasis
Basophilic Focus
Clear Cell Focus | +
1 1 2 1
X
X X X X X X X X X X X X X X X X X | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | males
(cont...) | |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|--|
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1 | 0
7
3
1 | | |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |
| Degeneration, Cystic Eosinophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fatty Change | X | X | X | X | X | X | X | X | X | X | | | | | | | | | | | | | | | | |
| Hepatodiaphragmatic Nodule | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | | | 1 | | 1 | 1 | | | | | | | | | | | | |
| Infarct | | | | 3 | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mixed Cell Focus | X | | | | X | | | X | | | | | | X | X | | | | X | X | | | | | | |
| Necrosis | | | | | | | 2 | | | | | | | | | 2 | | | | 2 | | | | 2 | | |
| Tension Lipidosis | | | | | | | | | | | | | X | | | | | | | | | | | | | |
| Centrilobular, Hypertrophy | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | 2 | | 2 | | 2 | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fat, Necrosis | | | | | | | + | | | | | | | | | | | | | | | | | | | |
| Pancreas | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Granulomatous | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acinus, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | 1 | | |
| Parotid Gland, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
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| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 7 7 7 7 7 7 7 7 6 7 6 6 7 7 7 6 5 7 7 7 5 6 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 3 3 3 3 3 3 3 3 1 3 2 7 3 3 3 7 3 3 3 3 8 0 3 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 1 2 2 1 1 1 1 6 2 3 0 0 1 2 9 4 0 1 1 0 5 1 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |
| | males (cont...) | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stomach, Glandular Infiltration Cellular, Mononuclear Cell Glands, Ectasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Tooth Dysplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| 3 1 2 4 3 4 2 2 3 2 1 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | | |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Artery, Infiltration Cellular, Mononuclear Cell | | | | | 2 | 1 | 1 | | 1 | 1 | | 3 | | | | | | | | | | | | 1 | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Vacuolization Cytoplasmic | | | | | 1 | | | | | | | | | | | | 2 | | | | | | | |
| Subcapsular, Hyperplasia | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| Zona Reticularis, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | 2 | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 36

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 7 | 6 | 5 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | |
| B6C3F1 MICE MALE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.5 G/KG | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | | | |
| | males (cont...) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | 2 | 2 | 1 | 2 | 3 | 1 | 3 | 2 | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 2 | 4 | 2 | 3 | 2 | 2 | 2 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Cyst | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | |
| Follicle, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

GENERAL BODY SYSTEM
 NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coagulating Gland | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Granuloma Sperm | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | | | | | 1 | 1 | | | 1 | 1 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cyst | | 3 | | | | | | | | | | | | | | | | | | | 2 | | | | | |
| Inflammation | | | | | | | | | | 2 | 2 | | | | | 1 | | | | | | | | | 2 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 7 7 7 7 7 7 7 7 7 6 7 6 6 7 7 7 6 5 7 7 7 5 6 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 3 3 3 3 3 3 3 3 3 1 3 2 7 3 3 3 7 3 3 3 3 8 0 3 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 1 2 2 1 1 1 1 1 6 2 3 0 0 1 2 9 4 0 1 1 0 5 1 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE
0.5 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 males (cont...) | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Prostate | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation | 1 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Seminal Vesicle | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Testes | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Germinal Epithelium, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Bone Marrow | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Lymphoid | 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mesenteric | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Angiectasis | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic Cell Proliferation | 1 2 2 2 2 1 2 1 1 2 3 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Lymphoid | 2 4 | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 7 7 7 7 7 7 7 7 6 7 6 6 7 7 7 6 5 7 7 7 5 6 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 3 3 3 3 3 3 3 3 1 3 2 7 3 3 3 7 3 3 3 3 8 0 3 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 1 2 2 1 1 1 1 6 2 3 0 0 1 2 9 4 0 1 1 0 5 1 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

males (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy | 2 | 2 | 2 | 3 | 3 | 4 | 2 | 2 | 3 | 3 | 2 | 4 | 4 | 2 | | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 |
| Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|---|
| Mammary Gland | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | |
| Cyst Epithelial Inclusion | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | 3 | | | | | | | 3 | | | | | | | 3 | | | | 3 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | + |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hypothalamus, Compression | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 39

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 7 7 7 7 7 7 7 7 6 7 6 6 7 7 7 6 5 7 7 7 5 6 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 3 3 3 3 3 3 3 3 1 3 2 7 3 3 3 7 3 3 3 3 8 0 3 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 1 2 2 1 1 1 1 6 2 3 0 0 1 2 9 4 0 1 1 0 5 1 2 | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE
0.5 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | |

males
(cont...)

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|---|--|
| Lung | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alveolus, Infiltration Cellular, Histiocyte | 2 | | | | | | | | | | | | 1 | | | | | | | | | | | | 3 | |
| Bronchus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | 1 | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Inflammation, Chronic | | | | | | | | | | | | | 1 | | | | | | | | | | | | | |
| Nasolacrimal Duct, Inflammation, Suppurative | | | | | | | | | | | | | 1 | | | | | | | | | | | | 2 | |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | 2 | | | | | | | | | | | | | |
| Epithelium, Cytoplasmic Alteration | | | | | | | | | | | | | 2 | | | | | | | | | | | | | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Eye | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cornea, Inflammation, Chronic | | | | | | | | | | | | | 2 | | | | | | | | | | | | | |
| Harderian Gland | + | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 04/13/2009

Time Report Requested: 10:57:30

First Dose M/F: 08/24/04 / 08/23/04

Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 7 | 7 | 6 | 5 | 7 | 7 | 7 | 5 | 6 | 7 | 7 |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

males (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 4 | |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Amyloid Deposition | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | 1 | | 1 | | 1 | 1 | 1 | 1 | 2 | | 1 | | 1 | 1 | 2 | 1 | | 4 | 2 | 2 | 1 | | 1 | 1 | |
| Renal Tubule, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Mineralization | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 2 | | 1 | | 1 | | 2 | | 2 | | | | | | |
| Renal Tubule, Pigmentation, Lipofuscin | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | | 1 | 1 | 1 | | | | | | | | 1 | 1 | | 1 | | 1 | | 1 | | 1 | 1 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked
Page 41

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| B6C3F1 MICE MALE
0.5 G/KG | | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Gallbladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Infiltration Cellular, Mononuclear Cell
Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0
1 2.0 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum
Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 2 | + | + | + | + | + | + | + | + | + | + | + | 50
1 2.0 |
| Intestine Small, Jejunum
Peyer's Patch, Hyperplasia, Lymphoid | + | + | + | + | + | + | + | + | + | + | + | + | 3 | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
1 3.0 |
| Liver
Amyloid Deposition | + | + | + | + | + | 3 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0
7 1.1 |
| Basophilic Focus | | | | | | | | | | | | | X | | | | | | | | | | | | | | X
3 |
| Clear Cell Focus | X | X | | | | | | | X | X | X | | | | | | | | | X | X | | | | | | X
19 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
| | 0732 | 0733 | 0731 | 0730 | 0726 | 0727 | 0727 | 0727 | 0726 | 0726 | 0727 | 0727 | 0727 | 0727 | 0726 | 0727 | 0724 | 0727 | 0727 | 0727 | 0724 | 0727 | 0726 | 0727 | |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| Degeneration, Cystic Eosinophilic Focus | X | X | X | | X | X | X | X | X | | X | X | X | X | | X | X | X | | X | X | X | X | | |
| Fatty Change | | 1 | | | | | | 1 | 1 | | | | 2 | 1 | 1 | | 1 | | | 3 | | 1 | 1 | | |
| Hepatodiaphragmatic Nodule Infarct | | | | | | | | | | | | | | X | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Mineralization | | | | | | | | | | | | | | | | | | | | 1 | | | | | |
| Mixed Cell Focus | | X | | | | | | | X | X | X | X | X | | X | | | | X | | | | | | |
| Necrosis | | | | | | | | | | | | | | 1 | | | 3 | | | | | | 2 | | |
| Tension Lipidosis | | | | | | | | X | | | | | | X | | | | | | | | | | | |
| Centrilobular, Hypertrophy | 2 | 2 | | 2 | 2 | | | 2 | 2 | | 2 | | 2 | 2 | | 2 | 2 | | | 2 | | 2 | | | |
| Mesentery Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | 1 | | | | | |
| Inflammation, Chronic Acinus, Atrophy | | | | 2 | | | | | | | | | 3 | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Parotid Gland, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation, Chronic | | | 2 | | | | | | | | | | 1 | | 1 | | 2 | | 1 | 2 | 1 | 1 | 1 | 2 | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Necrosis | | | | | | | | | | | | | | | 2 | | | | | | 3 | | | | |
| Epithelium, Hyperplasia | | | 2 | | | | | | | | | 2 | | 1 | | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 1 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 7 7 7 6 7 7 7 6 6 7 7 7 7 6 7 4 7 7 7 4 7 6 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 3 3 3 6 2 3 3 5 8 3 3 3 1 8 3 5 3 3 3 9 3 6 3 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 2 1 0 8 9 1 2 3 3 1 1 0 1 3 1 5 1 2 1 4 0 0 0 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Stomach, Glandular Infiltration Cellular, Mononuclear Cell Glands, Ectasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | | | | | | | | 1 | | | | | | 1 | | | | | | | | | | | | 2 1.0 |
| | | | | | | | | | | | | | 1 | | | | | | | | | | | | | 2 1.0 |
| Tooth Dysplasia | + | | | | + | + | | | | | | + | | + | + | + | + | | | + | + | + | + | | + | 27 |
| | 3 | | | | 3 | 3 | | | | | | 1 | | 2 | 3 | 4 | 4 | | | 2 | 2 | 1 | 2 | | 1 | 27 2.4 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cardiomyopathy | | | | | | | | 1 | | | | | | | | | | | | | | | | | | 11 1.3 |
| Artery, Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Vacuolization Cytoplasmic Subcapsular, Hyperplasia | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 48 1.3 |
| Zona Reticularis, Hyperplasia | | | | | 1 | | | | | | | | | | | | | | | | | | | | 2 | 2 1.5 |
| Adrenal Medulla Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 Page 44
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| | 7 7 7 7 6 7 7 7 6 6 7 7 7 7 6 7 4 7 7 7 4 7 6 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 3 3 3 6 2 3 3 5 8 3 3 3 1 8 3 5 3 3 3 9 3 6 3 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 2 1 0 8 9 1 2 3 3 1 1 0 1 3 1 5 1 2 1 4 0 0 0 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.5 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
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| | 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | 2 | 1 | | 2 | 2 | 2 | 1 | 1 | | 2 | 2 | 2 | 2 | | 2 | 1 | | 1 | 2 | 1 | | | | | 36 1.8 |
| Parathyroid Gland | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | 46 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 1.0 |
| Pars Distalis, Hyperplasia | | | | | | | | | 2 | | | | | | | | | | | | | | | | 1 2.0 |
| Thyroid Gland | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Follicle, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Coagulating Gland

1

Epididymis

50

Granuloma Sperm

2

3 2.3

Infiltration Cellular, Mononuclear Cell

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33 1.0

Preputial Gland

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Cyst

2

5 2.2

Inflammation

2

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2

2

9 1.7

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 |
| | 3 | 3 | 3 | 3 | 6 | 2 | 3 | 3 | 5 | 8 | 3 | 3 | 3 | 1 | 8 | 3 | 5 | 3 | 3 | 3 | 9 | 3 | 6 | 3 | 3 |
| | 2 | 2 | 1 | 0 | 8 | 9 | 1 | 2 | 3 | 3 | 1 | 1 | 0 | 1 | 3 | 1 | 5 | 1 | 2 | 1 | 4 | 0 | 0 | 0 | 2 |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 | 1 | 38 1.0 |
| Inflammation | | | | | | | | | | | | | | 2 | | | | | | 2 | | | | | 4 1.8 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | | | | | | | | | | | | | | | 1 | | | | | | 1 | | 6 1.0 |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Germinal Epithelium, Atrophy | | | | | | | | | | | | | | | | | | | | | | | 2 | | 1 2.0 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | | | + | | | | | | | | | | | | | | | | | | | | | 3 |
| Renal, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | 4 | | | 1 4.0 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia, Lymphoid | | | | 2 | | | | | | | | | | | | | | | | | | | | | 2 3.0 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia, Lymphoid | | | | 2 | | | | | | | | | | | | | | | | | | 4 | | | 2 3.0 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Hematopoietic Cell Proliferation | | | | 2 | 2 | 3 | | | | 3 | | | | | 2 | | | | | | 2 | 2 | 2 | 2 | 21 2.0 |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | 2 3.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked
Page 46

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 7 7 7 6 7 7 7 6 6 7 7 7 7 6 7 4 7 7 7 4 7 6 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 3 3 3 6 2 3 3 5 8 3 3 3 1 8 3 5 3 3 3 9 3 6 3 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 2 1 0 8 9 1 2 3 3 1 1 0 1 3 1 5 1 2 1 4 0 0 0 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE
0.5 G/KG | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| 2 2 2 2 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 2 | 3 | 1.3 |
| Thymus | + | + | + | + | + | M | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | M | + | 47 | | |
| Atrophy | 4 | 2 | 3 | 4 | 4 | | 4 | 2 | 3 | 4 | 1 | 3 | 2 | 4 | | 2 | 2 | 3 | 4 | 2 | 3 | 4 | 4 | 4 | | 46 | 3.1 | |
| Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2.0 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|-----|
| Mammary Gland | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 0 | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Cyst Epithelial Inclusion | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 | 2 | 1.5 | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | 3 | 4 | 4 | 3 | 3 | 3.2 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hypothalamus, Compression | | | | | | | | | | | | | | | | | | | | | | | | 4 | 1 | 4.0 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Page 47

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 7 7 7 6 7 7 7 6 6 7 7 7 7 6 7 4 7 7 7 4 7 6 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 3 3 3 6 2 3 3 5 8 3 3 3 1 8 3 5 3 3 3 9 3 6 3 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 2 1 0 8 9 1 2 3 3 1 1 0 1 3 1 5 1 2 1 4 0 0 0 2 | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation | | | | | | | 1 | | | | | 1 | | | | | | | | | 2 | | | 3 1.3 |
| Metaplasia, Osseous | | | | | | | 1 | | | | | | | | | | | | | | | | | 1 1.0 |
| Mineralization | | | | | | | 1 | | 1 | | | | | | | | | | | | | | | 2 1.0 |
| Alveolar Epithelium, Hyperplasia | | | | | | | 1 | | | | | | | | | | | | | | | | | 1 1.0 |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | 3 | | | | | | | | | | | | | | | 2 | | 5 2.2 |
| Bronchus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 1.0 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | 2 | 2 | | | | | | | | 4 1.5 |
| Inflammation, Chronic | | | | | | 1 | | | | 1 | | | | | | | 1 | | | | | | | 7 1.0 |
| Nasolacrimal Duct, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 1.0 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Epithelium, Cytoplasmic Alteration | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cornea, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 04/13/2009

Time Report Requested: 10:57:30

First Dose M/F: 08/24/04 / 08/23/04

Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 |
| ANIMAL ID | 3 | 3 | 3 | 3 | 6 | 2 | 3 | 3 | 5 | 8 | 3 | 3 | 3 | 1 | 8 | 3 | 5 | 3 | 3 | 3 | 9 | 3 | 6 | 3 | 3 |
| | 2 | 2 | 1 | 0 | 8 | 9 | 1 | 2 | 3 | 3 | 1 | 1 | 0 | 1 | 3 | 1 | 5 | 1 | 2 | 1 | 4 | 0 | 0 | 0 | 2 |
| B6C3F1 MICE MALE
0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*** TOTALS**

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|--|---|--|---|---|--|--|---|--|---|--|---|---|--|---|---|---|---|---|---|---|-----------|------------|
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | | 1 | | 1 | 1 | | | 1 | | 1 | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 34 | 1.0 |
| Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Amyloid Deposition | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3.0 |
| Nephropathy | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | 2 | 2 | 37 | 1.3 |
| Renal Tubule, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.7 |
| Renal Tubule, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.3 |
| Renal Tubule, Mineralization | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 38 | 1.0 |
| Renal Tubule, Pigmentation, Lipofuscin | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | | | | 1 | | | 1 | 1 | 1 | | | | | | 1 | 1 | 1 | | | 1 | 1 | 26 | 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 49

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 5 5 7 4 5 7 7 7 7 7 6 7 7 7 7 7 5 6 7 7 5 3 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE
1.0 G/KG | 3 9 4 3 6 9 3 3 3 3 3 7 3 3 3 3 3 7 6 3 3 8 9 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 6 7 1 5 6 1 2 0 2 1 3 2 2 2 1 1 0 4 8 1 2 2 2 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.0 G/KG | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5 5 5 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | | | |

males (cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Esophagus | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Gallbladder | + + + + + + M M + + + + + + + + + + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Cecum | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Colon | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Rectum | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Ileum | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Peyer's Patch, Hyperplasia, Lymphoid | 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Amyloid Deposition | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Angiectasis | 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Clear Cell Focus | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Degeneration, Cystic | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Eosinophilic Focus | X | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | | 7 | 5 | 5 | 7 | 4 | 5 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 5 | 3 | 7 | |
| | | 3 | 9 | 4 | 3 | 6 | 9 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 3 | 3 | 3 | 3 | 7 | 6 | 3 | 3 | 8 | 9 | 3 | |
| | | 1 | 6 | 7 | 1 | 5 | 6 | 1 | 2 | 0 | 2 | 1 | 3 | 2 | 2 | 2 | 1 | 1 | 0 | 4 | 8 | 1 | 2 | 2 | 1 | |
| B6C3F1 MICE MALE | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.0 G/KG | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fatty Change | | 1 | 2 | 1 | 1 | | 1 | | 1 | | | | | | | | 1 | 1 | 1 | | | | 1 | 2 | | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | 2 | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | |
| Inflammation, Suppurative | | | | | | | | | | | | 3 | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | 2 | | | | |
| Mixed Cell Focus | | | | | | | X | | | | | | X | | | | | | | | | | | X | | |
| Necrosis | | | | | 3 | | | | | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Tension Lipidosis | | | | X | X | | | | | | | | | | | | | | 3 | 1 | | | 3 | 3 | | |
| Vacuolization Cytoplasmic | | | | | | | | | | | | 2 | | | | | | | | | | | | | | |
| Bile Duct, Cyst | | | | | | | | | | 2 | | | | | | | | | | | | | | | | |
| Centrilobular, Fatty Change | | | | | | | | | | | | | | | | | | | | | | 4 | | | | |
| Centrilobular, Hypertrophy | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fat, Necrosis | | | | | + | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duct, Cyst | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | | 1 | 1 | 1 | | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Stomach, Forestomach | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Necrosis | | | | | | | | 2 | 1 | | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | | | 2 | 1 | 1 | | |
| Epithelium, Hyperplasia | | | | | | | | 2 | 2 | | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | | | | 2 | | | | |
| Stomach, Glandular | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

males
(cont...)

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B6C3F1 MICE MALE | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 7 | 5 | 5 | 7 | 4 | 5 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 5 | 3 | 7 | | |
| 1.0 G/KG | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

males (cont...)

Glands, Ectasia

1

Tooth Dysplasia

+
 2 1 1 4 1 1

CARDIOVASCULAR SYSTEM

Blood Vessel

+ +

Heart
 Cardiomyopathy
 Inflammation, Suppurative
 Artery, Infiltration Cellular, Mononuclear Cell
 Myocardium, Mineralization
 Valve, Inflammation

+
 1 1 2 1 2
 4

ENDOCRINE SYSTEM

Adrenal Cortex
 Hypertrophy
 Vacuolization Cytoplasmic
 Subcapsular, Hyperplasia
 Zona Reticularis, Hyperplasia

+
 1
 2 2 2 2 1 1 2 2 1 1 1 1 1 1 1 1 2 1 1 1 1 1
 2 2 3

Adrenal Medulla

+ +

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 52

TDMS No. 20007 - 06
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
Time Report Requested: 10:57:30
First Dose M/F: 08/24/04 / 08/23/04
Lab: BAT

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 5 | 7 | 4 | 5 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 5 | 3 | 7 | |
| | 3 | 9 | 4 | 3 | 6 | 9 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 3 | 3 | 3 | 3 | 7 | 6 | 3 | 3 | 8 | 9 | 3 | |
| | 1 | 6 | 7 | 1 | 5 | 6 | 1 | 2 | 0 | 2 | 1 | 3 | 2 | 2 | 2 | 1 | 1 | 0 | 4 | 8 | 1 | 2 | 2 | 1 | |
| B6C3F1 MICE MALE
1.0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

males
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Islets, Pancreatic Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | 1 | 2 | 1 | | | | 2 | 1 | 1 | | 1 | 1 | 2 | 1 | 2 | | 2 | | 2 | 1 | | 2 | 2 | | |
| Parathyroid Gland Cyst | + | + | M | + | M | M | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | M | + | |
| Pituitary Gland Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 1 | + | + | + | + | + | + | + | + |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

GENERAL BODY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|---|--|
| Peritoneum Inflammation, Chronic | | | | | | | | | | | + | | | | | | | | | | | | | | + | | + | |
| | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | 3 | |

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Epididymis Granuloma Sperm Infiltration Cellular, Mononuclear Cell | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | 1 | 1 | | 1 | 1 | | | 1 | 1 | | 1 | | | 1 | | | 1 | 1 | | | | 1 | 1 | 1 | 1 | | |
| Preputial Gland Cyst Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | 1 | | 2 | | 2 | | | | | 1 | | 1 | 1 | | 1 | 2 | | | | | | 1 | | | | | |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked
Page 53

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 5 5 7 4 5 7 7 7 7 7 6 7 7 7 7 7 5 6 7 7 5 3 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 9 4 3 6 9 3 3 3 3 3 7 3 3 3 3 3 7 6 3 3 8 9 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 6 7 1 5 6 1 2 0 2 1 3 2 2 2 1 1 0 4 8 1 2 2 2 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

males (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|--|---|--|---|---|---|---|--|--|---|---|---|---|---|---|---|---|--|---|--|---|---|--|---|
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | | 1 | | 1 | 1 | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Seminal Vesicle | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Testes | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Germinal Epithelium, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------------|
| Bone Marrow | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Lymph Node, Mesenteric | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | | 4 2 2 3 1 2 3 2 |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4 4 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 54

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 5 5 7 4 5 7 7 7 7 7 6 7 7 7 7 7 5 6 7 7 5 3 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 9 4 3 6 9 3 3 3 3 3 7 3 3 3 3 3 7 6 3 3 8 9 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 6 7 1 5 6 1 2 0 2 1 3 2 2 2 1 1 0 4 8 1 2 2 2 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE
1.0 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5 5 5 5 5 5 5 5 5 6 6 6 6 6 6 6 6 6 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | | |

males (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + |
| Atrophy | 1 | | | 2 | 4 | | 4 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 4 | 4 | 4 | 2 | 2 | 2 | | | | | 2 |
| Inflammation, Chronic Active Epithelial Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

RESPIRATORY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 55

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 5 5 7 4 5 7 7 7 7 7 6 7 7 7 7 7 5 6 7 7 5 3 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 9 4 3 6 9 3 3 3 3 3 7 3 3 3 3 3 7 6 3 3 8 9 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 6 7 1 5 6 1 2 0 2 1 3 2 2 2 1 1 0 4 8 1 2 2 2 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

males (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | 2 | | | | | 1 | | | | | | | | | | |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | 3 | | | | | | | | | | | | | | | |
| Bronchus, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | |
| Polyp, Inflammatory | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nasolacrimal Duct, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Anterior Chamber, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cornea, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | |
| Retrolbulbar, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | | | | | | | | | | | | |

URINARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
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 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------------|
| | 7 5 5 7 4 5 7 7 7 7 7 6 7 7 7 7 7 5 6 7 7 5 3 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE
1.0 G/KG | 3 9 4 3 6 9 3 3 3 3 3 7 3 3 3 3 3 7 6 3 3 8 9 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 6 7 1 5 6 1 2 0 2 1 3 2 2 2 1 1 0 4 8 1 2 2 2 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.0 G/KG | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5 5 5 5 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | males
(cont...) |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|---|---|--|---|
| Kidney | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia, Osseous | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | | | | | | |
| Papilla, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Renal Tubule, Hyperplasia | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Renal Tubule, Mineralization | 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Renal Tubule, Pigmentation, Lipofuscin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |

Urethra
 Inflammation
 Necrosis

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Urinary Bladder | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Transitional Epithelium, Cytoplasmic Alteration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 5 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 8 3 9 3 3 1 3 3 3 3 3 3 3 3 3 3 9 3 3 3 3 0 3 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 1 2 2 0 8 2 2 1 1 0 1 2 0 1 1 1 5 1 2 2 1 7 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Gallbladder | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Peyer's Patch, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Amyloid Deposition | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Angiectasis | | | | | 1 | | 1 | | 2 | 2 | | | | | | 2 | 1 | | | | 2 | | | | 10 1.7 |
| Basophilic Focus | | | | X | | | | | | | | | | | | | | | | | | | | | 1 |
| Clear Cell Focus | | | | | | X | | X | X | X | | | X | X | X | X | X | | X | X | X | X | | | 21 |
| Degeneration, Cystic | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Eosinophilic Focus | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 43 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
| | 0582 | 0571 | 0562 | 0553 | 0544 | 0535 | 0526 | 0517 | 0508 | 0499 | 0490 | 0481 | 0472 | 0463 | 0454 | 0445 | 0436 | 0427 | 0418 | 0409 | 0400 | 0391 | 0382 | 0373 | |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fatty Change | 1 | | | | 1 | | 2 | | | 1 | | 2 | 2 | 2 | 1 | | 2 | | | 1 | 1 | 2 | 1 | | 24 1.3 |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 48 1.1 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Mixed Cell Focus | | | | | X | | | | X | X | X | X | | | | | X | | | X | X | | X | 12 | |
| Necrosis | 2 | | 1 | | | | | | | | | | | | | | | | 2 | | | | 3 | | 13 2.0 |
| Tension Lipidosis | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Bile Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Centrilobular, Fatty Change | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Centrilobular, Hypertrophy | 2 | 2 | 2 | 2 | | | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 39 2.0 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 3 2.7 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Infiltration Cellular, Mononuclear Cell | | | 1 | | 1 | 1 | | 1 | 1 | 1 | 1 | | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 36 1.1 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Chronic | 1 | | 2 | 1 | 2 | | | 1 | 1 | 2 | 2 | | | | | | | | 2 | | 2 | | 1 | | 24 1.5 |
| Necrosis | 3 | | 2 | | 2 | | | | | 2 | | | | | | | | | | | 2 | | | | 10 1.8 |
| Epithelium, Hyperplasia | 1 | | 1 | 1 | | | | 1 | 1 | 2 | 2 | | | | | | | | 3 | | 2 | 2 | 2 | | 22 1.8 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | |
| 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 0 | |
| 8 | 3 | 9 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 0 | 3 | 3 | 0 |
| 2 | 1 | 2 | 2 | 0 | 8 | 2 | 2 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 5 | 1 | 2 | 2 | 1 | 7 | 2 | 2 | 0 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE
1.0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Islets, Pancreatic Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | 1 | 1 | 1 | 1 | 2 | 1 | | | | | | 1 | 2 | 1 | | 1 | 2 | 1 | 1 | | 1 | | 1 | | 1 | 33 | 1.3 |
| Parathyroid Gland Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | 44 | 1 1.0 |
| | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | |
| Pituitary Gland Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 2 1.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

GENERAL BODY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-------|
| Peritoneum Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 2.5 |
|----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-------|

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Epididymis Granuloma Sperm Infiltration Cellular, Mononuclear Cell | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 2.0 |
| | 1 | | | | 1 | 1 | | | 1 | 1 | 1 | | | | 1 | 1 | 1 | | | 1 | 1 | | | 1 | 1 | 28 | 1.0 |
| Preputial Gland Cyst Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 3 2.3 |
| | | | | | | | | | | | | | | | | | 2 | 3 | | | 2 | | | | | 13 | 1.3 |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Page 61

TDMS No. 20007 - 06

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 04/13/2009

Time Report Requested: 10:57:30

First Dose M/F: 08/24/04 / 08/23/04

Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|-------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 8 | 3 | 9 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | |
| | 2 | 1 | 2 | 2 | 0 | 8 | 2 | 2 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 5 | 1 | 2 | 2 | 1 | 7 | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| B6C3F1 MICE MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.0 G/KG | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | | | | | | | | | | | | 29 | 1.0 |
| Inflammation | 3 | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.5 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.5 |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Germinal Epithelium, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hematopoietic Cell Proliferation | 3 | 1 | 2 | 2 | | 2 | | | | | | | | | | | | | | | | 1 | 2 | | 15 | 2.1 |
| Hyperplasia, Lymphoid | | | | | 1 | | | | | | | | | 2 | | | | | | | | | | | 3 | 1.3 |
| Lymphoid Follicle, Atrophy | 3 | | | | | | | 3 | | | | | 3 | | | | | | | | | | | | 6 | 3.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 3 | 9 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 |
| 2 | 1 | 2 | 2 | 0 | 8 | 2 | 2 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 5 | 1 | 2 | 2 | 1 | 7 | 2 | 2 |
| B6C3F1 MICE MALE
1.0 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6 | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Atrophy | 4 | 4 | 3 | 4 | 2 | 4 | | 1 | 4 | 1 | 2 | 2 | 3 | 1 | 3 | 2 | 2 | 4 | 2 | 2 | 3 | 1 | 4 | | 2 | 43 2.8 |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Epithelial Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Mammary Gland | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 0 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hemorrhage | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Ulcer | | | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | 4 3.0 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

RESPIRATORY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|
| | 5 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 5 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE MALE
1.0 G/KG | 8 3 9 3 3 1 3 3 3 3 3 3 3 3 3 3 9 3 3 3 3 0 3 3 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| | 2 1 2 2 0 8 2 2 1 1 0 1 2 0 1 1 1 5 1 2 2 1 7 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 1 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| ANIMAL ID | 7 7 7 7 8 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation | | | 1 | | | | | | | | | 1 | | | | | | | | | | | | | | 2 1.0 |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Alveolus, Infiltration Cellular, Histocyte | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Bronchus, Hyperplasia | | | | 2 | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | 1 | | | | 5 1.2 |
| Polyp, Inflammatory | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Nasolacrimal Duct, Inflammation, Suppurative | | | | | | | | | | | | | | | | 2 | | | | | | | | | | 3 1.7 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Anterior Chamber, Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Cornea, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Retrolbulbar, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | | | 3 | 2 | | | | | | | 2 | 1 | 1 | | | | | | | | | 8 1.9 |
| Infiltration Cellular, Mononuclear Cell | | | 1 | | 1 | | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 39 1.0 |

URINARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|---|
| | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | 7 | | | |
| 8 | 3 | 9 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 0 | 3 | 3 | |
| 2 | 1 | 2 | 2 | 0 | 8 | 2 | 2 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 1 | 2 | 2 | 1 | 7 | 2 | 2 | | |
| B6C3F1 MICE MALE
1.0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0 | 0 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|-------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Metaplasia, Osseous | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | 2 1.5 | |
| Nephropathy | | 2 | 2 | 2 | 2 | 2 | | 1 | 1 | 1 | | 1 | | 1 | | 1 | | 1 | 1 | 1 | 1 | 2 | 2 | 1 | | | | 38 1.3 | |
| Papilla, Necrosis | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | 3 1.0 |
| Renal Tubule, Hyperplasia | 1 | 1 | | 2 | | | | 1 | | | | | | | 1 | | | | | | | | | | | | | 10 1.1 | |
| Renal Tubule, Mineralization | 1 | 1 | | 1 | 1 | | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 31 1.0 | |
| Renal Tubule, Pigmentation, Lipofuscin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 |
| Urethra | + | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Inflammation | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Necrosis | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Infiltration Cellular, Mononuclear Cell | | 1 | 1 | | | | | | | | | | 1 | 1 | 1 | | 1 | | | | 1 | 1 | | 1 | | | | 20 1.0 | |
| Transitional Epithelium, Cytoplasmic Alteration | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |

*** END OF MALE DATA ***

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 65

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 7 7 7 5 7 7 7 6 7 7 7 7 7 7 7 5 7 7 7 5 7 7 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
0 G/KG | 3 3 3 2 4 2 2 3 8 3 2 3 2 3 3 3 2 6 0 3 2 8 2 3 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 1 0 9 4 9 9 1 4 0 9 1 9 1 1 0 9 0 1 0 9 1 9 0 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | | |

females (cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Esophagus | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Gallbladder Cyst | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Cecum Inflammation, Chronic | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Colon | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Rectum | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Ileum | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clear Cell Focus | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Eosinophilic Focus | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Fatty Change | 1 2 1 3 2 2 2 2 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 4 1 1 | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------------|---|---|---|
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| B6C3F1 MICE FEMALE | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0 G/KG | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | females (cont...) | | | |
| Mixed Cell Focus | | X | | | | | | | | X | | X | | | | | | | | X | X | | | | | | | | | |
| Necrosis | | | | | 1 | | | | | | | | | | | | 1 | | | 2 | | | | | | | | | | |
| Tension Lipidosis | | | | X | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| Mesentery | | | | + | | | | | | | | | | | | | | | | + | | | | | | | | | + | |
| Fat, Necrosis | | | | 3 | | | | | | | | | | | | | | | | 2 | | | | | | | | | 3 | |
| Pancreas | | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Inflammation, Chronic | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Infiltration Cellular, Mononuclear Cell | | 1 | | | 1 | | 1 | 1 | 1 | 1 | | | 1 | 1 | | 1 | 1 | | 1 | | | 1 | 1 | 3 | 2 | 1 | | | | |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Infiltration Cellular, Mononuclear Cell | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glands, Ectasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Tooth | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dysplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|--------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Page 67

TDMS No. 20007 - 06

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 04/13/2009

Time Report Requested: 10:57:30

First Dose M/F: 08/24/04 / 08/23/04

Lab: BAT

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 6 |
| DAY ON TEST | | 3 | 3 | 3 | 2 | 4 | 2 | 2 | 3 | 8 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 6 | 0 | 3 | 2 | 8 | 2 | 3 | 1 |
| DAY ON TEST | | 0 | 1 | 0 | 9 | 4 | 9 | 9 | 1 | 4 | 0 | 9 | 1 | 9 | 1 | 1 | 0 | 9 | 0 | 1 | 0 | 9 | 1 | 9 | 0 | 0 |
| B6C3F1 MICE FEMALE
0 G/KG | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | ANIMAL ID | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | |
| | ANIMAL ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Artery, Infiltration Cellular, Mononuclear Cell | | 1 | | | | | | | | | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Vacuolization Cytoplasmic Subcapsular, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hyperplasia | | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hyperplasia | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 4 | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Ectopic Thymus | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 7 7 7 5 7 7 7 6 7 7 7 7 7 7 7 5 7 7 7 5 7 7 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
0 G/KG | 3 3 3 2 4 2 2 3 8 3 2 3 2 3 3 3 2 6 0 3 2 8 2 3 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 1 0 9 4 9 9 1 4 0 9 1 9 1 1 0 9 0 1 0 9 1 9 0 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| females (cont...) | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | | |

Infiltration Cellular, Mononuclear Cell
 Follicle, Hyperplasia

GENERAL BODY SYSTEM
 NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Clitoral Gland Inflammation | + + + + M + | | | | | | | | | | | | | | | | | | | | | | | | |
| Ovary Angiectasis Cyst Hemorrhage | + + M + 2 + | | | | | | | | | | | | | | | | | | | | | | | | |
| Uterus Inflammation, Suppurative Metaplasia, Squamous Endometrium, Hyperplasia, Cystic | + | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 2 2 3 3 2 1 3 1 3 1 2 1 1 3 2 1 2 3 3 2 | | | | | | | | | | | | | | | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Bone Marrow | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | + + | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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TDMS No. 20007 - 06

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 04/13/2009

Time Report Requested: 10:57:30

First Dose M/F: 08/24/04 / 08/23/04

Lab: BAT

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| B6C3F1 MICE FEMALE | | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 5 | 7 | 7 | 6 |
| 0 G/KG | | 3 | 3 | 3 | 2 | 4 | 2 | 2 | 3 | 8 | 3 | 2 | 3 | 2 | 3 | 3 | 2 | 6 | 0 | 3 | 2 | 8 | 2 | 3 |
| | | 0 | 1 | 0 | 9 | 4 | 9 | 9 | 1 | 4 | 0 | 9 | 1 | 9 | 1 | 1 | 0 | 9 | 0 | 1 | 0 | 9 | 1 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 |

females (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mediastinal, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular
Hyperplasia, Lymphoid | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | | | | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen
Hematopoietic Cell Proliferation
Hyperplasia, Lymphoid
Lymphoid Follicle, Atrophy | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | 2 | 2 | | | | | | 2 | 1 | | 3 | | 2 | 2 | | 1 | | | | 2 | | | | | 2 | | 2 |
| Thymus
Atrophy
Hyperplasia, Histiocytic
Infiltration Cellular, Histiocyte
Epithelial Cell, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | 1 | | | 2 | 2 | 2 | 3 | 1 | 2 | 2 | | 2 | 3 | | 2 | 3 | 3 | 1 | 2 | 4 | | | 1 | 4 | | 4 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | | |
| | | | | | | | 2 | 2 | | | | | | 2 | | | | | | | | | | | | | 1 | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland
Hyperplasia
Inflammation, Chronic Active
Metaplasia, Squamous | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skin
Inflammation, Chronic
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Page 70

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 7 7 7 5 7 7 7 6 7 7 7 7 7 7 7 5 7 7 7 5 7 7 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
0 G/KG | 3 3 3 2 4 2 2 3 8 3 2 3 2 3 3 3 2 6 0 3 2 8 2 3 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 1 0 9 4 9 9 1 4 0 9 1 9 1 1 0 9 0 1 0 9 1 9 0 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | | |

females (cont...)

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Bone | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Fibrosis | 2 3 2 1 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Skeletal Muscle | + | | | | | | | | | | | | | | | | | | | | | | | | |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Brain | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Choroid Plexus, Infiltration Cellular, Mononuclear Cell | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Hypothalamus, Compression | 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| Peripheral Nerve | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Axon, Degeneration | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Spinal Cord | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Axon, Degeneration | 3 | | | | | | | | | | | | | | | | | | | | | | | | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Lung | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| | 7 7 7 7 5 7 7 7 6 7 7 7 7 7 7 7 5 7 7 7 5 7 7 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
0 G/KG | 3 3 3 2 4 2 2 3 8 3 2 3 2 3 3 3 2 6 0 3 2 8 2 3 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 1 0 9 4 9 9 1 4 0 9 1 9 1 1 0 9 0 1 0 9 1 9 0 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 G/KG | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 |

females (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Inflammation
Alveolar Epithelium, Hyperplasia | | | | | | | | | | | 1 | | | | | | | | | | | | | | |
| Nose
Inflammation, Chronic
Olfactory Epithelium, Degeneration | + | | | | | | | | | | 1 | + | | | | | | | | | | | | | |
| Trachea | + | | | | | | | | | | | | | | | | | | | | | | | | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ear | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye
Anterior Chamber, Inflammation,
Suppurative | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland
Atrophy
Hyperplasia
Infiltration Cellular, Mononuclear Cell | + | | | | | | | | | | 1 | + | | | | | | | | | | | | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Kidney
Amyloid Deposition
Inflammation | + | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|---|------------------------------|
| | 0
7
3
0 | 0
7
3
1 | 0
7
3
0 | 0
7
2
9 | 0
5
4
4 | 0
7
2
9 | 0
7
2
9 | 0
7
3
1 | 0
6
8
4 | 0
7
3
0 | 0
7
2
9 | 0
7
3
1 | 0
7
2
9 | 0
7
3
1 | 0
7
3
1 | 0
7
3
3 | 0
7
2
6 | 0
5
0
1 | 0
7
3
2 | 0
7
8
1 | 0
7
2
9 | 0
5
8
1 | 0
7
2
9 | 0
7
3
0 | 0
6
1
0 | | | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | females
(cont...) |
| 0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | | | |
| Metaplasia, Osseous Mineralization | | | | 1 | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | | | | | 1 | 1 | | | | | 2 | | |
| Nephropathy | 1 | | | 2 | 1 | | 1 | 2 | 1 | | 1 | 1 | 1 | | 1 | 1 | | 2 | | 2 | 1 | 1 | | | 2 | 1 | | |
| Papilla, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Hyperplasia | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Infiltration Cellular, Mononuclear Cell | | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | 2 | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
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 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Page 73

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| B6C3F1 MICE FEMALE
0 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| ANIMAL ID | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Gallbladder Cyst | + | + | + | + | + | 1 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Intestine Large, Cecum Inflammation, Chronic | + | + | + | + | + | + | + | + | + | 1 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | 3 1.0 |
| Clear Cell Focus | X | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Eosinophilic Focus | X | | | | | X | | X | | | | | | X | | | | | | | | | | | 9 |
| Fatty Change | 2 | 2 | 1 | 2 | | | 2 | X | | 2 | 2 | | 1 | 1 | | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 39 1.6 |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | 2 | | | | | | | | | | | | | 1 2.0 |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 45 1.1 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 04/13/2009

Time Report Requested: 10:57:30

First Dose M/F: 08/24/04 / 08/23/04

Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 8 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 9 | 3 | 3 | 0 | 3 | 3 | 3 | |
| | 9 | 1 | 9 | 9 | 9 | 0 | 0 | 3 | 8 | 0 | 1 | 9 | 9 | 0 | 0 | 9 | 1 | 9 | 4 | 0 | 1 | 0 | 0 | 1 | 0 | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0 G/KG | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS |
| Mixed Cell Focus | | | X | | | X | | | | | | | X | | | X | | | X | | | X | | | | 12 |
| Necrosis | | | | 1 | | | | | | 3 | | | | | | | | | | | | | | | | 5 1.6 |
| Tension Lipidosis | | | X | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Mesentery | + | + | + | | + | | | | | | | + | | | | | | | | | | | | | + | 8 |
| Fat, Necrosis | 3 | 2 | | 3 | | | | | | | | | 3 | | | | | | | | | | | | 2 | 8 2.6 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | 1 | | | | | 2 1.0 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | | 1 | 2 | 1 | 1 | 1 | 1 | 1 | | 2 | | 1 | 1 | 1 | 1 | | 1 | | M | 1 | 1 | | 34 1.1 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Chronic | | | | 1 | | | | | | | | | | | 2 | | | | | | | | | | | 3 1.7 |
| Epithelium, Hyperplasia | | | | 1 | | | | | | | | | | | | | | | | | | | | | | 3 1.3 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2 1.0 |
| Mineralization | | | | | | 1 | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Glands, Ectasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Tooth | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Dysplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 1.0 |

CARDIOVASCULAR SYSTEM

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|--|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 7 | | | |
| | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 8 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 9 | 3 | 3 | 0 | 3 | 3 | | |
| | 9 | 1 | 9 | 9 | 9 | 0 | 0 | 3 | 8 | 0 | 1 | 9 | 9 | 0 | 0 | 9 | 1 | 9 | 4 | 0 | 1 | 0 | 0 | 1 | 0 | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | 1 | | 2 1.0 |
| Artery, Infiltration Cellular, Mononuclear Cell | | | | | | 1 | | | | | | | | | | | | | | | | | | | 1 1.0 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|-------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Atrophy | | | | | | | | | | | 1 | | | | | | | | | | | | | | 1 1.0 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Vacuolization Cytoplasmic Subcapsular, Hyperplasia | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 49 1.9 | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | 1 | | | | | | | | | | | | | | | | | 1 | 2 | | 4 1.3 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | 48 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | 1 | | | 1 1.0 |
| Pars Distalis, Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | | 2 | 3 | | | 4 2.8 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Ectopic Thymus | | | | | | | | | | | | | | | | | | | | | | 1 | | | 1 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 76

TDMS No. 20007 - 06
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
Time Report Requested: 10:57:30
First Dose M/F: 08/24/04 / 08/23/04
Lab: BAT

| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 |
| | | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | | | |
| | | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 8 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 9 | 3 | 3 | 0 | 3 | 3 | | | |
| | | 9 | 1 | 9 | 9 | 9 | 0 | 0 | 3 | 8 | 0 | 1 | 9 | 9 | 0 | 0 | 9 | 1 | 9 | 4 | 0 | 1 | 0 | 0 | 1 | 0 | | |
| | | ----- | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
0 G/KG | | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | |
| | | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS | |

| | | |
|---|---|--------------|
| Infiltration Cellular, Mononuclear Cell | 1 | 1 1.0 |
| Follicle, Hyperplasia | 2 | 1 2.0 |

GENERAL BODY SYSTEM
NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|---|---|-----------|--------------|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 49 | 1 1.0 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 49 | 1 2.0 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2 | 4 1.7 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 | 1 3.0 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 50 | 3 1.3 |
| Metaplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 2.0 |
| Endometrium, Hyperplasia, Cystic | 3 | 2 | 2 | 3 | 1 | 3 | 2 | 3 | 2 | 3 | 3 | 1 | 2 | 3 | 2 | 4 | 1 | 2 | 1 | 2 | 1 | 42 | 2.1 | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|-----------|----------|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
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| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 8 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 9 | 3 | 3 | 0 | 3 | 3 | 3 | 3 | |
| | 9 | 1 | 9 | 9 | 9 | 0 | 0 | 3 | 8 | 0 | 1 | 9 | 9 | 0 | 0 | 9 | 1 | 9 | 4 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--------------|
| Mediastinal, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 1 4.0 |
|------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--------------|

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Lymph Node, Mandibular
Hyperplasia, Lymphoid | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | 48 | 4 3.3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|-----------|--|
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | 50 | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|-----------|--|

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--------------|-----------|---------------|
| Spleen
Hematopoietic Cell Proliferation
Hyperplasia, Lymphoid
Lymphoid Follicle, Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | 49 | 26 1.8 |
| | | 2 | 1 | 2 | 2 | 1 | | | | 1 | 4 | 2 | 2 | 2 | | | | | | 1 | 2 | | | 1 | | | | | 7 1.6 | | |
| | | | | 4 | | | | | 3 | | | | | | | | | | | | | | | | | | | | 4 2.8 | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--------------|-----------|---------------|
| Thymus
Atrophy
Hyperplasia, Histiocytic
Infiltration Cellular, Histiocyte
Epithelial Cell, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | 50 | 39 2.6 |
| | 1 | | 2 | | 2 | 2 | 2 | 4 | 4 | 2 | 4 | 4 | 2 | 2 | 4 | | 4 | 2 | | 4 | 3 | 2 | 4 | 2 | 4 | | | | 1 3.0 | | |
| | | | | | | | | | | | | | | 3 | | | | | | | | | | | 3 | | | | 5 2.4 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--------------|-----------|--------------|
| Mammary Gland
Hyperplasia
Inflammation, Chronic Active
Metaplasia, Squamous | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | 50 | 1 2.0 |
| | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | | |
| | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--------------|-----------|--------------|
| Skin
Inflammation, Chronic
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | 50 | 1 3.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | | |
| | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 20007 - 06

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 04/13/2009

Time Report Requested: 10:57:30

First Dose M/F: 08/24/04 / 08/23/04

Lab: BAT

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|---|
| | | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 8 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 9 | 3 | 3 | 0 | 3 | 3 |
| | | 9 | 1 | 9 | 9 | 9 | 0 | 0 | 3 | 8 | 0 | 1 | 9 | 9 | 0 | 0 | 9 | 1 | 9 | 4 | 0 | 1 | 0 | 0 | 1 |
| B6C3F1 MICE FEMALE | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 G/KG | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Alveolar Epithelium, Hyperplasia | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | 3 1.0 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Chronic | | | | | | | | | | | | | 2 | | | | | | | | | | 1 | | | | 4 1.3 |
| Olfactory Epithelium, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|--------------|
| Ear | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Anterior Chamber, Inflammation, Suppurative | | | | | | | 3 | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | 3 1.7 |
| Infiltration Cellular, Mononuclear Cell | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | 1 | 38 1.0 | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Amyloid Deposition | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 1.0 |
| Inflammation | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | 1 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
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TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | | |
| | 8 | 3 | 2 | 2 | 3 | 2 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 6 | 2 | 3 | 6 | 2 | 0 | 3 | 2 | | |
| | 1 | 1 | 9 | 9 | 0 | 9 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 4 | 9 | 0 | 3 | 5 | 1 | 0 | 6 | 9 | 1 | 0 | 9 | | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 0.25 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | | |
| Necrosis | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | |
| Tension Lipidosis | X | | | | | X | | X | | X | | X | | | | | | | | X | | | | | | | |
| Centrilobular, Hypertrophy | | | 1 | 1 | | | 1 | 1 | | 1 | 1 | 1 | | | 1 | | | | | | | | 1 | 1 | | | |
| Mesentery | | | | | | | | | | | | | | | | | + | | + | + | | | + | + | | | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | 3 | | 2 | 3 | | | 4 | 3 | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Duct, Cyst | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | |
| Infiltration Cellular, Mononuclear Cell | | | | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | | | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Erosion | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic | 3 | | | 1 | | | | | | | | | | | | | | | | 1 | | | | | | | |
| Ulcer | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Hyperplasia | 2 | | | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Infiltration Cellular, Mononuclear Cell | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Glands, Ectasia | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Tooth | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dysplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
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TDMS No. 20007 - 06

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 04/13/2009

Time Report Requested: 10:57:30

First Dose M/F: 08/24/04 / 08/23/04

Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 5 5 7 6 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 8 3 2 2 3 2 3 1 3 3 3 3 3 2 2 3 2 6 2 3 6 2 0 3 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 1 9 9 0 9 1 1 1 1 1 1 0 0 4 9 0 3 5 1 0 6 9 1 0 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.25 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females (cont...)

Thyroid Gland Cyst

+ +

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland

+ +

Ovary Angiectasis Cyst Thrombosis

+
1 1 1 1

Uterus Inflammation, Suppurative Metaplasia, Squamous Endometrium, Hyperplasia, Cystic

+
1 3 3 1 1 2 3 1 1 2 2 1 2 1 2 2 1 3 1 1 2 1 1

HEMATOPOIETIC SYSTEM

Bone Marrow Fibrosis

+
2

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | females (cont...) |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | |
| 8 | 3 | 2 | 2 | 3 | 2 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 6 | 2 | 3 | 6 | 2 | 0 | 3 | 2 | |
| 1 | 1 | 9 | 9 | 0 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 4 | 9 | 0 | 3 | 5 | 1 | 0 | 6 | 9 | 1 | 0 | 9 | |

B6C3F1 MICE FEMALE

0.25 G/KG

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymph Node
Mediastinal, Hyperplasia, Plasma Cell | | | | | | | | | | | | | | | | | | | | | | | | | | + | 3 |
| Lymph Node, Mandibular
Hyperplasia, Lymphoid | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Lymph Node, Mesenteric
Hyperplasia, Plasma Cell | | | | | | | | | | | | | | | | | | | | | | | | | | + | 3 |
| Spleen
Hematopoietic Cell Proliferation
Hyperplasia, Lymphoid
Lymphoid Follicle, Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Thymus
Atrophy | 4 | 2 | 1 | 1 | 1 | 2 | 1 | 3 | 1 | 2 | 4 | 1 | 2 | 3 | 1 | 1 | 2 | 4 | 4 | 2 | 4 | 1 | 3 | 1 | + | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skin
Ulcer
Subcutaneous Tissue, Fibrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

MUSCULOSKELETAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
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 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 5 5 7 6 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 8 3 2 2 3 2 3 1 3 3 3 3 3 2 2 3 2 6 2 3 6 2 0 3 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 1 9 9 0 9 1 1 1 1 1 1 0 0 4 9 0 3 5 1 0 6 9 1 0 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.25 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibrosis | | | | 2 | | | | | | | | | | | | | | | | | | | | |
| Joint, Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | |
| Serosa, Fibrosis | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | 1 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
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TDMS No. 20007 - 06
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 CAS Number: 9000-38-8

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 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 3 | 2 | 2 | 3 | 2 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 6 | 2 | 3 | 6 | 2 | 0 | 3 | 2 | |
| 1 | 1 | 9 | 9 | 0 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 4 | 9 | 0 | 3 | 5 | 1 | 0 | 6 | 9 | 1 | 0 | 9 |

| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

B6C3F1 MICE FEMALE
0.25 G/KG

females (cont...)

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|--|--|--|--|--|---|---|---|---|---|---|---|--|--|--|--|--|---|---|---|---|---|---|---|
| Eye | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|--|---|---|---|---|--|--|--|--|--|---|---|--|--|--|--|--|---|---|---|---|--|--|--|--|
| Kidney | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amyloid Deposition | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydronephrosis | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia, Osseous | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | 1 | | 1 | | | | 2 | 1 | | | | | | | 1 | 1 | | | | | | 1 | 2 | 1 | 2 | | | | |
| Papilla, Necrosis | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Hyperplasia | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | | | | | | | | | | | | | | | | | | | | |
| Inflammation | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue

M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Page 88

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 3 | 0 | 3 | 1 | 9 | 6 | 3 | 3 | 3 | 2 | 7 | 2 | 3 | 6 | 7 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | |
| | 0 | 8 | 0 | 5 | 7 | 9 | 1 | 1 | 0 | 9 | 5 | 9 | 1 | 9 | 2 | 0 | 0 | 9 | 9 | 9 | 9 | 0 | 0 | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0.25 G/KG | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Esophagus
Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 2.0 |
| Gallbladder
Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | 48 | 1 1.0 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | 49 | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Eosinophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | 7 | |
| Fatty Change | | | 1 | 1 | | | 2 | | 2 | | 2 | 1 | 1 | 1 | | 1 | 1 | 2 | 1 | 2 | | X | | 33 | 1.5 |
| Hematopoietic Cell Proliferation | | | | | 1 | 2 | | | | | | | | | | | | | 1 | | | | | 4 | 1.3 |
| Infiltration Cellular, Mononuclear Cell | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 47 | 1.1 |
| Mixed Cell Focus | | | | | | | | X | | | | | | X | | | | X | X | | X | X | X | 13 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | 3 | 0 | 3 | 1 | 9 | 6 | 3 | 3 | 3 | 2 | 7 | 2 | 3 | 6 | 7 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 3 | |
| | 0 | 8 | 0 | 5 | 7 | 9 | 1 | 1 | 0 | 9 | 5 | 9 | 1 | 9 | 2 | 0 | 0 | 9 | 9 | 9 | 9 | 0 | 0 | 8 | 1 | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0.25 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| Necrosis | 2 | | 1 | | | | X | | X | | | | 1 | | | | | | | | | | | | 4 | 1.3 |
| Tension Lipidosis | | | | | | | | | | | | | X | | | | | | | | | | | | 8 | |
| Centrilobular, Hypertrophy | | | 1 | | | | | | | | | | 1 | | 1 | | 1 | | 1 | | | | 1 | | 20 | 1.0 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | 10 | |
| Fat, Necrosis | | | | | | | | | | | 2 | | | | 3 | | 2 | | | | | | 3 | | 4 | 2.9 |
| Pancreas | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | 50 | |
| Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Salivary Glands | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | 49 | |
| Atrophy | | | | | | | | | | | | | | | M | | | | | | | | | | 1 | 1.0 |
| Infiltration Cellular, Mononuclear Cell | 1 | | 1 | | 1 | | | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 2 | | | | 33 | 1.1 |
| Stomach, Forestomach | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | 50 | |
| Erosion | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Inflammation, Chronic | | | 2 | | | | | | | | | | | | 1 | | 1 | | | | | | | | 6 | 1.5 |
| Ulcer | | | 2 | | | | | | | | | | | | | | | | | | | | | | 2 | 2.5 |
| Epithelium, Hyperplasia | | | 1 | | | | | | | | | | 1 | | 1 | | 2 | | | | | | | | 6 | 1.3 |
| Stomach, Glandular | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | 50 | |
| Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Glands, Ectasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Tooth | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Dysplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |

CARDIOVASCULAR SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|---------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|
| | 7 7 7 7 6 6 7 7 7 7 5 7 7 6 3 7 7 7 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 0 3 1 9 6 3 3 3 2 7 2 3 6 7 3 3 2 2 2 2 3 3 1 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 8 0 5 7 9 1 1 0 9 5 9 1 9 2 0 0 9 9 9 9 0 0 8 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.25 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 7 7 7 7 8 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Blood Vessel Mineralization | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 2.0 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 2.0 |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | 4 1.0 |
| Artery, Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | | | | | | 1 | 1 | | | | | | 2 2.0 |
| Myocardium, Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | 2 4.0 |
| Valve, Inflammation | | | | | | | | | | | | | 4 | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|-------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 50 2.0 | |
| Subcapsular, Hyperplasia | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 4 1.0 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | |
| Parathyroid Gland | M | + | + | + | M | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 44 | 1 1.0 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 1.0 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | 4 1.3 | |
| Pars Distalis, Hyperplasia | 1 | | | | | | | | | | | | 2 | | | | | | | | | 1 | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 91

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|--|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | 3 | 0 | 3 | 1 | 9 | 6 | 3 | 3 | 3 | 2 | 7 | 2 | 3 | 6 | 7 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 3 | |
| | 0 | 8 | 0 | 5 | 7 | 9 | 1 | 1 | 0 | 9 | 5 | 9 | 1 | 9 | 2 | 0 | 0 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 8 | 1 | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0.25 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cyst | | | | | | | | | | | | | | 1 | | | | | | | | | | | | 1 1.0 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Clitoral Gland | + | M | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | 48 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | 3 | | | 1 3.0 |
| Cyst | 1 | | | | 1 | 1 | | | | 1 | | | | | 1 | | | | | | | | | | | 10 1.0 |
| Thrombosis | | | | | | | | | | | | | | | | 4 | | | | | | | | | | 1 4.0 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Suppurative | | | | | | | | | | | | | | 2 | | | | | | | | | | | | 1 2.0 |
| Metaplasia, Squamous | | | | | | | | | | 3 | | | | | | | | | | | | 2 | | | | 2 2.5 |
| Endometrium, Hyperplasia, Cystic | 2 | | 1 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | | 2 | 2 | 1 | 3 | | 2 | 3 | 1 | 2 | 2 | 44 2.0 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibrosis | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 7 7 7 6 6 7 7 7 7 5 7 7 6 3 7 7 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
0.25 G/KG | 3 0 3 1 9 6 3 3 3 2 7 2 3 6 7 3 3 2 2 2 2 3 3 1 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 8 0 5 7 9 1 1 0 9 5 9 1 9 2 0 0 9 9 9 9 0 0 8 1 | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| 0.25 G/KG | 2 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 7 7 7 7 8 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 0 | | | | | | | | | | | | | | | | | | | | | | | |
| 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|---------------|
| Lymph Node
Mediastinal, Hyperplasia, Plasma Cell | + | | | | | | | | | | | | | | | | | | | | | | | | 3 | 1 3.0 |
| Lymph Node, Mandibular
Hyperplasia, Lymphoid | + + + + + + + + + + + + + + M + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | 49 | 4 2.0 |
| Lymph Node, Mesenteric
Hyperplasia, Plasma Cell | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | 1 3.0 |
| Spleen
Hematopoietic Cell Proliferation | + A + + + + + + + + + A + + + + + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | 48 | 24 1.8 |
| Hyperplasia, Lymphoid | 2 3 2 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 1 | | | | | | | | | | | | | | | | | | | | | | | | 6 | 1.8 |
| Lymphoid Follicle, Atrophy | 2 | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.0 |
| Thymus
Atrophy | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | 44 2.1 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|--------------|
| Mammary Gland | + M + | | | | | | | | | | | | | | | | | | | | | | | | 49 | |
| Skin
Ulcer | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | 1 4.0 |
| Subcutaneous Tissue, Fibrosis | 4 2 | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 2.0 |

MUSCULOSKELETAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|---|-----|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | | | | |
| | 3 | 0 | 3 | 1 | 9 | 6 | 3 | 3 | 3 | 2 | 7 | 2 | 3 | 6 | 7 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 3 | | | | |
| | 0 | 8 | 0 | 5 | 7 | 9 | 1 | 1 | 0 | 9 | 5 | 9 | 1 | 9 | 2 | 0 | 0 | 9 | 9 | 9 | 9 | 0 | 0 | 8 | 1 | | | | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| 0.25 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | | | | |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | | | | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | | | |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | | |
| Fibrosis | | | | | | | | | | | | | 2 | | | 2 | | 1 | | 2 | | | 1 | 3 | 2 | 8 | 1.9 | | |
| Joint, Inflammation, Chronic | | | | | | | | | 1 | | | | | | | | | | | | | | | | | 1 | 1.0 | | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Inflammation, Acute | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Mineralization | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Alveolus, Infiltration Cellular, Histiocyte | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Serosa, Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Inflammation, Chronic | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | 2 | 1.0 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 94

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 7 7 7 6 6 7 7 7 7 5 7 7 6 3 7 7 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
0.25 G/KG | 3 0 3 1 9 6 3 3 3 2 7 2 3 6 7 3 3 2 2 2 2 3 3 1 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 8 0 5 7 9 1 1 0 9 5 9 1 9 2 0 0 9 9 9 9 0 0 8 1 | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| * TOTALS | 2 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 7 7 7 7 8 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 0 | | | | | | | | | | | | | | | | | | | | | | | |
| 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------------|
| Eye | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Harderian Gland | + + + + + + + + + + + + + + + M + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | 49 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 1 |
| Infiltration Cellular, Mononuclear Cell | 1 | | | | | | | | | | | | | | | | | | | | | | | | 4 1.5
42 1.0 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Kidney | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Amyloid Deposition | 1 | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Inflammation | 2 | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Mineralization | 2 1 1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | 20 1.2 |
| Nephropathy | 2 2 1 2 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | 25 1.2 |
| Papilla, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 3 2.0 |
| Renal Tubule, Hyperplasia | 2 2 | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Urinary Bladder | + A + + + + + + + + + + + + + M + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | 48 |
| Infiltration Cellular, Mononuclear Cell | 1 | | | | | | | | | | | | | | | | | | | | | | | | 34 1.1 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| | 7 5 7 7 7 7 7 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
0.5 G/KG | 3 3 2 3 3 2 3 3 3 3 2 2 3 2 3 3 2 3 3 3 3 2 2 3 2 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 4 9 0 0 9 0 1 8 0 9 9 1 9 0 0 9 1 1 0 0 9 9 0 9 | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| 0.5 G/KG | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 1 2 3 4 5 6 7 8 9 0 1 1 1 1 1 1 1 1 1 2 2 2 3 4 5 |

females
(cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Esophagus | + | | | | | | | | | | | | | | | | | | | | | | | |
| Gallbladder | + + + + + + + + + + + + M + + + + + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Cecum | + | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Colon | + | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Rectum | + | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum
Epithelium, Hyperplasia | + | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Ileum
Inflammation, Chronic Active
Ulcer | +
2
1 | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum
Peyer's Patch, Hyperplasia | + | | | | | | | | | | | | | | | | | | | | | | | |
| Liver
Angiectasis
Basophilic Focus
Clear Cell Focus
Cyst | +
1
X X
1 | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 96

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|----------------------|
| | 7 5 7 7 7 7 7 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 3 2 3 3 2 3 3 3 3 2 2 3 2 3 3 2 3 3 3 3 3 2 2 3 2 | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) | |
| | 0 4 9 0 0 9 0 1 8 0 9 9 1 9 0 0 9 1 1 0 0 9 9 0 9 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | females
(cont...) |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | | |
| Eosinophilic Focus | | | | X | X | | | | | | | X | X | X | X | | | X | | | | X | X | X | | | |
| Fatty Change | 2 | 1 | 2 | | 2 | 2 | 1 | 2 | 1 | 1 | 2 | | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | 1 | 1 | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Mixed Cell Focus | X | | | | | | | X | X | | | | | X | | | X | X | | | X | | X | X | | | |
| Necrosis | | | | 1 | | | | | | | | | | | | | | | | | | | | 1 | 1 | | |
| Tension Lipidosis | | | X | | | | | | | | | | X | | | | | X | X | | X | | | | | | |
| Centrilobular, Hypertrophy | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| Mesentery | | | | + | | | + | | | | | | | | | | | | | | | | + | | | | |
| Fat, Necrosis | | | | 2 | | | 3 | | | | | | | | | | | | | | | | 3 | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Acinus, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acinus, Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | | 1 | 1 | 1 | 1 | | 1 | | | 1 | | 1 | 1 | 1 | 1 | | |
| Duct, Submandibular Gland, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Erosion | | | | | | | | | | | | | | | | | | | | | | | | | 3 | | |
| Inflammation, Chronic | | | | 1 | | | | | | | | | | 1 | | | | | | | 3 | | 3 | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | 3 | | | | | | |
| Epithelium, Hyperplasia | | | | 1 | | | | | | | | | | 1 | | | 2 | | | 3 | | 3 | | 3 | 2 | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
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TDMS No. 20007 - 06
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 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 5 7 7 7 7 7 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 3 3 2 3 3 2 3 3 3 3 2 2 3 2 3 3 2 3 3 3 3 2 2 3 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 4 9 0 0 9 0 1 8 0 9 9 1 9 0 0 9 1 1 0 0 9 9 0 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
0.5 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 2 2 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | | |

females
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|---|
| Glands, Ectasia | | | | | | | | | | | 1 | | | | | | | | | | | 1 |
| Tooth Dysplasia | | | | | | | | | | | | | | | | | | | | | | + |
| | | | | | | | | | | | | | | | | | | | | | | 1 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Blood Vessel | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Heart | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | | | |
| Artery, Infiltration Cellular, Mononuclear Cell | 1 | | | | | | | | | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Adrenal Cortex | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Vacuolization Cytoplasmic Subcapsular, Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + + + + + + + M + + + + + + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | |

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Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | |
| | 0 | 4 | 9 | 0 | 0 | 9 | 0 | 1 | 8 | 0 | 9 | 9 | 1 | 9 | 0 | 0 | 9 | 1 | 1 | 0 | 0 | 9 | 9 | 0 | 9 | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0.5 G/KG | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | females (cont...) |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis | | | | | | | | | 2 | | | | | | | | | | | | | | | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pars Distalis, Hyperplasia | | | | | | | | 1 | 3 | | | | | 1 | 1 | | | | | | | | | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyst | | | | | 1 | | | | 1 | | 2 | | | 1 | | | | | | 1 | | | | | | |
| Thrombosis | | | | | | | | | | | | | | | | | | | 3 | | | | | | | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Endometrium, Hyperplasia, Cystic | 2 | | 2 | 1 | 2 | 1 | 3 | 2 | | | | 3 | 1 | | 2 | 3 | 2 | 3 | 2 | 1 | 3 | | 1 | 2 | 2 | 2 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-------------------|
| | 7 5 7 7 7 7 7 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
0.5 G/KG | 3 3 2 3 3 2 3 3 3 3 2 2 3 2 3 3 2 3 3 3 3 2 2 3 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 4 9 0 0 9 0 1 8 0 9 9 1 9 0 0 9 1 1 0 0 9 9 0 9 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.5 G/KG | 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 2 3 4 5 6 7 8 9 0 1 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | females (cont...) |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Fibrosis | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular
Hyperplasia, Lymphoid | + | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymph Node, Mesenteric | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen
Hematopoietic Cell Proliferation
Hyperplasia, Lymphoid
Lymphoid Follicle, Atrophy | + | | | | | | | | | | | | | | | | | | | | | | | | | 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 2 2 2 |
| Thymus
Atrophy
Hyperplasia, Histiocytic | + | | | | | | | | | | | | | | | | | | | | | | | | | 2 2 2 2 2 1 1 3 1 2 1 1 2 2 1 2 2 2 1 2 2 2 2 2 1 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------------|
| Mammary Gland | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin
Fibrosis
Inflammation, Chronic
Subcutaneous Tissue, Necrosis | + | | | | | | | | | | | | | | | | | | | | | | | | | 3
3
3 |

MUSCULOSKELETAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
| | 0730 | 0733 | 0732 | 0733 | 0733 | 0732 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Fibrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | 2 | | 1 | | | | | | | | | | | | | | | | | | | | | | |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nose Glands, Dilatation, Nasolacrimal Duct, Inflammation, Suppurative | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Harderian Gland Atrophy Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
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| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 5 7 7 7 7 7 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
0.5 G/KG | 3 3 2 3 3 2 3 3 3 3 2 2 3 2 3 3 2 3 3 3 2 2 3 2 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 4 9 0 0 9 0 1 8 0 9 9 1 9 0 0 9 1 1 0 0 9 9 0 9 | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| females (cont...) | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | |

Infiltration Cellular, Mononuclear Cell 1

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Kidney | + | | | | | | | | | | | | | | | | | | | | | | | |
| Amyloid Deposition | | | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | 1 1 2 1 1 2 1 1 1 1 2 1 1 1 2 1 1 1 1 1 2 | | | | | | | | | | | | | | | | | | | | | | | |
| Papilla, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | |
| Pelvis, Cyst | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Hyperplasia | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 102

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 7 7 7 7 7 5 7 7 7 7 7 7 7 7 7 7 7 7 7 5 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 2 2 2 2 3 2 5 2 3 3 2 2 2 3 2 3 2 2 3 2 5 1 2 3 2 | | | | | | | | | | | | | | | | | | | | | | | |
| | 9 9 9 9 0 9 4 9 0 1 9 9 9 1 9 1 9 9 0 9 6 2 9 1 9 | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
0.5 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 2 2 2 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 4 4 4 4 4 5 | | | | | | | | | | | | | | | | | | | | | | | |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|----|---|-----|---|-----|-----|---|---|-----|
| Esophagus | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | | | | | |
| Gallbladder | + | | | | | | | | | | | | | | | | | | | | | | | | 49 | | | | | | | | | |
| Intestine Large, Cecum | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | | | | | |
| Intestine Large, Colon | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | | | | | |
| Intestine Large, Rectum | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | | | | | |
| Intestine Small, Duodenum
Epithelium, Hyperplasia | + | | | | | | | | | | | | | | | | | | | | | | | | 2 | 50 | 1 | 2.0 | | | | | | |
| Intestine Small, Ileum
Inflammation, Chronic Active
Ulcer | + | | | | | | | | | | | | | | | | | | | | | | | | | 50 | 1 | 2.0 | 1 | 1.0 | | | | |
| Intestine Small, Jejunum
Peyer's Patch, Hyperplasia | + | | | | | | | | | | | | | | | | | | | | | | | | 4 | 50 | 1 | 4.0 | | | | | | |
| Liver
Angiectasis
Basophilic Focus
Clear Cell Focus
Cyst | + | | | | | | | | | | | | | | | | | | | | | | | | | 50 | | | 1 | 2 | 1.0 | 4 | 1 | 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
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|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------|-----|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| B6C3F1 MICE FEMALE
0.5 G/KG | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Eosinophilic Focus | | | | X | | | X | X | X | | X | | | | | | | | | X | | | | | 16 | |
| Fatty Change | 1 | | 1 | | | 1 | | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 42 | 1.3 |
| Hematopoietic Cell Proliferation | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | 4 | 1.3 |
| Infiltration Cellular, Mononuclear Cell | 1 | 2 | 1 | 1 | 1 | 2 | | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 49 | 1.1 | |
| Mixed Cell Focus | X | | | | | | | | | | | X | | X | | | | | | | | | X | 14 | | |
| Necrosis | | 1 | | | | | | | | | | | | | | | | | | | | | 2 | 5 | 1.2 | |
| Tension Lipidosis | | | | | X | | | | | | | | | X | | | | | | | | | | 7 | | |
| Centrilobular, Hypertrophy | 2 | 2 | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | | 2 | 2 | 48 | 1.9 | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | 3 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 5 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 5 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 5 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Acinus, Atrophy | 2 | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Acinus, Vacuolization Cytoplasmic | 2 | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Duct, Cyst | 4 | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Infiltration Cellular, Mononuclear Cell | 1 | | | | 1 | 1 | | 1 | | | 1 | 1 | 2 | | | 2 | | | 1 | 1 | | 1 | 1 | 31 | 1.1 | |
| Duct, Submandibular Gland, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Erosion | | 3 | | | | | 2 | 3 | 4 | 3 | | | | | 4 | | 3 | 3 | 4 | 3 | 2 | | 4 | 14 | 3.1 | |
| Inflammation, Chronic | | 3 | | | 3 | 3 | 2 | 3 | 3 | 3 | | | | | 3 | 1 | 3 | 4 | 3 | 3 | 2 | 1 | 4 | 21 | 2.6 | |
| Ulcer | | | | | 3 | 3 | | | | | | | | | | | | | | | | | | 3 | 3.0 | |
| Epithelium, Hyperplasia | | 3 | | | 4 | 3 | 3 | 3 | 3 | 4 | | | | | 4 | 1 | 3 | 4 | 4 | 3 | 1 | 2 | 4 | 23 | 2.8 | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|--|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | | |
| | 2 | 2 | 2 | 2 | 3 | 2 | 5 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 2 | 5 | 1 | 2 | 3 | 2 | |
| | 9 | 9 | 9 | 9 | 0 | 9 | 4 | 9 | 0 | 1 | 9 | 9 | 9 | 1 | 9 | 1 | 9 | 9 | 0 | 9 | 6 | 2 | 9 | 1 | 9 | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | * TOTALS | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------|
| Glands, Ectasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 |
| Tooth Dysplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cardiomyopathy | | | 1 | | | | 1 | | | | | | | | | | | 1 | | | | | | | 4 1.0 |
| Artery, Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | 1 | | | | | | 1 | 1 | | | | 3 1.0 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|--------------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Vacuolization Cytoplasmic Subcapsular, Hyperplasia | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 50 2.0 | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Parathyroid Gland | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 105

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|--|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | | |
| | 2 | 2 | 2 | 2 | 3 | 2 | 5 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 2 | 5 | 1 | 2 | 3 | 2 | |
| | 9 | 9 | 9 | 9 | 0 | 9 | 4 | 9 | 0 | 1 | 9 | 9 | 9 | 1 | 9 | 1 | 9 | 9 | 0 | 9 | 6 | 2 | 9 | 1 | 9 | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | * TOTALS | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 49 | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Cyst | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | 2 1.0 |
| Pars Distalis, Hyperplasia | | | 1 | 1 | | | | | | | | | | | | | | | | | 1 | | | | | | 7 1.3 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 1.3 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 3.5 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Endometrium, Hyperplasia, Cystic | 1 | 2 | 3 | 2 | 3 | 2 | 2 | 1 | 2 | | 2 | 1 | 3 | 4 | 3 | 2 | 3 | 3 | 3 | 1 | 2 | | | | 1 | 4 | 42 2.1 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 |
| | 2 | 2 | 2 | 2 | 3 | 2 | 5 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 2 | 5 | 1 | 2 | 3 | 2 |
| | 9 | 9 | 9 | 9 | 0 | 9 | 4 | 9 | 0 | 1 | 9 | 9 | 9 | 1 | 9 | 1 | 9 | 9 | 0 | 9 | 6 | 2 | 9 | 1 | 9 |
| B6C3F1 MICE FEMALE
0.5 G/KG | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Fibrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Lymph Node, Mandibular
Hyperplasia, Lymphoid | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | 2 | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 2.0 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Spleen
Hematopoietic Cell Proliferation
Hyperplasia, Lymphoid
Lymphoid Follicle, Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | 2 | 4 | | 1 | 1 | | | | | | | | | 1 | | 1 | | 1 | | | | 4 | | 1 | 1 | |
| | | | | | 4 | | | | | 2 | | | | | 2 | | | | | 2 | | | | | 20 | 1.5 |
| | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 2.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 2.5 |
| Thymus
Atrophy
Hyperplasia, Histiocytic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | 4 | 2 | 2 | 1 | 1 | 1 | 4 | 1 | | 2 | 1 | 1 | 1 | 1 | M | + | + | + | + | + | + | + | + | + | | |
| | | | | | 2 | | | | | | | | | | | | | | | | | | | | 49 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 46 | 1.7 |
| | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.0 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Skin
Fibrosis
Inflammation, Chronic
Subcutaneous Tissue, Necrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |

MUSCULOSKELETAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|--|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | | |
| | 2 | 2 | 2 | 2 | 3 | 2 | 5 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 2 | 5 | 1 | 2 | 3 | 2 | |
| | 9 | 9 | 9 | 9 | 0 | 9 | 4 | 9 | 0 | 1 | 9 | 9 | 9 | 1 | 9 | 1 | 9 | 9 | 0 | 9 | 6 | 2 | 9 | 1 | 9 | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | * TOTALS | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibrosis | | | | 1 | | | | | | | 3 | | | | 1 | | | | | | | | | | 7 1.6 |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | 1 | | | | 2 1.0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Glands, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Nasolacrimal Duct, Inflammation, Suppurative | | | | | | | 2 | | | | | | | | | | | | | | | | | | 1 2.0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Atrophy | | | | | | | | | | | | | | | 1 | | | | | | | | | | 1 1.0 |
| Hyperplasia | | | | 1 | | 2 | | | | | | | | | | | | | | | 1 | | | | 5 1.6 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
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TDMS No. 20007 - 06
 Test Type: CHRONIC
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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
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 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 7 7 7 7 7 5 7 7 7 7 7 7 7 7 7 7 7 7 7 5 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 2 2 2 2 3 2 5 2 3 3 2 2 2 3 2 3 2 2 3 2 5 1 2 3 2 | | | | | | | | | | | | | | | | | | | | | | | |
| | 9 9 9 9 0 9 4 9 0 1 9 9 9 1 9 1 9 9 0 9 6 2 9 1 9 | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.5 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|--|--|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 42 1.0 |
|---|---|---|---|---|--|--|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|---------------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Amyloid Deposition | | | | | | 1 | | | | | | | | | | | | | | | | | | | 2 1.0 |
| Metaplasia, Osseous | | | | 1 | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Mineralization | | | | | | | | 1 | 1 | | | | | | | | | | | | | | | | 7 1.0 |
| Nephropathy | 2 | 1 | 1 | 1 | 1 | 1 | 4 | | 1 | | 1 | 1 | 1 | | | | 1 | | 1 | 1 | | | 1 | 26 1.3 | |
| Papilla, Necrosis | | | | | | | | | 2 | | | | | | | | | | | | | | | | 1 2.0 |
| Pelvis, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Renal Tubule, Hyperplasia | | | | | | | | | 1 | | | | | | | | | | | | | | | | 2 1.0 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Infiltration Cellular, Mononuclear Cell | | 1 | | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 40 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 04/13/2009

Time Report Requested: 10:57:30

First Dose M/F: 08/24/04 / 08/23/04

Lab: BAT

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 5 | 3 | 7 | 2 | 3 | 8 | 2 | 3 | 3 | 3 | 7 | 3 | 3 | 3 | 3 | 3 | 4 | 2 | 2 | 0 | 2 | 2 | 3 | 3 | |
| | 5 | 4 | 0 | 8 | 9 | 0 | 4 | 3 | 1 | 0 | 1 | 6 | 1 | 0 | 0 | 1 | 1 | 1 | 8 | 9 | 9 | 4 | 3 | 9 | 1 | |
| B6C3F1 MICE FEMALE
1.0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

females (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | | | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | | |
| Mixed Cell Focus | X | | | | | | | | | | X | | | | | | X | X | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tension Lipidosis | | | | | | | | | | | X | | | | | | | X | | | | | | | | X |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Centrilobular, Hypertrophy | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mesentery | | | + | | | | | | | | | | | | | | | | | | | | | | | |
| Fat, Necrosis | | | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acinus, Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Infiltration Cellular, Mononuclear Cell | 1 | | 1 | 1 | | | | | | | | | | 1 | | 1 | | 1 | | 1 | | | | 1 | 1 | 1 |
| Parotid Gland, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Erosion | | | | | | 4 | | 3 | 3 | 2 | | 3 | 2 | | 3 | | 3 | 2 | | | | | | | 2 | |
| Inflammation, Chronic | | 2 | | | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 1 | 3 | | 3 | 3 | 3 | | | | | | 3 | |
| Ulcer | | 2 | | | 2 | | 3 | | | | 3 | | | | | | | | 2 | | | | | | | |
| Epithelium, Hyperplasia | | 1 | | | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 1 | 3 | | 3 | 3 | 3 | | | | | | 3 | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Infiltration Cellular, Mononuclear Cell | | | | | | | | | | | | | | 2 | | | | | | | | | | | | |
| Ulcer | | 2 | | | | | | | 2 | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 111

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | |
| | 2 | 5 | 3 | 7 | 2 | 3 | 8 | 2 | 3 | 3 | 3 | 7 | 3 | 3 | 3 | 3 | 3 | 4 | 2 | 2 | 0 | 2 | 2 | 3 | |
| | 5 | 4 | 0 | 8 | 9 | 0 | 4 | 3 | 1 | 0 | 1 | 6 | 1 | 0 | 0 | 1 | 1 | 1 | 8 | 9 | 9 | 4 | 3 | 9 | 1 |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.0 G/KG | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females (cont...)

| | | |
|-------------------------|---|---|
| Epithelium, Hyperplasia | 2 | 2 |
| Tooth Dysplasia | + | 1 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | | |
| Myocardium, Mineralization | 2 | | | | | | | | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Subcapsular, Hyperplasia | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 |
| Zona Reticularis, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | | | | | | | 2 | | | | | | | | | | 1 | | | |
| Vacuolization Cytoplasmic | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 6 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | 0 | |
| 2 | 5 | 3 | 7 | 2 | 3 | 8 | 2 | 3 | 3 | 3 | 7 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 2 | 2 | 0 | 2 | 2 | 3 | 0 | |
| 5 | 4 | 0 | 8 | 9 | 0 | 4 | 3 | 1 | 0 | 1 | 6 | 1 | 0 | 0 | 1 | 1 | 1 | 8 | 9 | 9 | 4 | 3 | 9 | 1 | 0 | |

| B6C3F1 MICE FEMALE
1.0 G/KG | | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
|--------------------------------|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia | | | | | | | | | | | 2 | | | | | | | | | | 2 | 1 | | | | | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

GENERAL BODY SYSTEM

| | | |
|-----------------------|--|---|
| Tissue NOS | | + |
| Inflammation, Chronic | | 3 |

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Endometrium, Hyperplasia, Cystic | 2 | | 2 | 1 | 1 | 2 | 1 | | 3 | | 2 | 3 | | 1 | 3 | 1 | 2 | 1 | 1 | | 1 | 2 | 2 | 3 |
| Vagina | | | | | | | | | | | | | | | | | | | | | | | | |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | + |
| | | | | | | | | | | | | | | | | | | | | | | | | 2 |

HEMATOPOIETIC SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked
Page 113

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 6 7 6 7 7 6 5 7 7 7 5 7 7 7 7 7 5 7 7 6 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 2 5 3 7 2 3 8 2 3 3 3 7 3 3 3 3 3 4 2 2 0 2 2 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5 4 0 8 9 0 4 3 1 0 1 6 1 0 0 1 1 1 8 9 9 4 3 9 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1.0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow
Fibrosis
Necrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mandibular
Hyperplasia, Lymphoid | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric
Hyperplasia, Lymphoid
Inflammation, Granulomatous | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen
Hematopoietic Cell Proliferation
Hyperplasia, Lymphoid
Lymphoid Follicle, Atrophy | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | 1 | | | 2 | | | | | | | | | 2 | | 1 | | | 2 | | | | |
| | | 4 | | | | | 3 | | | | | | | | | | | | | | | | | | |
| Thymus
Atrophy
Hyperplasia, Histiocytic
Infiltration Cellular, Histiocyte | + | M | + | + | + | + | M | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + |
| | 4 | | 4 | 4 | 4 | 1 | | 2 | 2 | 1 | 2 | | | | 1 | 2 | 2 | 2 | 3 | 1 | | 4 | 4 | 1 | 1 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
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TDMS No. 20007 - 06
 Test Type: CHRONIC
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Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | |
| | 2 | 5 | 3 | 7 | 2 | 3 | 8 | 2 | 3 | 3 | 3 | 7 | 3 | 3 | 3 | 3 | 3 | 4 | 2 | 2 | 0 | 2 | 2 | 3 | |
| | 5 | 4 | 0 | 8 | 9 | 0 | 4 | 3 | 1 | 0 | 1 | 6 | 1 | 0 | 0 | 1 | 1 | 1 | 8 | 9 | 9 | 4 | 3 | 9 | 1 |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.0 G/KG | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibrosis | | | | | 1 | | | | | | | | | | 2 | | | | | | | | | |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Peripheral Nerve
Axon, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | |
| Spinal Cord | | | | | | | | | | | | | | | | | | | | | | | | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 6 7 6 7 7 6 5 7 7 7 5 7 7 7 7 7 5 7 7 6 7 7 7 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
1.0 G/KG | 2 5 3 7 2 3 8 2 3 3 3 7 3 3 3 3 3 4 2 2 0 2 2 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5 4 0 8 9 0 4 3 1 0 1 6 1 0 0 1 1 1 8 9 9 4 3 9 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5 5 5 5 5 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | | |

females (cont...)

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Eye | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 | | | | | | | | | | | | | | | | | | | | | | | | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Kidney | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Amyloid Deposition | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia, Osseous | 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | 1 1 1 2 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | 1 1 1 4 4 1 3 1 4 1 1 3 2 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Papilla, Necrosis | 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Infiltration Cellular, Mononuclear Cell | 1 | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| 5 | 7 | 1 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | | |
| 4 | 1 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 6 | 3 | 3 | |
| 8 | 9 | 8 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 9 | 9 | 1 | 0 | 0 | 1 | 1 | 1 | 9 | 0 | 9 | 9 | 0 | 0 | |
| B6C3F1 MICE FEMALE
1.0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Gallbladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cyst | | | | | | | | | | | | | 1 | | | | | | | | | | | | | 1 1.0 |
| Epithelium, Cytoplasmic Alteration | | | | | | | | | | | | | | | | | | | | | | 2 | | | | 1 2.0 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Metaplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Clear Cell Focus | | | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| Eosinophilic Focus | X | | | X | X | X | X | | | | X | X | | | X | X | | | | X | X | X | | | 26 | |
| Fatty Change | | | | 1 | 1 | | 1 | | | | 1 | 1 | | | 1 | | | | | 1 | 1 | 1 | | 1 | 1 | 23 1.3 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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TDMS No. 20007 - 06
 Test Type: CHRONIC
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 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
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 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| | 5 | 7 | 1 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | | |
| | 4 | 1 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 6 | 3 | 3 | |
| | 8 | 9 | 8 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 9 | 9 | 1 | 0 | 0 | 1 | 1 | 1 | 9 | 0 | 9 | 9 | 0 | 0 | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.0 G/KG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Pars Distalis, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.8 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

GENERAL BODY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----|
| Tissue NOS | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Endometrium, Hyperplasia, Cystic | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.8 |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.6 |
| Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |

HEMATOPOIETIC SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 120

TDMS No. 20007 - 06
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 04/13/2009
 Time Report Requested: 10:57:30
 First Dose M/F: 08/24/04 / 08/23/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 5 | 7 | 1 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | | |
| | 4 | 1 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 6 | 3 | 3 | |
| | 8 | 9 | 8 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 9 | 9 | 1 | 0 | 0 | 1 | 1 | 1 | 9 | 0 | 9 | 9 | 0 | 0 | |
| B6C3F1 MICE FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1.0 G/KG | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | |
| | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------------|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Fibrosis | 1 | | | 1 | | | | | | 2 | | | | 2 | | | | | | 2 | 3 | 2 | | | | | 9 1.8 |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------------|--|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Peripheral Nerve | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Axon, Degeneration | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Spinal Cord | + | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|------------|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
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| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 5 7 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 6 7 7 | | | | | | | | | | | | | | | | | | | | | | | |
| B6C3F1 MICE FEMALE
1.0 G/KG | 4 1 4 3 3 3 3 3 3 3 3 3 2 2 3 3 3 3 3 3 2 3 2 6 3 3 | | | | | | | | | | | | | | | | | | | | | | | |
| | 8 9 8 0 0 1 0 0 1 0 0 0 9 9 1 0 0 1 1 1 9 0 9 9 0 0 | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| * TOTALS | 3 4 | | | | | | | | | | | | | | | | | | | | | | | |
| | 7 7 7 7 8 8 8 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 0 | | | | | | | | | | | | | | | | | | | | | | | |
| 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Eye | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Harderian Gland | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Infiltration Cellular, Mononuclear Cell | 1 | | | | | | | | | | | | | | | | | | | | | | | | 38 1.0 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Kidney | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Amyloid Deposition | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nephropathy | 2 | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Papilla, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Urinary Bladder | + | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Infiltration Cellular, Mononuclear Cell | 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | 34 1.0 |

*** END OF REPORT ***

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