

TDMS No. 20007 - 05
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
Time Report Requested: 09:10:56
First Dose M/F: 08/18/04 / 08/19/04
Lab: BAT

F2_R2

C Number: C20007
Lock Date: 03/27/2007
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 2.2.0

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FISCHER 344 RATS MALE	DAY ON TEST																									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			0	
0.0 G/KG	7	7	6	7	7	6	6	7	7	7	7	5	7	7	7	5	7	7	7	7	7	7	7	7	7	7	0		
	2	2	5	2	2	1	2	2	2	2	2	8	2	2	2	0	2	2	2	2	2	2	2	2	2	2	2	0	
	9	7	1	8	7	0	9	9	7	8	7	2	8	7	9	4	7	7	7	8	8	7	7	8	8	8	8	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	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	2	2	2	2	2	2	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	5	0		

C-cell, Hyperplasia

1 2 1 1

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Coagulating Gland
 Fibrosis
 Inflammation

+
 2

Epididymis
 Inflammation

+ +

Preputial Gland

+ +

Prostate
 Inflammation
 Epithelium, Hyperplasia

+
 2 2 3 2 1 2 1 1 3 3 1 2 1 2 2 4
 1 1 1 1

Seminal Vesicle

+ +

Testes
 Arteriole, Necrosis
 Germinal Epithelium, Degeneration
 Interstitial Cell, Hyperplasia

+
 2 1 1 3 1 2 2
 1 2 3 1 2 3 1 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
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|-----------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|-----|
| | 078 | 078 | 079 | 061 | 072 | 072 | 069 | 051 | 072 | 068 | 072 | 072 | 072 | 072 | 072 | 050 | 072 | 072 | 059 | 072 | 066 | 067 | | 077 |
| 0.0 G/KG | 0026 | 0027 | 0028 | 0029 | 0030 | 0031 | 0032 | 0033 | 0034 | 0035 | 0036 | 0037 | 0038 | 0039 | 0040 | 0041 | 0042 | 0043 | 0044 | 0045 | 0046 | 0047 | 0048 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|-------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Epithelium, Necrosis | | | 1 | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Muscularis, Degeneration | | | 2 | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Parasite Metazoan | | | | | | | X | | | | | X | | | | | | | | | | | | | 7 | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Ectopic Tissue | | | | | | | | | | | | 2 | | | | | | | | | | | | | 1 2.0 | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Necrosis | | | | 1 | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Basophilic Focus | X | X | | | X | | | | X | | | X | | | X | | | X | | | X | | X | | 21 | |
| Clear Cell Focus | X | X | | | X | X | | | | | | X | X | X | | | X | | | X | | | | | 18 | |
| Eosinophilic Focus | | | X | | X | | | | X | | | X | X | X | | | X | | | | X | | X | | 15 | |
| Fatty Change, Diffuse | | | | 2 | 1 | | | 2 | | | 4 | | | | 1 | | | | | | | | | | 11 1.8 | |
| Hematopoietic Cell Proliferation | | | | | | | | | 1 | | | | | 1 | | | | | | | 1 | | | | 3 1.0 | |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | | | | X | | | | | | | | 2 | |
| Inflammation, Chronic Active | 1 | 1 | | | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 36 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

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|-----------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|-------|--------|
| | 078 | 078 | 079 | 061 | 072 | 072 | 069 | 051 | 072 | 068 | 072 | 072 | 072 | 072 | 072 | 050 | 072 | 072 | 057 | 066 | | 067 | 077 | |
| ANIMAL ID | 0026 | 0007 | 0008 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | | |
| Mixed Cell Focus | | | | | | | | | | | | | | | | | | | | | | | 4 | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 2.0 |
| Pigmentation, Hemosiderin | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Bile Duct, Hyperplasia | 1 | 2 | 1 | 1 | 1 | 2 | | | | | | | 1 | 1 | 1 | | | 2 | 1 | 2 | | | 2 1 1 | 32 1.3 |
| Centrilobular, Fatty Change | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 2.0 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Fat, Necrosis | 3 | | | | | | | | | | | | | | | | | 2 | | 4 | | | | 4 2.5 |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | | | | | | | | | | | | | | | | | | | | | | | | 49 |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | 16 1.3 |
| Acinus, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 6 1.5 |
| Salivary Glands | | | | | | | | | | | | | | | | | | | | | | | | 49 |
| Stomach, Forestomach | | | | | | | | | | | | | | | | | | | | | | | | 49 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | 8 2.3 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | 4 2.5 |
| Epithelium, Dysplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 6 2.2 |
| Stomach, Glandular | | | | | | | | | | | | | | | | | | | | | | | | 49 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Epithelium, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Tooth | | | | | | | | | | | | | | | | | | | | | | | | 10 |
| Malformation | | | | | | | | | | | | | | | | | | | | | | | | 10 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
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0.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-----------------|------------------|
| | 0728 | 0728 | 0729 | 0673 | 0778 | 0779 | 0664 | 0551 | 0778 | 0669 | 0771 | 0772 | 0777 | 0778 | 0778 | 0554 | 0778 | 0777 | 0554 | 0775 | | 0667 | 0668 | 0777 | 0777 | |
| ANIMAL ID | 00026 | 00007 | 00008 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | | |
| Hyperplasia | | | 3 | | | 1 | | 3 | 2 | 3 | 1 | 4 | | | | | 1 | | | 3 | | | | | 16 2.4 | |
| Lymph Node
Mediastinal, Hyperplasia, Lymphoid | | + | 2 | | | | | | | | | | | | | | | | | | | | | | 4 3 2.0 | |
| Lymph Node, Mandibular | 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 | |
| Lymph Node, Mesenteric
Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 2 2.0 | |
| Spleen
Accessory Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 1 | |
| Hematopoietic Cell Proliferation | 1 | | 1 | | | | | 3 | | | | 2 | | | | 2 | | 1 | | | 2 | 2 | | 1 | 10 1.7 | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | 2 | | | 1 2.0 | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Pigmentation, Hemosiderin | 1 | | | 1 | | 1 | 2 | 1 | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 31 1.1 | |
| Lymphoid Follicle, Atrophy | | | | 4 | | | | | | | | | | | | 3 | | | | | | | | | 2 3.5 | |
| Thymus
Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | 48 47 3.3 |
| 4 3 4 4 3 3 3 3 3 4 3 3 4 3 3 4 3 4 4 3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland
Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | 48 1 2.0 | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin
Subcutaneous Tissue, Fibrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 1 4.0 | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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
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| ANIMAL ID | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Cornea, Fibrosis | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Iris, Synechia | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Retina, Degeneration | | | | | | | | | | | | | | 1 | | | | | | | | | 6 1.5 |
| Retina, Retinal Detachment | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Accumulation, Hyaline Droplet | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Infarct | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Mineralization | 1 | | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 38 1.0 |
| Nephropathy | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | | 2 | 1 | 1 | 1 | 1 | 1 | 46 1.4 |
| Cortex, Cyst | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Papilla, Necrosis | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Pelvis, Inflammation | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Ureter | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Urethra | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

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(cont...) |
|-----------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|
| | 0728 | 0727 | 0722 | 0721 | 0714 | 0707 | 0707 | 0707 | 0707 | 0707 | 0706 | 0707 | 0707 | 0701 | 0705 | 0707 | 0707 | 0706 | 0707 | 0706 | 0707 | 0706 | 0707 | 0706 | 0707 | | |
| Bile Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| Bile Duct, Hyperplasia | 1 | 2 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | |
| Centrilobular, Fatty Change | 2 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Centrilobular, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hepatocyte, Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oval Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Atrophy | | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acinus, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epithelium, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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

TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| DAY ON TEST | FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | | ANIMAL ID | males
(cont...) |
|--|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------|--------------------|
| | 078 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 076 | 077 | 077 | 071 | 075 | 077 | 077 | 076 | 077 | 077 | 076 | 077 | 076 | 077 | 077 | | |
| 0.1 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 | 00051 | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Mineralization | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 |
| Nephropathy | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | | 1 | 2 | 1 | 1 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | | |
| Pelvis, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pelvis, Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Ureter | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |

* .. 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE
0.1 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | | | | | |
|-----------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-----|-----|-----|-----|-----|
| | 0030 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | | 0077 | | | | | | | | |
| ANIMAL ID | 00076 | 00077 | 00078 | 00079 | 00080 | 00081 | 00082 | 00083 | 00084 | 00085 | 00086 | 00087 | 00088 | 00089 | 00090 | 00091 | 00092 | 00093 | 00094 | 00095 | 00096 | 00097 | 00098 | 00099 | 00100 | | | | | |
| Bile Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | | | | |
| Bile Duct, Hyperplasia | | 2 | | 1 | 1 | 1 | 1 | 2 | | | | 1 | 1 | 1 | 2 | 2 | | 1 | 1 | 1 | | | | 3 | 1 | 1 | 39 | 1.3 | | |
| Centrilobular, Fatty Change | | | | | | | | | | | | | | | 1 | | | | | | | | | | | 7 | 1.3 | | | |
| Centrilobular, Necrosis | | | | | | | | | | | | | | | | | | | 1 | 3 | | | | | | 2 | 2.0 | | | |
| Hepatocyte, Hypertrophy | | | | | | | | | | | | | | | 1 | | | | | | | | | | | 2 | 1.0 | | | |
| Oval Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2.0 | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | 8 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 | 1.4 | |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Hyperplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Pancreas | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acinus, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE
0.1 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|--------------|--|
| | 0030 | 0072 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | | | |
| ANIMAL ID | 00076 | 00077 | 00078 | 00079 | 00080 | 00081 | 00082 | 00083 | 00084 | 00085 | 00086 | 00087 | 00088 | 00089 | 00090 | 00091 | 00092 | 00093 | 00094 | 00095 | 00096 | 00097 | 00098 | 00099 | 00100 | | |
| Necrosis | | | 1 | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Lymph Node
Mediastinal, Infiltration Cellular, Plasma Cell | | | + | | | | | | | | | | | | | | | | | | | | + | | | 3
1 2.0 | |
| Lymph Node, Mandibular | 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 | |
| Lymph Node, Mesenteric
Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
2 1.0 | |
| Spleen
Amyloid Deposition | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
1 2.0 | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | | 3
10 2.2 | |
| Pigmentation, Hemosiderin | | | 1 | | 1 | 1 | 1 | 1 | | | | | 1 | 1 | | 1 | 1 | 1 | | | | | 1 | 1 | 1 | 32 1.0 | |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 | |
| Thymus
Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
49 3.2 | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Skin
Cyst Epithelial Inclusion | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
1 | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| DAY ON TEST | FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | * 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 | 50 | | |
| 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | | |
| 0 | 7 | 8 | 9 | 8 | 9 | 8 | 9 | 9 | 5 | 7 | 8 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 1 | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | |
| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 1 | |
| 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 |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 |
| Hydrocephalus | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Congestion | 2 | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Alveolar Epithelium, Hyperplasia | | | | 4 | | 1 | | 3 | | | | 1 | | | | | 1 | | | | | 1 | | 13 |
| Alveolar Epithelium, Metaplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | 1 | | | | | | | | | | | | | | | | 3 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Foreign Body | | | | | | | | X | | | | | | | | | | | | | | X | | 4 |
| Inflammation | | | 2 | | | | | 2 | | | | | 2 | | | | | | 1 | | | | 1 | 14 |
| Olfactory Epithelium, Metaplasia | | | | | | | | 2 | | | | | | | | | | | | | | | | 1 |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Ear | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Retina, Degeneration | | | | | | | | | | | | 1 | | | | | | | | | | 1 | | 6 |

* .. 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE
0.1 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------|----------|--|
| | 0030 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | | |
| ANIMAL ID | 0076 | 0077 | 0078 | 0079 | 0080 | 0081 | 0082 | 0083 | 0084 | 0085 | 0086 | 0087 | 0088 | 0089 | 0090 | 0091 | 0092 | 0093 | 0094 | 0095 | 0096 | 0097 | 0098 | 0099 | | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Mineralization | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 43 1.0 | | |
| Nephropathy | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 47 1.2 | | |
| Pelvis, Dilatation | | | | | | | | | | 2 | | | | | | | | | | | | | | 1 2.0 | | |
| Pelvis, Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | | |
| Ureter | | | | | | | | | | | | | | | | | | | | | | + | | 1 | | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| DAY ON TEST | FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | | 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 | | | |
| 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 0 | | |
| 2 | 2 | 6 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 8 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | | |
| 9 | 7 | 4 | 0 | 8 | 7 | 8 | 8 | 9 | 8 | 8 | 8 | 8 | 1 | 8 | 7 | 2 | 9 | 8 | 8 | 9 | 7 | 7 | 7 | 7 | 7 | 0 | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 0 | 0 | 0 | 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 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 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 | 6 | 0 | | |
| Malformation | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pulmonary Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | | 2 | 4 | 3 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 1 | 2 | |
| Mineralization | | | | 1 | | | | | | | | | | | | | | | | | | | | | |
| Atrium, Thrombosis | | | | | | | | | | | | 1 | | | | | | | | | | | | | |
| Coronary Artery, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epicardium, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zona Fasciculata, Hyperplasia | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|
| FISCHER 344 RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | males
(cont...) |
| | 0
7
2
9 | 0
7
2
7 | 0
6
6
4 | 0
6
3
0 | 0
7
2
8 | 0
7
2
7 | 0
7
2
8 | 0
7
2
8 | 0
7
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9 | 0
7
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9 | 0
7
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8 | 0
7
2
8 | 0
7
2
8 | 0
7
2
1 | 0
7
2
8 | 0
7
2
7 | 0
6
8
9 | 0
7
2
8 | 0
7
2
8 | 0
7
2
9 | 0
7
2
7 | 0
7
2
7 | 0
7
2
8 | 0
7
2
8 | | |
| 0.3 G/KG | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0
0
1
0
1 | 0
0
1
0
2 | 0
0
1
0
3 | 0
0
1
0
4 | 0
0
1
0
5 | 0
0
1
0
6 | 0
0
1
0
7 | 0
0
1
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8 | 0
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9 | 0
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2 | 0
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3 | 0
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4 | 0
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5 | 0
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6 | 0
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7 | 0
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8 | 0
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9 | 0
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1 | 0
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1
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2 | 0
0
1
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3 | 0
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1
0
4 | 0
0
1
0
5 | |
| | 0 | 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 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|--|--|---|--|--|--|---|--|--|--|--|---|---|--|--|--|---|---|---|--|--|--|---|--|---|
| Ear | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Eye | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cornea, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Retina, Degeneration | 1 | | | 1 | | | | 3 | | | | | 2 | 1 | | | | 1 | 1 | 1 | | | | 3 | | |
| Harderian Gland | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | | | | | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|
| Kidney | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Accumulation, Hyaline Droplet | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Infarct | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Mineralization | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| Nephropathy | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | | 1 | 2 | 1 | 1 | 3 | | |
| Pelvis, Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE
0.3 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|-----------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|----|
| | 0727 | 0727 | 0727 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | | |
| ANIMAL ID | 00126 | 00127 | 00128 | 00129 | 00130 | 00131 | 00132 | 00133 | 00134 | 00135 | 00136 | 00137 | 00138 | 00139 | 00140 | 00141 | 00142 | 00143 | 00144 | 00145 | 00146 | 00147 | 00148 | 00149 | 00150 | |
| Centrilobular, Degeneration | | | | 2 | | | | | | | | | | | | | | | | | | | | | 1 | |
| Centrilobular, Fatty Change | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Hepatocyte, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Hepatocyte, Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Oval Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Pancreas | | | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | 18 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Acinus, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 9 |
| Salivary Glands | | | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Stomach, Forestomach | | | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Erosion | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | 9 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Epithelium, Dysplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 11 |
| Stomach, Glandular | | | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Epithelium, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Tooth | | | | | | | | | | | | | | | | | | | | | | | | | | 9 |

* .. 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| DAY ON TEST | FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|-------------|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|-----|
| | 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 | 5 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 6 | 7 | 5 | 7 | 4 | 6 | 7 | | | |
| 2 | 2 | 2 | 2 | 9 | 6 | 0 | 9 | 2 | 2 | 2 | 2 | 8 | 0 | 2 | 1 | 7 | 2 | 9 | 2 | 2 | 5 | 6 | | 2 | |
| 7 | 7 | 7 | 8 | 8 | 4 | 9 | 4 | 8 | 9 | 7 | 7 | 9 | 8 | 7 | 6 | 3 | 7 | 9 | 0 | 8 | 4 | 4 | | 8 | |
| 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 | 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 | 9 | 1.0 |

Malformation

1 1

1 1 1

9 1.0

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pulmonary Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 2.0 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cardiomyopathy | 2 | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 3 | 3 | 3 | 2 | 48 2.3 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Atrium, Thrombosis | | | | 2 | | | | | | | | | | | | | | | 2 | | | | | | 3 1.7 |
| Coronary Artery, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Epicardium, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | | | 3 1.0 |
| Necrosis | | | | | | | | | | | | | | | | 1 | | | | | | | | | 1 1.0 |
| Zona Fasciculata, Hyperplasia | 1 | | | | | | | | | | 1 | 1 | | | | | | | 1 | | | 1 | | | 9 1.0 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | 1 | 1 | | | | | 1 | | | | | | 4 | | 2 | 3 | | | | | 10 1.8 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | 1 | | | | | | | | | | 1 | | | | | | | | | 2 1.0 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | 48 | |
| 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

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BLANK .. Not examined microscopically

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TDMS No. 20007 - 05
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Kava kava extract
 CAS Number: 9000-38-8

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 Lab: BAT

| FISCHER 344 RATS MALE
0.3 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|---|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|-----|-----|--------|--------|
| | 07 | 07 | 07 | 07 | 05 | 06 | 07 | 06 | 07 | 07 | 07 | 07 | 06 | 06 | 07 | 06 | 06 | 07 | 07 | 05 | | 07 | 04 | 06 | 07 |
| ANIMAL ID | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | |
| Pituitary Gland Hemorrhage | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | 2 | | | | 1 2.0 | |
| Pars Distalis, Hyperplasia | | 2 | 3 | | | 2 | | | | | 1 | 1 | 1 | 1 | 1 | | | 1 | | 2 | | | 2 | 21 1.4 | |
| Thyroid Gland C-cell, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | 1 | | 4 | | | | | | 1 | | | | 1 | 1 | | | | | | | | | 12 1.8 | |
| GENERAL BODY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Peritoneum | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| GENITAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epididymis Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 3 1.7 | |
| Preputial Gland Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | 49 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Prostate Inflammation Epithelium, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | 2 | | | 2 | 2 | 2 | 2 | 1 | | | | 2 | | | 1 | | | 1 | | 4 | 1 | 21 1.8 |
| | | | | | | | | | | | | | | | | | | | | | | | 1 | 2 1.0 | |
| Seminal Vesicle Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 2.0 | |
| Testes Interstitial Cell, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | 2 | | 1 | | | | | | | 2 | 2 | | | | | | | 2 | 10 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| DAY ON TEST | FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
|-------------|-----------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|
| | 07 | 07 | 07 | 07 | 05 | 06 | 07 | 06 | 07 | 07 | 07 | 07 | 06 | 06 | 07 | 06 | 06 | 07 | 07 | 05 | | 07 | 04 | 06 |
| 0.3 G/KG | 27 | 27 | 27 | 28 | 29 | 26 | 09 | 09 | 28 | 22 | 22 | 22 | 89 | 08 | 27 | 66 | 37 | 22 | 99 | 88 | 22 | 54 | 66 | 28 |
| ANIMAL ID | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| | 22 | 22 | 22 | 22 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| | 66 | 77 | 88 | 99 | 00 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 00 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | 3 | | 2 | 3 | | | | 1 | | 1 | 3 | 2 | 2 | 2 | 3 | | 3 | | 1 | | 1 | 24 2.1 |
| Lymph Node | | | | | | | | | | | | | | | + | | | | | | + | | | 2 |
| Mediastinal, Ectasia | | | | | | | | | | | | | | | 2 | | | | | | | | | 1 2.0 |
| Mediastinal, Infiltration Cellular, Plasma Cell | | | | | | | | | | | | | | | | | | | | | 3 | | | 1 3.0 |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 0 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hematopoietic Cell Proliferation | | | 2 | | | 2 | | | | | | | 1 | | | 2 | | | | | | | | 7 1.7 |
| Pigmentation, Hemosiderin | 1 | | | 1 | 1 | | 1 | 2 | | 1 | 1 | 1 | 1 | 1 | | | | 1 | | 1 | 1 | 1 | 1 | 35 1.1 |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | 2 3.0 |
| Lymphoid Follicle, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Atrophy | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | | 3 | 3 | 4 | 3 | 3 | 3 | 49 3.3 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Epidermis, Hyperplasia, Basal Cell | | | | | | | | | | | | | | | | | | | | | | | 3 | 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE
0.3 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|-----------------------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|
| | 07 | 07 | 07 | 07 | 05 | 06 | 07 | 06 | 07 | 07 | 07 | 07 | 06 | 06 | 07 | 06 | 06 | 07 | 07 | 05 | | 07 | 07 | 04 | 06 |
| ANIMAL ID | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| | 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 |

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

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Necrosis | | | | | 3 | | | | | | | | | | | | | | | | | | | | | 2 | 3.0 |
| Choroid Plexus, Infiltration Cellular, Lymphocyte | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Congestion | | | | | 3 | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Inflammation, Chronic Active | | | | | | | | | 1 | | 1 | 1 | | | | | | | | | | | 2 | | | 9 | 1.1 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | 1 | | | 1 | 1.0 |
| Alveolar Epithelium, Hyperplasia | 1 | 1 | | | | | | | 1 | | 2 | | 1 | 2 | 1 | | 2 | | | | | 1 | 1 | | | 20 | 1.4 |
| Alveolar Epithelium, Hypertrophy | | | | | | 2 | | | | | | | | | | | | | | | | | | | | 2 | 1.5 |
| Alveolar Epithelium, Metaplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Alveolar Epithelium, Metaplasia, Squamous | | | | | | | | | | | | | | | 2 | | | | | | | | | | | 1 | 2.0 |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | 1 | | | | | | | | | | | | | | | | | 1 | 1 | | | 11 | 1.1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | X | | | 1 | |
| Inflammation | | | | | | | | | | | | | 1 | 2 | | | | | | | | | 2 | | | 10 | 1.6 |
| Olfactory Epithelium, Metaplasia | | | | | | | | | | | | | | | | | | | | | | | 1 | | | 3 | 1.3 |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| 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
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|-----------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|
| | 07 | 07 | 07 | 07 | 05 | 06 | 07 | 06 | 07 | 07 | 07 | 07 | 06 | 06 | 07 | 06 | 06 | 07 | 07 | 05 | 07 | 07 | 04 | 06 | |
| 0.3 G/KG | 27 | 27 | 27 | 28 | 98 | 64 | 09 | 94 | 28 | 29 | 27 | 28 | 89 | 08 | 27 | 16 | 73 | 27 | 29 | 08 | 29 | 29 | 54 | 64 | 28 |
| ANIMAL ID | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | |
| | 22 | 22 | 22 | 22 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | |
| | 66 | 77 | 88 | 99 | 00 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 00 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Ear | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cornea, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 1 3.0 |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 2.0 |
| Retina, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 10 1.5 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | | | | + | 1 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|-----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Accumulation, Hyaline Droplet | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Infarct | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Mineralization | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 41 | 1.0 | |
| Nephropathy | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 3 | 1 | 1 | 2 | 1 | 1 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 48 | 1.8 |
| Pelvis, Transitional Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 2.0 | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | 2 1 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

TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE
1.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | males
(cont...) | |
|-----------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|------|
| | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | 0727 | | 0727 |
| ANIMAL ID | 00151 | 00152 | 00153 | 00154 | 00155 | 00156 | 00157 | 00158 | 00159 | 00160 | 00161 | 00162 | 00163 | 00164 | 00165 | 00166 | 00167 | 00168 | 00169 | 00170 | 00171 | |
| Bile Duct, Hyperplasia | | | | 1 | | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 2 | 2 | 2 | | | 1 |
| Centrilobular, Fatty Change | | 1 | | | 2 | 2 | | | | | | 2 | | 1 | | 1 | | | 2 | | | 2 |
| Centrilobular, Necrosis | | | | | | | | | | | | | | | | | | | | | | |
| Hepatocyte, Hypertrophy | 2 | | | 1 | | | 2 | | | | | 1 | 2 | | 1 | 2 | | | 2 | | | 1 |
| Oval Cell, Hyperplasia | | | | | | | | | | | | | | | | | | 1 | | | | |
| Mesentery | | | | | | | + | | | | | | | | | | | | | | | |
| Fat, Necrosis | | | | | | | | | | | | | | | | 2 | | | | | | 2 |
| Oral Mucosa | | | | + | | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy | | | | | | 1 | | 1 | 1 | | | | 1 | | 1 | | 1 | 4 | 1 | 1 | | 1 |
| Inflammation | | | | | 2 | | | | | | | | | | | | | | | | | |
| Acinus, Hyperplasia | | | | | | | 2 | | | | | | | | | | | | | | | |
| Acinus, Metaplasia, Hepatocyte | | | | | | | | | | | | | | | | | | 2 | | 1 | 1 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Erosion | | | | | | | | | | | | 1 | | | | | | | | | | |
| Inflammation | | | | 2 | | | 3 | | 2 | | 3 | 2 | 3 | | 2 | | 2 | | 3 | | 2 | 3 |
| Mineralization | | | | | | | | | | | | 2 | | | | | 1 | | | | | |
| Ulcer | | | | 2 | | | 3 | | 2 | | | 2 | 1 | | 1 | | 1 | | 1 | | 1 | |
| Epithelium, Dysplasia | | | | | | | | | | | | | | | | | | 4 | | | | |
| Epithelium, Hyperplasia | | | | 2 | | 2 | 3 | | 3 | 2 | 3 | 3 | 4 | | 3 | 1 | 2 | 1 | 4 | | 2 | 1 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation | | | | | | | | | | | | | | | | | 2 | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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TDMS No. 20007 - 05
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 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE
1.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | ANIMAL ID | males
(cont...) |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|-----------|--------------------|
| | 0
7
2
7 | 0
7
2
7 | 0
5
5
6 | 0
5
8
9 | 0
7
2
8 | 0
7
2
9 | 0
6
2
9 | 0
7
2
7 | 0
7
0
9 | 0
4
4
7 | 0
6
2
3 | 0
7
6
8 | 0
6
4
0 | 0
7
2
9 | 0
7
2
7 | 0
6
9
4 | 0
6
6
5 | 0
7
2
7 | 0
7
2
9 | 0
6
7
7 | 0
7
2
0 | 0
0
3
7 | 0
7
2
2 | 0
7
2
8 | | |
| | 0 | 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
5
1 | | |

Epithelium, Necrosis

3

Tooth
Malformation

+
 1 1 1 1 1 1

CARDIOVASCULAR SYSTEM

Blood Vessel
Mineralization

+ +

Heart
Cardiomyopathy
Inflammation, Suppurative
Atrium, Thrombosis

+
 2 4 2 1 3 2 3 2 2 2 3 2 3 3 2 2 1 2 2 3 3 3 2

ENDOCRINE SYSTEM

Adrenal Cortex
Hypertrophy
Necrosis
Zona Fasciculata, Hyperplasia

+
 1
 1 1 1 1 1 1 1 1

Adrenal Medulla
Hemorrhage
Hyperplasia
Thrombosis

+
 2 2 2 3 2 1

Islets, Pancreatic
Hyperplasia

+ +

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
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 CAS Number: 9000-38-8

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE
1.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | ANIMAL ID | males
(cont...) | | | |
|-----------------------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----------|--------------------|----|----|----|
| | 07 | 07 | 05 | 05 | 07 | 07 | 06 | 07 | 07 | 04 | 06 | 07 | 06 | 07 | 07 | 07 | 06 | 06 | 07 | 07 | | | 06 | 07 | 00 |
| | 27 | 27 | 25 | 28 | 22 | 22 | 22 | 22 | 20 | 24 | 27 | 22 | 24 | 22 | 22 | 29 | 26 | 26 | 27 | 27 | 26 | 27 | 23 | 22 | 22 |
| | 7 | 7 | 6 | 9 | 8 | 9 | 9 | 7 | 9 | 7 | 3 | 8 | 0 | 9 | 9 | 7 | 4 | 5 | 7 | 7 | 9 | 7 | 0 | 7 | 8 |
| | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 |
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 35 |

Hyperplasia 1 3 1 2 2

Pituitary Gland +
 Pars Distalis, Hyperplasia 2 3 1 2

Thyroid Gland +
 C-cell, Hyperplasia 1 1
 Follicular Cell, Hyperplasia
 Follicular Cell, Hypertrophy 1

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis +
 Inflammation

Preputial Gland +
 Inflammation 4
 Duct, Hyperplasia, Atypical 1

Prostate +
 Atrophy
 Inflammation 1 1 2 3 1 3 2 3
 Epithelium, Hyperplasia 1

Seminal Vesicle +
 Atrophy
 Inflammation 2

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

TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE
1.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | ANIMAL ID | males
(cont...) | | | |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|-----------------------|------------------|
| | 0
7
2
7 | 0
7
2
7 | 0
5
5
6 | 0
5
8
9 | 0
7
2
8 | 0
7
2
9 | 0
6
2
9 | 0
7
2
7 | 0
7
0
9 | 0
4
4
7 | 0
6
7
3 | 0
7
2
8 | 0
6
4
0 | 0
7
2
9 | 0
7
2
7 | 0
6
9
4 | 0
6
6
5 | 0
7
2
7 | 0
6
7
9 | 0
7
2
7 | | | 0
0
3
0 | 0
7
2
7 | 0
0
2
7 |
| | 0 | 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
5
1 | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | 4 | | | | | | | | | | | | | | | | | | | | | | |
| Interstitial Cell, Hyperplasia | | | | | | | | | | 1 | | | 3 | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | 2 | | | 3 | | 1 | | 3 | 3 | | 3 | | | | | 4 | 4 | 3 | | 4 | 2 | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | 2 | | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Lymph Node | | | | | | | | | | + | | | | | | | | | | | | | + |
| Mediastinal, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy | | | | | 2 | 2 | 1 | | 3 | | 1 | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accessory Spleen | | | | | | | | | | | | | | | | | | | | | | | |
| Fibrosis | | | | | | | | | | | | 1 | | | | | | | | | | | |
| Hematopoietic Cell Proliferation | | | | | | | | | | 1 | 1 | | | | | | | | | 2 | | | |
| Hyperplasia, Histiocytic | | | | | | | | | | | | | | | | | | | | 2 | | | |
| Pigmentation, Hemosiderin | | 1 | 1 | | 1 | 1 | 1 | | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | | 1 | 1 |
| Thrombosis | | | | | | | | 2 | | | | | | | | | | | | | | | |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | 3 | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 4 | 3 | | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE
1.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|-----------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| | 0729 | 0729 | 0729 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | |
| ANIMAL ID | 00176 | 00177 | 00178 | 00179 | 00180 | 00181 | 00182 | 00183 | 00184 | 00185 | 00186 | 00187 | 00188 | 00189 | 00190 | 00191 | 00192 | 00193 | 00194 | 00195 | 00196 | 00197 | 00198 | 00199 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|---------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon
Parasite Metazoan | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
2 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Angiectasis | | | | | 1 | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Basophilic Focus | | X | X | X | | X | | | X | | | | | | | | | | X | | | | | | 13 |
| Clear Cell Focus | | | | | | | | | | | | | X | X | | | | X | | | X | | | | 11 |
| Degeneration, Cystic | | | | | | | | | | | | | | | | | | | | | | | | | 5 1.2 |
| Eosinophilic Focus | X | | | | | | | | | | | X | | | | | | X | | | | | X | 13 | |
| Fatty Change, Diffuse | 2 | | | | | | | | 2 | 2 | | | | | | | | | | | | 1 | | 8 1.5 | |
| Fibrosis | | | | | | | | | | | | | | | | | | | | | | | 2 | | 1 2.0 |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Inflammation, Chronic Active | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | | 1 | | 1 | 1 | | | | 1 | 1 | 1 | 1 | | 1 | 34 1.1 | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Pigmentation, Hemosiderin | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Tension Lipidosis | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 |
| Tension Lipidosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 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

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 2) Mild 4) Marked

TDMS No. 20007 - 05
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 Kava kava extract
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 Lab: BAT

| FISCHER 344 RATS MALE
1.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|-----------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
| | 0729 | 0729 | 0727 | 0728 | 0727 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | 0728 | |
| ANIMAL ID | 00176 | 00077 | 00078 | 00079 | 00080 | 00081 | 00082 | 00083 | 00084 | 00085 | 00086 | 00087 | 00088 | 00089 | 00090 | 00091 | 00092 | 00093 | 00094 | 00095 | 00096 | 00097 | 00098 | 00099 | 00100 |
| Bile Duct, Hyperplasia | 1 | 1 | 1 | 1 | 1 | | 2 | | 1 | 1 | | 2 | 1 | 1 | | 3 | | 1 | 1 | 1 | 1 | | 2 | | 34 1.4 |
| Centrilobular, Fatty Change | | 1 | 2 | 2 | 2 | 2 | | 1 | | | | | 2 | | 1 | | | 1 | 2 | | 2 | 2 | | | 21 1.7 |
| Centrilobular, Necrosis | | | | | | | | | | | 3 | | | | | | | | | | | | | | 1 3.0 |
| Hepatocyte, Hypertrophy | | 1 | 1 | 1 | 1 | 1 | | 1 | 2 | 1 | | | 1 | 2 | | | | 2 | | 1 | | | 2 | | 22 1.4 |
| Oval Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 5 1.6 |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Atrophy | | | 1 | 3 | | | 1 | | 1 | | | | | | 1 | | | 2 | | 1 | | | 1 | | 18 1.3 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Acinus, Hyperplasia | | | | 2 | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Acinus, Metaplasia, Hepatocyte | | | | | | | | | | | | 2 | | | | | | | 1 | 2 | | | | | 6 1.5 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Erosion | | | | | | | | | | | | | 1 | | | | 1 | | | | | | 1 | | 4 1.0 |
| Inflammation | 1 | 2 | | | | | 1 | | 3 | 2 | | 2 | | | 1 | 1 | | 2 | | 1 | | 2 | | | 22 2.0 |
| Mineralization | | | | | | | 2 | | | | | | | | | | | | | | | | | | 3 1.7 |
| Ulcer | 1 | 1 | | | | | 2 | | 3 | | | | | | | | | | | | | | | | 13 1.6 |
| Epithelium, Dysplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Epithelium, Hyperplasia | 1 | 3 | | | | | 1 | 3 | 4 | | 3 | | | | 1 | 1 | | 4 | | | | 1 | 1 | | 27 2.3 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | 2 | | 1 2.0 |
| Inflammation | | | 2 | | | | | | | | 1 | | | | | | | | | | | | | | 3 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
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TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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 Kava kava extract
 CAS Number: 9000-38-8

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| FISCHER 344 RATS MALE
1.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|------|----|-----|-----|
| | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | | 0729 | | | |
| ANIMAL ID | 00176 | 00177 | 00178 | 00179 | 00180 | 00181 | 00182 | 00183 | 00184 | 00185 | 00186 | 00187 | 00188 | 00189 | 00190 | 00191 | 00192 | 00193 | 00194 | 00195 | 00196 | 00197 | 00198 | 00199 | 00200 | | | | |
| Hyperplasia | | | 3 | | | 1 | | | | | | | | | | | | | | | | | | 1 | 2 | 2 | 10 | 1.8 | |
| Pituitary Gland
Pars Distalis, Hyperplasia | + | + | | + | + | | + | + | | + | + | | + | + | | + | + | | + | + | | + | + | | + | + | + | 50 | |
| | | | 1 | | | | | | 1 | | | | | | | 1 | | | | | | | | 1 | 1 | 2 | | 11 | 1.5 |
| Thyroid Gland
C-cell, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | 4 | | | | 1 | 1 | | | | | 1 | | | | | | | | 1 | | | | 7 | 1.4 |
| Follicular Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | 1 | 2.0 |
| Follicular Cell, Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Epididymis
Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| | | | | | | | | | | | | 2 | | | | | | | | | | | | | 1 | | | | 2 | 1.5 |
| Preputial Gland
Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Duct, Hyperplasia, Atypical | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | 2 | 4.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | |
| Prostate
Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Inflammation | | | 2 | | | | | | | 3 | 3 | | | | 2 | | | 1 | | 1 | | | | | | | 1 | 2 | 16 | 1.9 |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | 1 | | | | | | | | | 1 | | | 3 | 1.0 | |
| Seminal Vesicle
Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Inflammation | | | | | | | | | | | | 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:
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 2) Mild 4) Marked

TDMS No. 20007 - 05
 Test Type: CHRONIC
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 Species/Strain: RATS/F 344/N

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 Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE
1.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|-----------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
| | 079 | 079 | 077 | 072 | 072 | 078 | 078 | 069 | 058 | 063 | 060 | 044 | 074 | 045 | 072 | 079 | 079 | 079 | 003 | 078 | | 078 | 079 | 079 | 059 |
| ANIMAL ID | 00176 | 00077 | 00078 | 00079 | 00080 | 00081 | 00082 | 00083 | 00084 | 00085 | 00086 | 00087 | 00088 | 00089 | 00090 | 00091 | 00092 | 00093 | 00094 | 00095 | 00096 | 00097 | 00098 | 00099 | 00100 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst Epithelial Inclusion | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | 2 | | | 1 | 2.0 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Osteopetrosis | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 | 2.0 |
| Ligament, Mineralization | | | | | | | | | | | | | | 2 | | | | | | | | | | | | 1 | 2.0 |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2.0 |
| Hydrocephalus | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2 | 1.5 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Congestion | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 1.7 |
| Inflammation, Chronic Active | | | | 1 | 1 | | | | | 1 | 1 | | | | 1 | | | | | | | | | | | 9 | 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE
1.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | | | | | | |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-----|-----|--|
| | 079 | 079 | 077 | 072 | 072 | 072 | 078 | 078 | 069 | 058 | 052 | 066 | 066 | 044 | 074 | 044 | 077 | 077 | 077 | 072 | | 070 | 072 | 072 | 072 | 077 | 077 | 057 | 077 | | |
| ANIMAL ID | 00176 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | | | |
| Alveolar Epithelium, Hyperplasia | 1 | 1 | | 2 | | | | | | | | | 2 | | | 1 | | 1 | | | | | 1 | | | 1 | | 1 | 15 | 1.3 | |
| Alveolar Epithelium, Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | 3 | | | | 1 | | | | | | | | | | 1 | | 1 | | 1 | | | 9 | 1.6 | |
| Arteriole, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | |
| Serosa, Inflammation, Acute | | | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Foreign Body | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Inflammation | | | | 2 | | | | | | 1 | 1 | 2 | 1 | | | | | | 1 | | 2 | 1 | | 2 | 1 | | | | 18 | 1.3 | |
| Olfactory Epithelium, Metaplasia | | | | | | | | | | 2 | 2 | | | | | | | | | | | | 2 | | | | | | 5 | 1.6 | |
| Respiratory Epithelium, Hyperplasia | | | | | | | 1 | | | | | | | | | | | | | | | | 1 | | | | | | 4 | 1.0 | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Anterior Chamber, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Iris, Inflammation | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | 2 | 1.0 | |
| Retina, Degeneration | | | 1 | 2 | | 2 | | | | | | 2 | | 1 | | | | | | 1 | | | 1 | | | | | | 16 | 1.6 | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Accumulation, Hyaline Droplet | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2 | 1.0 | |
| Hyperplasia, Oncocytic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | |
| Mineralization | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | | | 1 | 1 | 1 | 1 | | | | | | 34 | 1.0 | | |
| Nephropathy | 2 | 4 | 3 | 2 | 4 | 4 | 2 | 2 | 4 | 4 | 1 | 4 | 2 | 3 | 1 | 3 | 2 | | 4 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | | 48 | 3.1 | | |
| Cortex, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 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

TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS MALE
1.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|----------|
| | 079 | 079 | 077 | 078 | 077 | 078 | 069 | 058 | 063 | 060 | 044 | 074 | 041 | 077 | 079 | 079 | 079 | 003 | 078 | 077 | 078 | 079 | 059 | 077 | | |
| ANIMAL ID | 00176 | 00077 | 00078 | 00079 | 00080 | 00081 | 00082 | 00083 | 00084 | 00085 | 00086 | 00087 | 00088 | 00089 | 00090 | 00091 | 00092 | 00093 | 00094 | 00095 | 00096 | 00097 | 00098 | 00099 | | |
| Pelvis, Inflammation | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| Pelvis, Transitional Epithelium, Hyperplasia | | 1 | | | | 1 | | | | 2 | | 1 | | | | | | 1 | | | | | | | | |
| Urinary Bladder Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| | | | | | | | | | | | | | | | | | | | | | | | 3 | 50 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 | | |

*** 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
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TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
0.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | ANIMAL ID | females
(cont...) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 0705 | 0708 | 0709 | 0712 | 0713 | 0714 | 0715 | 0716 | 0717 | 0718 | 0719 | 0720 | 0721 | 0722 | 0723 | 0724 | 0725 | 0726 | 0727 | 0728 | 0729 | 0730 | 0731 | 0732 | 0733 | | | 0734 | 0735 | 0736 | 0737 | 0738 | 0739 | 0740 | 0741 | 0742 | 0743 | 0744 | 0745 | 0746 | 0747 | 0748 | 0749 | 0750 | 0751 | 0752 | 0753 | 0754 | 0755 | 0756 | 0757 | 0758 | 0759 | 0760 | 0761 | 0762 | 0763 | 0764 | 0765 | 0766 | 0767 | 0768 | 0769 | 0770 | 0771 | 0772 | 0773 | 0774 | 0775 | 0776 | 0777 | 0778 | 0779 | 0780 | 0781 | 0782 | 0783 | 0784 | 0785 | 0786 | 0787 | 0788 | 0789 | 0790 | 0791 | 0792 | 0793 | 0794 | 0795 | 0796 | 0797 | 0798 | 0799 | 0800 | 0801 | 0802 | 0803 | 0804 | 0805 | 0806 | 0807 | 0808 | 0809 | 0810 | 0811 | 0812 | 0813 | 0814 | 0815 | 0816 | 0817 | 0818 | 0819 | 0820 | 0821 | 0822 | 0823 | 0824 | 0825 | 0826 | 0827 | 0828 | 0829 | 0830 | 0831 | 0832 | 0833 | 0834 | 0835 | 0836 | 0837 | 0838 | 0839 | 0840 | 0841 | 0842 | 0843 | 0844 | 0845 | 0846 | 0847 | 0848 | 0849 | 0850 | 0851 | 0852 | 0853 | 0854 | 0855 | 0856 | 0857 | 0858 | 0859 | 0860 | 0861 | 0862 | 0863 | 0864 | 0865 | 0866 | 0867 | 0868 | 0869 | 0870 | 0871 | 0872 | 0873 | 0874 | 0875 | 0876 | 0877 | 0878 | 0879 | 0880 | 0881 | 0882 | 0883 | 0884 | 0885 | 0886 | 0887 | 0888 | 0889 | 0890 | 0891 | 0892 | 0893 | 0894 | 0895 | 0896 | 0897 | 0898 | 0899 | 0900 | 0901 | 0902 | 0903 | 0904 | 0905 | 0906 | 0907 | 0908 | 0909 | 0910 | 0911 | 0912 | 0913 | 0914 | 0915 | 0916 | 0917 | 0918 | 0919 | 0920 | 0921 | 0922 | 0923 | 0924 | 0925 | 0926 | 0927 | 0928 | 0929 | 0930 | 0931 | 0932 | 0933 | 0934 | 0935 | 0936 | 0937 | 0938 | 0939 | 0940 | 0941 | 0942 | 0943 | 0944 | 0945 | 0946 | 0947 | 0948 | 0949 | 0950 | 0951 | 0952 | 0953 | 0954 | 0955 | 0956 | 0957 | 0958 | 0959 | 0960 | 0961 | 0962 | 0963 | 0964 | 0965 | 0966 | 0967 | 0968 | 0969 | 0970 | 0971 | 0972 | 0973 | 0974 | 0975 | 0976 | 0977 | 0978 | 0979 | 0980 | 0981 | 0982 | 0983 | 0984 | 0985 | 0986 | 0987 | 0988 | 0989 | 0990 | 0991 | 0992 | 0993 | 0994 | 0995 | 0996 | 0997 | 0998 | 0999 | 1000 | 1001 | 1002 | 1003 | 1004 | 1005 | 1006 | 1007 | 1008 | 1009 | 1010 | 1011 | 1012 | 1013 | 1014 | 1015 | 1016 | 1017 | 1018 | 1019 | 1020 | 1021 | 1022 | 1023 | 1024 | 1025 | 1026 | 1027 | 1028 | 1029 | 1030 | 1031 | 1032 | 1033 | 1034 | 1035 | 1036 | 1037 | 1038 | 1039 | 1040 | 1041 | 1042 | 1043 | 1044 | 1045 | 1046 | 1047 | 1048 | 1049 | 1050 | 1051 | 1052 | 1053 | 1054 | 1055 | 1056 | 1057 | 1058 | 1059 | 1060 | 1061 | 1062 | 1063 | 1064 | 1065 | 1066 | 1067 | 1068 | 1069 | 1070 | 1071 | 1072 | 1073 | 1074 | 1075 | 1076 | 1077 | 1078 | 1079 | 1080 | 1081 | 1082 | 1083 | 1084 | 1085 | 1086 | 1087 | 1088 | 1089 | 1090 | 1091 | 1092 | 1093 | 1094 | 1095 | 1096 | 1097 | 1098 | 1099 | 1100 | 1101 | 1102 | 1103 | 1104 | 1105 | 1106 | 1107 | 1108 | 1109 | 1110 | 1111 | 1112 | 1113 | 1114 | 1115 | 1116 | 1117 | 1118 | 1119 | 1120 | 1121 | 1122 | 1123 | 1124 | 1125 | 1126 | 1127 | 1128 | 1129 | 1130 | 1131 | 1132 | 1133 | 1134 | 1135 | 1136 | 1137 | 1138 | 1139 | 1140 | 1141 | 1142 | 1143 | 1144 | 1145 | 1146 | 1147 | 1148 | 1149 | 1150 | 1151 | 1152 | 1153 | 1154 | 1155 | 1156 | 1157 | 1158 | 1159 | 1160 | 1161 | 1162 | 1163 | 1164 | 1165 | 1166 | 1167 | 1168 | 1169 | 1170 | 1171 | 1172 | 1173 | 1174 | 1175 | 1176 | 1177 | 1178 | 1179 | 1180 | 1181 | 1182 | 1183 | 1184 | 1185 | 1186 | 1187 | 1188 | 1189 | 1190 | 1191 | 1192 | 1193 | 1194 | 1195 | 1196 | 1197 | 1198 | 1199 | 1200 | 1201 | 1202 | 1203 | 1204 | 1205 | 1206 | 1207 | 1208 | 1209 | 1210 | 1211 | 1212 | 1213 | 1214 | 1215 | 1216 | 1217 | 1218 | 1219 | 1220 | 1221 | 1222 | 1223 | 1224 | 1225 | 1226 | 1227 | 1228 | 1229 | 1230 | 1231 | 1232 | 1233 | 1234 | 1235 | 1236 | 1237 | 1238 | 1239 | 1240 | 1241 | 1242 | 1243 | 1244 | 1245 | 1246 | 1247 | 1248 | 1249 | 1250 | 1251 | 1252 | 1253 | 1254 | 1255 | 1256 | 1257 | 1258 | 1259 | 1260 | 1261 | 1262 | 1263 | 1264 | 1265 | 1266 | 1267 | 1268 | 1269 | 1270 | 1271 | 1272 | 1273 | 1274 | 1275 | 1276 | 1277 | 1278 | 1279 | 1280 | 1281 | 1282 | 1283 | 1284 | 1285 | 1286 | 1287 | 1288 | 1289 | 1290 | 1291 | 1292 | 1293 | 1294 | 1295 | 1296 | 1297 | 1298 | 1299 | 1300 | 1301 | 1302 | 1303 | 1304 | 1305 | 1306 | 1307 | 1308 | 1309 | 1310 | 1311 | 1312 | 1313 | 1314 | 1315 | 1316 | 1317 | 1318 | 1319 | 1320 | 1321 | 1322 | 1323 | 1324 | 1325 | 1326 | 1327 | 1328 | 1329 | 1330 | 1331 | 1332 | 1333 | 1334 | 1335 | 1336 | 1337 | 1338 | 1339 | 1340 | 1341 | 1342 | 1343 | 1344 | 1345 | 1346 | 1347 | 1348 | 1349 | 1350 | 1351 | 1352 | 1353 | 1354 | 1355 | 1356 | 1357 | 1358 | 1359 | 1360 | 1361 | 1362 | 1363 | 1364 | 1365 | 1366 | 1367 | 1368 | 1369 | 1370 | 1371 | 1372 | 1373 | 1374 | 1375 | 1376 | 1377 | 1378 | 1379 | 1380 | 1381 | 1382 | 1383 | 1384 | 1385 | 1386 | 1387 | 1388 | 1389 | 1390 | 1391 | 1392 | 1393 | 1394 | 1395 | 1396 | 1397 | 1398 | 1399 | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 1413 | 1414 | 1415 | 1416 | 1417 | 1418 | 1419 | 1420 | 1421 | 1422 | 1423 | 1424 | 1425 | 1426 | 1427 | 1428 | 1429 | 1430 | 1431 | 1432 | 1433 | 1434 | 1435 | 1436 | 1437 | 1438 | 1439 | 1440 | 1441 | 1442 | 1443 | 1444 | 1445 | 1446 | 1447 | 1448 | 1449 | 1450 | 1451 | 1452 | 1453 | 1454 | 1455 | 1456 | 1457 | 1458 | 1459 | 1460 | 1461 | 1462 | 1463 | 1464 | 1465 | 1466 | 1467 | 1468 | 1469 | 1470 | 1471 | 1472 | 1473 | 1474 | 1475 | 1476 | 1477 | 1478 | 1479 | 1480 | 1481 | 1482 | 1483 | 1484 | 1485 | 1486 | 1487 | 1488 | 1489 | 1490 | 1491 | 1492 | 1493 | 1494 | 1495 | 1496 | 1497 | 1498 | 1499 | 1500 | 1501 | 1502 | 1503 | 1504 | 1505 | 1506 | 1507 | 1508 | 1509 | 1510 | 1511 | 1512 | 1513 | 1514 | 1515 | 1516 | 1517 | 1518 | 1519 | 1520 | 1521 | 1522 | 1523 | 1524 | 1525 | 1526 | 1527 | 1528 | 1529 | 1530 | 1531 | 1532 | 1533 | 1534 | 1535 | 1536 | 1537 | 1538 | 1539 | 1540 | 1541 | 1542 | 1543 | 1544 | 1545 | 1546 | 1547 | 1548 | 1549 | 1550 | 1551 | 1552 | 1553 | 1554 | 1555 | 1556 | 1557 | 1558 | 1559 | 1560 | 1561 | 1562 | 1563 | 1564 | 1565 | 1566 | 1567 | 1568 | 1569 | 1570 | 1571 | 1572 | 1573 | 1574 | 1575 | 1576 | 1577 | 1578 | 1579 | 1580 | 1581 | 1582 | 1583 | 1584 | 1585 | 1586 | 1587 | 1588 | 1589 | 1590 | 1591 | 1592 | 1593 | 1594 | 1595 | 1596 | 1597 | 1598 | 1599 | 1600 | 1601 | 1602 | 1603 | 1604 | 1605 | 1606 | 1607 | 1608 | 1609 | 1610 | 1611 | 1612 | 1613 | 1614 | 1615 | 1616 | 1617 | 1618 | 1619 | 1620 | 1621 | 1622 | 1623 | 1624 | 1625 | 1626 | 1627 | 1628 | 1629 | 1630 | 1631 | 1632 | 1633 | 1634 | 1635 | 1636 | 1637 | 1638 | 1639 | 1640 | 1641 | 1642 | 1643 | 1644 | 1645 | 1646 | 1647 | 1648 | 1649 | 1650 | 1651 | 1652 | 1653 | 1654 | 1655 | 1656 | 1657 | 1658 | 1659 | 1660 | 1661 | 1662 | 1663 | 1664 | 1665 | 1666 | 1667 | 1668 | 1669 | 1670 | 1671 | 1672 | 1673 | 1674 | 1675 | 1676 | 1677 | 1678 | 1679 | 1680 | 1681 | 1682 | 1683 | 1684 | 1685 | 1686 | 1687 | 1688 | 1689 | 1690 | 1691 | 1692 | 1693 | 1694 | 1695 | 1696 | 1697 | 1698 | 1699 | 1700 | 1701 | 1702 | 1703 | 1704 | 1705 | 1706 | 1707 | 1708 | 1709 | 1710 | 1711 | 1712 | 1713 | 1714 | 1715 | 1716 | 1717 | 1718 | 1719 | 1720 | 1721 | 1722 | 1723 | 1724 | 1725 | 1726 | 1727 | 1728 | 1729 | 1730 | 1731 | 1732 | 1733 | 1734 | 1735 | 1736 | 1737 | 1738 | 1739 | 1740 | 1741 | 1742 | 1743 | 1744 | 1745 | 1746 | 1747 | 1748 | 1749 | 1750 | 1751 | 1752 | 1753 | 1754 | 1755 | 1756 | 1757 | 1758 | 1759 | 1760 | 1761 | 1762 | 1763 | 1764 | 1765 | 1766 | 1767 | 1768 | 1769 | 1770 | 1771 | 1772 | 1773 | 1774 | 1775 | 1776 | 1777 | 1778 | 1779 | 1780 | 1781 | 1782 | 1783 | 1784 | 1785 | 1786 | 1787 | 1788 | 1789 | 1790 | 1791 | 1792 | 1793 | 1794 | 1795 | 1796 | 1797 | 1798 | 1799 | 1800 | 1801 | 1802 | 1803 | 1804 | 1805 | 1806 | 1807 | 1808 | 1809 | 1810 | 1811 | 1812 | 1813 | 1814 | 1815 | 1816 | 1817 | 1818 | 1819 | 1820 | 1821 | 1822 | 1823 | 1824 | 1825 | 1826 | 1827 | 1828 | 1829 | 1830 | 1831 | 1832 | 1833 | 1834 | 1835 | 1836 | 1837 | 1838 | 1839 | 1840 | 1841 | 1842 | 1843 | 1844 | 1845 | 1846 | 1847 | 1848 | 1849 | 1850 | 1851 | 1852 | 1853 | 1854 | 1855 | 1856 | 1857 | 1858 | 1859 | 1860 | 1861 | 1862 | 1863 | 1864 | 1865 | 1866 | 1867 | 1868 | 1869 | 1870 | 1871 | 1872 | 1873 | 1874 | 1875 | 1876 | 1877 | 1878 | 1879 | 1880 | 1881 | 1882 | 1883 | 1884 | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 | 1895 | 1896 | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 |

TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
0.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | females
(cont...) | | | | | |
|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
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NONE

GENITAL SYSTEM

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|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Clitoral Gland
Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | 3 | | | | | | | | | | | | | |
| Ovary
Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cyst, Multiple | 1 | 1 | | | | | | | | | | | | | | | | | | | 2 | | | | | |
| | | | | | | | | | | | | | 4 | | | | | | | | | | | | | |
| Uterus
Endometrium, Hyperplasia, Cystic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | 1 | | | | | | | | 1 | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow
Hemorrhage | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | 2 | | | | 2 | 1 | | 4 | | | | 2 | | 1 | 2 | | 2 | 1 | | 2 | | 1 | | | |
| Myelofibrosis | | | | | | | | 1 | | | | | | | 2 | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Lymph Node, Mandibular | 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 |
| Lymph Node, Mesenteric
Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation | | | 3 | | | 2 | | | | | | | | | | | | | | | | | | | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
0.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|-------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|-----|-----|
| | 0692 | 0450 | 0701 | 0703 | 0709 | 0709 | 0709 | 0709 | 0709 | 0709 | 0709 | 0709 | 0709 | 0709 | 0709 | 0709 | 0709 | 0709 | 0709 | 0709 | | 0709 | 0709 | | |
| ANIMAL ID | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | | | |
| Artery, Necrosis | | | | | | | | | | | | | | | | | | | | | | 2 | 1 | 2.0 | |
| Bile Duct, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | 1 | 12 | 1.0 |
| Hepatocyte, Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | 2 | 5 | 1.6 |
| Serosa, Fibrosis | | | | | | | | | | | | | | | | | | | | | | | 3 | 1 | 3.0 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | 10 | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | 10 | 1.5 |
| Pancreas | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | 13 | 1.0 |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Acinus, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Salivary Glands | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Stomach, Forestomach | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Hyperplasia, Atypical | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | 5 | 2.0 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 5 | 2.2 |
| Stomach, Glandular | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Epithelium, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Tooth | | | | | | | | | | | | | | | | | | | | | | | | 5 | |
| Malformation | | | | | | | | | | | | | | | | | | | | | | | | 5 | 1.0 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|--|
| 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| DAY ON TEST | FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
|-------------|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|--|
| | 0692 | 0450 | 0701 | 0703 | 0702 | 0703 | 0702 | 0709 | 0509 | 0606 | 0607 | 0707 | 0707 | 0707 | 0707 | 0606 | 0707 | 0606 | 0606 | 0707 | | 0707 | 0707 | |
| 0.0 G/KG | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | |
| | 0022 | 0022 | 0022 | 0022 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | | |
| | 67 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------------|
| Clitoral Gland Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 3.0 |
| Ovary Cyst, Multiple | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 7 2.6
1 4.0 |
| Uterus Endometrium, Hyperplasia, Cystic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 5 1.6 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Bone Marrow Hemorrhage | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 3.0 |
| Bone Marrow Hyperplasia | 3 | 3 | 4 | 1 | | 1 | | 3 | | 4 | 2 | 2 | | 1 | 3 | 2 | | 2 | 1 | 3 | | 2 | | | 26 2.1 |
| Bone Marrow Myelofibrosis | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Bone Marrow Necrosis | 3 | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | | 0 |
| Lymph Node, Mesenteric Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 3.0 |
| Lymph Node, Mesenteric Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
0.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------------|
| | 0692 | 0450 | 0701 | 0733 | 0770 | 0773 | 0777 | 0779 | 0519 | 0666 | 0667 | 0777 | 0777 | 0777 | 0777 | 0666 | 0777 | 0666 | 0666 | 0777 | 0666 | 0777 | 0777 | 0777 | |
| ANIMAL ID | 0022 | 0022 | 0022 | 0022 | 0033 | 0033 | 0033 | 0033 | 0044 | 0055 | 0066 | 0067 | 0077 | 0077 | 0077 | 0077 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | |
| Hematopoietic Cell Proliferation
Hyperplasia, Histiocytic
Pigmentation, Hemosiderin
Lymphoid Follicle, Atrophy
Lymphoid Follicle, Necrosis | | 2 | 2 | | 1 | | 1 | 1 | | | | 4 | 1 | | | | | | 1 | 1 | | | | 1 | 19 1.3 |
| Thymus Atrophy
Infiltration Cellular, Plasma Cell | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 50
48 3.0
1 2.0 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Osteopetrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
1 3.0 |
| Skeletal Muscle Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | 1
1 3.0 |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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
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TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
0.1 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | ANIMAL ID | females
(cont...) | | |
|-------------------------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----------|----------------------|----|----|
| | 07 | 06 | 06 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 07 | 05 | 06 | | | 07 | 00 |
| | 2 | 3 | 7 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 0 | 7 | 2 | 2 | 2 | 3 | 3 | 5 | 3 | 2 | 5 | 2 | 3 |
| | 7 | 9 | 8 | 9 | 9 | 0 | 0 | 0 | 8 | 0 | 0 | 5 | 0 | 9 | 8 | 8 | 9 | 0 | 8 | 1 | 9 | 1 | 8 | 0 |
| | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 |
| | 12 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
| C-cell, Hyperplasia | 2 | | | 2 | 1 | 2 | | | | | 4 | 3 | 3 | | 1 | | 1 | 1 | | 1 | | | 1 | |
| Follicular Cell, Hyperplasia | | | 1 | | | | | | | | | | | | | | | | | | | | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | 3 | | | | | | | | | | | | | | | 3 | | | | |
| Inflammation | | | | | | | | | 2 | | | | | | | | | | | | | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | | | | | | | | | | | | | | 1 | 4 | | | | | | 1 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Congestion | | | | | | | | | | | | | | | 4 | | | | | | | | |
| Hemorrhage | | | | | | | | | 3 | | | | | | | | | | | | 2 | | |
| Necrosis | | | | | | | | | | | | | | | | 3 | | | | | | | |
| Endometrium, Hyperplasia, Cystic | | | | | | | | | | | | | | | 2 | 1 | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | 4 | 2 | | | 3 | 2 | | 1 | 1 | 1 | | | 4 | 3 | 2 | | 1 | 1 | | 4 | | | |
| Myelofibrosis | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M |

* .. 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
0.1 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|-------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|
| | 0729 | 0729 | 0728 | 0729 | 0728 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | | 0729 |
| ANIMAL ID | 0076 | 0077 | 0078 | 0079 | 0080 | 0081 | 0082 | 0083 | 0084 | 0085 | 0086 | 0087 | 0088 | 0089 | 0090 | 0091 | 0092 | 0093 | 0094 | 0095 | 0096 | |
| Bile Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | 1 |
| Bile Duct, Hyperplasia | | | | 1 | 1 | | 2 | 1 | | 2 | | | | | | | | 2 | 1 | | | 15 |
| Centrilobular, Necrosis | | | | | | | | | | | | | | | | | | | | | | 1 |
| Hepatocyte, Hypertrophy | | | | | | | | | | | | | | 1 | | | | | | | | 2 |
| Oval Cell, Hyperplasia | | | | | | | | | | 2 | | | | | | | | | | | | 2 |
| Serosa, Fibrosis | | | | | | | | | | | | | | | | | 2 | | | | | 1 |
| Mesentery | | | | + | | | + | | | | | | | | | + | + | + | | | | 9 |
| Fat, Necrosis | | | | 2 | | | 2 | | | | | | | | | 3 | 2 | 2 | | | | 9 |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Atrophy | | | | 1 | 1 | | 2 | | | | | | | | 1 | | | | | 3 | | 10 |
| Acinus, Hyperplasia | | | | | | | | | | | | | | | | | | 1 | | | | 3 |
| Acinus, Metaplasia, Hepatocyte | | | | | | | | | | 1 | | | | | | | | | | | | 1 |
| Salivary Glands | | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Erosion | | | | | | | | | | | | | | | | | | | | | | 1 |
| Inflammation | | | | | | | | | | 1 | | | | | | | 1 | | | | | 7 |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | 1 |
| Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 6 |
| Stomach, Glandular | | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | 2 |
| Epithelium, Necrosis | | | | | | | | | | | | | | | | | | | | | | 1 |
| Tooth | | | | | | | | | | | | | | | | | | | | | + | 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:
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TDMS No. 20007 - 05
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 Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 09/21/2010
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 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| DAY ON TEST | FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
|-------------|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|
| | 079 | 072 | 078 | 077 | 078 | 079 | 071 | 078 | 075 | 076 | 075 | 070 | 073 | 073 | 070 | 075 | 079 | 073 | 078 | 072 | | 079 | 077 | |
| ANIMAL ID | 0076 | 0077 | 0078 | 0079 | 0080 | 0081 | 0082 | 0083 | 0084 | 0085 | 0086 | 0087 | 0088 | 0089 | 0090 | 0091 | 0092 | 0093 | 0094 | 0095 | 0096 | 0097 | 0098 | 0099 |
| 0 | 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 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 0 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 8 | 1 | 2 | 0 | 0 | 3 | 3 | 3 | 2 | 0 | 2 | 3 | 2 | 3 | 2 | 2 |
| 9 | 9 | 8 | 9 | 8 | 9 | 9 | 1 | 8 | 5 | 9 | 5 | 5 | 0 | 2 | 0 | 0 | 9 | 5 | 9 | 0 | 8 | 2 | 9 | 9 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 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 | 3 | 3 |
| 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 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 |

Malformation

2

3 1.3

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cardiomyopathy | 1 | 2 | 1 | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | | | 2 | 2 | 1 | 3 | 1 | 4 | 2 | 2 | 2 | 2 | 45 1.9 |
| Atrium, Thrombosis | | | | | | | | 2 | | | | | | | | | | | | | | | | 1 2.0 |
| Valve, Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Amyloid Deposition | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Degeneration, Cystic | | | | | | | | | | | | | | | | | | | | | 1 | | | 6 1.2 |
| Hypertrophy | | | | | | | | | | 1 | | | | | | | | | | | 1 | | | 3 1.0 |
| Zona Fasciculata, Hyperplasia | | | | | | 1 | | 1 | | | 2 | | | | | | | | | | | | | 6 1.2 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | 4 | | 1 4.0 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Pars Distalis, Hyperplasia | | | 4 | | 3 | | 2 | | 2 | | | 1 | | 2 | | | | 2 | | | 2 | 2 | 2 | 20 2.2 |
| Thyroid 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

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TDMS No. 20007 - 05
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 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
0.1 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|-------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|--------|
| | 079 | 079 | 078 | 079 | 078 | 079 | 077 | 077 | 077 | 077 | 066 | 066 | 077 | 066 | 000 | 077 | 066 | 077 | 077 | 077 | 066 | 077 | 077 | 077 | | |
| ANIMAL ID | 0076 | 0077 | 0078 | 0079 | 0080 | 0081 | 0082 | 0083 | 0084 | 0085 | 0086 | 0087 | 0088 | 0089 | 0090 | 0091 | 0092 | 0093 | 0094 | 0095 | 0096 | 0097 | 0098 | 0099 | | |
| C-cell, Hyperplasia | | | | | | | | | | 3 | | | | | | | | | | | 1 | | | | | 15 1.9 |
| Follicular Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | 3 | | | | | 1 1.0 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Hyperplasia | | | | | | | | | | | 2 | | | | | | | | | | | | | | 3 | 2.7 |
| Inflammation | | | | | | | | | | | | | | 2 | | | | | | | | | | | 2 | 2.0 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst | 1 | | | | 1 | | | | | 4 | | | | | | | | 2 | | | 1 | | | 3 | 9 | 2.0 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Congestion | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.5 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Endometrium, Hyperplasia, Cystic | | | | | | | | | | | 1 | | | | | | | 1 | | | | | | 1 | 5 | 1.2 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | 1 | 1 | 1 | | | 3 | | 3 | | 4 | | | 3 | 1 | 3 | 3 | 2 | | | 3 | 2 | 27 | 2.3 |
| Myelofibrosis | | | | | | | | | 2 | | | | | | | | | | | | | | | | 1 | 2.0 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Lymph Node, Mandibular | 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 | |

* .. 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | ANIMAL ID | females
(cont...) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | 0705 | 0708 | 0709 | 0712 | 0713 | 0714 | 0715 | 0716 | 0717 | 0718 | 0719 | 0720 | 0721 | 0722 | 0723 | 0724 | 0725 | 0726 | 0727 | 0728 | 0729 | 0730 | 0731 | 0732 | | | 0733 | 0734 | 0735 | 0736 | 0737 | 0738 | 0739 | 0740 | 0741 | 0742 | 0743 | 0744 | 0745 | 0746 | 0747 | 0748 | 0749 | 0750 | 0751 | 0752 | 0753 | 0754 | 0755 | 0756 | 0757 | 0758 | 0759 | 0760 | 0761 | 0762 | 0763 | 0764 | 0765 | 0766 | 0767 | 0768 | 0769 | 0770 | 0771 | 0772 | 0773 | 0774 | 0775 | 0776 | 0777 | 0778 | 0779 | 0780 | 0781 | 0782 | 0783 | 0784 | 0785 | 0786 | 0787 | 0788 | 0789 | 0790 | 0791 | 0792 | 0793 | 0794 | 0795 | 0796 | 0797 | 0798 | 0799 | 0800 | 0801 | 0802 | 0803 | 0804 | 0805 | 0806 | 0807 | 0808 | 0809 | 0810 | 0811 | 0812 | 0813 | 0814 | 0815 | 0816 | 0817 | 0818 | 0819 | 0820 | 0821 | 0822 | 0823 | 0824 | 0825 | 0826 | 0827 | 0828 | 0829 | 0830 | 0831 | 0832 | 0833 | 0834 | 0835 | 0836 | 0837 | 0838 | 0839 | 0840 | 0841 | 0842 | 0843 | 0844 | 0845 | 0846 | 0847 | 0848 | 0849 | 0850 | 0851 | 0852 | 0853 | 0854 | 0855 | 0856 | 0857 | 0858 | 0859 | 0860 | 0861 | 0862 | 0863 | 0864 | 0865 | 0866 | 0867 | 0868 | 0869 | 0870 | 0871 | 0872 | 0873 | 0874 | 0875 | 0876 | 0877 | 0878 | 0879 | 0880 | 0881 | 0882 | 0883 | 0884 | 0885 | 0886 | 0887 | 0888 | 0889 | 0890 | 0891 | 0892 | 0893 | 0894 | 0895 | 0896 | 0897 | 0898 | 0899 | 0900 | 0901 | 0902 | 0903 | 0904 | 0905 | 0906 | 0907 | 0908 | 0909 | 0910 | 0911 | 0912 | 0913 | 0914 | 0915 | 0916 | 0917 | 0918 | 0919 | 0920 | 0921 | 0922 | 0923 | 0924 | 0925 | 0926 | 0927 | 0928 | 0929 | 0930 | 0931 | 0932 | 0933 | 0934 | 0935 | 0936 | 0937 | 0938 | 0939 | 0940 | 0941 | 0942 | 0943 | 0944 | 0945 | 0946 | 0947 | 0948 | 0949 | 0950 | 0951 | 0952 | 0953 | 0954 | 0955 | 0956 | 0957 | 0958 | 0959 | 0960 | 0961 | 0962 | 0963 | 0964 | 0965 | 0966 | 0967 | 0968 | 0969 | 0970 | 0971 | 0972 | 0973 | 0974 | 0975 | 0976 | 0977 | 0978 | 0979 | 0980 | 0981 | 0982 | 0983 | 0984 | 0985 | 0986 | 0987 | 0988 | 0989 | 0990 | 0991 | 0992 | 0993 | 0994 | 0995 | 0996 | 0997 | 0998 | 0999 | 1000 | 1001 | 1002 | 1003 | 1004 | 1005 | 1006 | 1007 | 1008 | 1009 | 1010 | 1011 | 1012 | 1013 | 1014 | 1015 | 1016 | 1017 | 1018 | 1019 | 1020 | 1021 | 1022 | 1023 | 1024 | 1025 | 1026 | 1027 | 1028 | 1029 | 1030 | 1031 | 1032 | 1033 | 1034 | 1035 | 1036 | 1037 | 1038 | 1039 | 1040 | 1041 | 1042 | 1043 | 1044 | 1045 | 1046 | 1047 | 1048 | 1049 | 1050 | 1051 | 1052 | 1053 | 1054 | 1055 | 1056 | 1057 | 1058 | 1059 | 1060 | 1061 | 1062 | 1063 | 1064 | 1065 | 1066 | 1067 | 1068 | 1069 | 1070 | 1071 | 1072 | 1073 | 1074 | 1075 | 1076 | 1077 | 1078 | 1079 | 1080 | 1081 | 1082 | 1083 | 1084 | 1085 | 1086 | 1087 | 1088 | 1089 | 1090 | 1091 | 1092 | 1093 | 1094 | 1095 | 1096 | 1097 | 1098 | 1099 | 1100 | 1101 | 1102 | 1103 | 1104 | 1105 | 1106 | 1107 | 1108 | 1109 | 1110 | 1111 | 1112 | 1113 | 1114 | 1115 | 1116 | 1117 | 1118 | 1119 | 1120 | 1121 | 1122 | 1123 | 1124 | 1125 | 1126 | 1127 | 1128 | 1129 | 1130 | 1131 | 1132 | 1133 | 1134 | 1135 | 1136 | 1137 | 1138 | 1139 | 1140 | 1141 | 1142 | 1143 | 1144 | 1145 | 1146 | 1147 | 1148 | 1149 | 1150 | 1151 | 1152 | 1153 | 1154 | 1155 | 1156 | 1157 | 1158 | 1159 | 1160 | 1161 | 1162 | 1163 | 1164 | 1165 | 1166 | 1167 | 1168 | 1169 | 1170 | 1171 | 1172 | 1173 | 1174 | 1175 | 1176 | 1177 | 1178 | 1179 | 1180 | 1181 | 1182 | 1183 | 1184 | 1185 | 1186 | 1187 | 1188 | 1189 | 1190 | 1191 | 1192 | 1193 | 1194 | 1195 | 1196 | 1197 | 1198 | 1199 | 1200 | 1201 | 1202 | 1203 | 1204 | 1205 | 1206 | 1207 | 1208 | 1209 | 1210 | 1211 | 1212 | 1213 | 1214 | 1215 | 1216 | 1217 | 1218 | 1219 | 1220 | 1221 | 1222 | 1223 | 1224 | 1225 | 1226 | 1227 | 1228 | 1229 | 1230 | 1231 | 1232 | 1233 | 1234 | 1235 | 1236 | 1237 | 1238 | 1239 | 1240 | 1241 | 1242 | 1243 | 1244 | 1245 | 1246 | 1247 | 1248 | 1249 | 1250 | 1251 | 1252 | 1253 | 1254 | 1255 | 1256 | 1257 | 1258 | 1259 | 1260 | 1261 | 1262 | 1263 | 1264 | 1265 | 1266 | 1267 | 1268 | 1269 | 1270 | 1271 | 1272 | 1273 | 1274 | 1275 | 1276 | 1277 | 1278 | 1279 | 1280 | 1281 | 1282 | 1283 | 1284 | 1285 | 1286 | 1287 | 1288 | 1289 | 1290 | 1291 | 1292 | 1293 | 1294 | 1295 | 1296 | 1297 | 1298 | 1299 | 1300 | 1301 | 1302 | 1303 | 1304 | 1305 | 1306 | 1307 | 1308 | 1309 | 1310 | 1311 | 1312 | 1313 | 1314 | 1315 | 1316 | 1317 | 1318 | 1319 | 1320 | 1321 | 1322 | 1323 | 1324 | 1325 | 1326 | 1327 | 1328 | 1329 | 1330 | 1331 | 1332 | 1333 | 1334 | 1335 | 1336 | 1337 | 1338 | 1339 | 1340 | 1341 | 1342 | 1343 | 1344 | 1345 | 1346 | 1347 | 1348 | 1349 | 1350 | 1351 | 1352 | 1353 | 1354 | 1355 | 1356 | 1357 | 1358 | 1359 | 1360 | 1361 | 1362 | 1363 | 1364 | 1365 | 1366 | 1367 | 1368 | 1369 | 1370 | 1371 | 1372 | 1373 | 1374 | 1375 | 1376 | 1377 | 1378 | 1379 | 1380 | 1381 | 1382 | 1383 | 1384 | 1385 | 1386 | 1387 | 1388 | 1389 | 1390 | 1391 | 1392 | 1393 | 1394 | 1395 | 1396 | 1397 | 1398 | 1399 | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 1413 | 1414 | 1415 | 1416 | 1417 | 1418 | 1419 | 1420 | 1421 | 1422 | 1423 | 1424 | 1425 | 1426 | 1427 | 1428 | 1429 | 1430 | 1431 | 1432 | 1433 | 1434 | 1435 | 1436 | 1437 | 1438 | 1439 | 1440 | 1441 | 1442 | 1443 | 1444 | 1445 | 1446 | 1447 | 1448 | 1449 | 1450 | 1451 | 1452 | 1453 | 1454 | 1455 | 1456 | 1457 | 1458 | 1459 | 1460 | 1461 | 1462 | 1463 | 1464 | 1465 | 1466 | 1467 | 1468 | 1469 | 1470 | 1471 | 1472 | 1473 | 1474 | 1475 | 1476 | 1477 | 1478 | 1479 | 1480 | 1481 | 1482 | 1483 | 1484 | 1485 | 1486 | 1487 | 1488 | 1489 | 1490 | 1491 | 1492 | 1493 | 1494 | 1495 | 1496 | 1497 | 1498 | 1499 | 1500 | 1501 | 1502 | 1503 | 1504 | 1505 | 1506 | 1507 | 1508 | 1509 | 1510 | 1511 | 1512 | 1513 | 1514 | 1515 | 1516 | 1517 | 1518 | 1519 | 1520 | 1521 | 1522 | 1523 | 1524 | 1525 | 1526 | 1527 | 1528 | 1529 | 1530 | 1531 | 1532 | 1533 | 1534 | 1535 | 1536 | 1537 | 1538 | 1539 | 1540 | 1541 | 1542 | 1543 | 1544 | 1545 | 1546 | 1547 | 1548 | 1549 | 1550 | 1551 | 1552 | 1553 | 1554 | 1555 | 1556 | 1557 | 1558 | 1559 | 1560 | 1561 | 1562 | 1563 | 1564 | 1565 | 1566 | 1567 | 1568 | 1569 | 1570 | 1571 | 1572 | 1573 | 1574 | 1575 | 1576 | 1577 | 1578 | 1579 | 1580 | 1581 | 1582 | 1583 | 1584 | 1585 | 1586 | 1587 | 1588 | 1589 | 1590 | 1591 | 1592 | 1593 | 1594 | 1595 | 1596 | 1597 | 1598 | 1599 | 1600 | 1601 | 1602 | 1603 | 1604 | 1605 | 1606 | 1607 | 1608 | 1609 | 1610 | 1611 | 1612 | 1613 | 1614 | 1615 | 1616 | 1617 | 1618 | 1619 | 1620 | 1621 | 1622 | 1623 | 1624 | 1625 | 1626 | 1627 | 1628 | 1629 | 1630 | 1631 | 1632 | 1633 | 1634 | 1635 | 1636 | 1637 | 1638 | 1639 | 1640 | 1641 | 1642 | 1643 | 1644 | 1645 | 1646 | 1647 | 1648 | 1649 | 1650 | 1651 | 1652 | 1653 | 1654 | 1655 | 1656 | 1657 | 1658 | 1659 | 1660 | 1661 | 1662 | 1663 | 1664 | 1665 | 1666 | 1667 | 1668 | 1669 | 1670 | 1671 | 1672 | 1673 | 1674 | 1675 | 1676 | 1677 | 1678 | 1679 | 1680 | 1681 | 1682 | 1683 | 1684 | 1685 | 1686 | 1687 | 1688 | 1689 | 1690 | 1691 | 1692 | 1693 | 1694 | 1695 | 1696 | 1697 | 1698 | 1699 | 1700 | 1701 | 1702 | 1703 | 1704 | 1705 | 1706 | 1707 | 1708 | 1709 | 1710 | 1711 | 1712 | 1713 | 1714 | 1715 | 1716 | 1717 | 1718 | 1719 | 1720 | 1721 | 1722 | 1723 | 1724 | 1725 | 1726 | 1727 | 1728 | 1729 | 1730 | 1731 | 1732 | 1733 | 1734 | 1735 | 1736 | 1737 | 1738 | 1739 | 1740 | 1741 | 1742 | 1743 | 1744 | 1745 | 1746 | 1747 | 1748 | 1749 | 1750 | 1751 | 1752 | 1753 | 1754 | 1755 | 1756 | 1757 | 1758 | 1759 | 1760 | 1761 | 1762 | 1763 | 1764 | 1765 | 1766 | 1767 | 1768 | 1769 | 1770 | 1771 | 1772 | 1773 | 1774 | 1775 | 1776 | 1777 | 1778 | 1779 | 1780 | 1781 | 1782 | 1783 | 1784 | 1785 | 1786 | 1787 | 1788 | 1789 | 1790 | 1791 | 1792 | 1793 | 1794 | 1795 | 1796 | 1797 | 1798 | 1799 | 1800 | 1801 | 1802 | 1803 | 1804 | 1805 | 1806 | 1807 | 1808 | 1809 | 1810 | 1811 | 1812 | 1813 | 1814 | 1815 | 1816 | 1817 | 1818 | 1819 | 1820 | 1821 | 1822 | 1823 | 1824 | 1825 | 1826 | 1827 | 1828 | 1829 | 1830 | 1831 | 1832 | 1833 | 1834 | 1835 | 1836 | 1837 | 1838 | 1839 | 1840 | 1841 | 1842 | 1843 | 1844 | 1845 | 1846 | 1847 | 1848 | 1849 | 1850 | 1851 | 1852 | 1853 | 1854 | 1855 | 1856 | 1857 | 1858 | 1859 | 1860 | 1861 | 1862 | 1863 | 1864 | 1865 | 1866 | 1867 | 1868 | 1869 | 1870 | 1871 | 1872 | 1873 | 1874 | 1875 | 1876 | 1877 | 1878 | 1879 | 1880 | 1881 | 1882 | 1883 | 1884 | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 | 1895 | 1896 | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 |

TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
0.3 G/KG | 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 | | |
| | 7 | 7 | 0 | 6 | 5 | 5 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 5 | 4 | 6 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | |
| | 0 | 3 | 9 | 2 | 3 | 1 | 1 | 1 | 2 | 8 | 2 | 2 | 2 | 3 | 3 | 5 | 8 | 2 | 2 | 2 | 2 | 3 | 1 | 3 | 3 |
| | 5 | 0 | 8 | 8 | 2 | 9 | 5 | 8 | 9 | 1 | 9 | 9 | 9 | 9 | 9 | 2 | 8 | 8 | 9 | 9 | 9 | 0 | 8 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 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 |
| | 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 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cardiomyopathy | 2 | 2 | | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Degeneration, Cyst | | | | | | | | | | | | | | | | | | 2 | | | | 1 | | 1 |
| Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | |
| Zona Fasciculata, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | M | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | M | + | + |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | | | | | | | | | | | | 1 | | | | | | | | | | |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Pars Distalis, Hyperplasia | | | | | | | | | | 1 | 2 | | | 1 | 3 | 2 | | 1 | | | | 2 | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| C-cell, Hyperplasia | | 2 | | | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 2 | | |

GENERAL BODY 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
0.3 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | |
|-------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|
| | 0730 | 0629 | 0729 | 0705 | 0672 | 0772 | 0772 | 0772 | 0572 | 0757 | 0667 | 0767 | 0667 | 0557 | 0667 | 0737 | 0637 | 0727 | 0727 | 0647 | | 0777 | 0677 | 0767 | 0777 | 0677 |
| ANIMAL ID | 00326 | 00332 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 |
| | 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 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|--------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Perforation | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation | | | | | 4 | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Necrosis | | | | | 4 | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Parasite Metazoan | | | | | | | | | | | | | | | X | X | | | | | | | | X | | 8 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Basophilic Focus | X | | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 41 |
| Clear Cell Focus | | | X | | | | X | | X | | | | | | | | | X | | X | | | | | | 11 |
| Eosinophilic Focus | | | X | | X | X | | | X | X | X | | | X | X | | X | X | X | | | | | X | | 24 |
| Fatty Change, Diffuse | | | 1 | 3 | 3 | | | | | 1 | | | | 1 | | | | | | | | 1 | | | | 10 1.5 |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | X | | | | | | | | | | | | | | 1 | |
| Inflammation, Chronic Active | 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 | |
| Mixed Cell Focus | X | | | | | | | | | | X | | | | | | | | X | | X | | X | | 9 | |
| Pigmentation, Hemosiderin | | | | | | | | | | | | | | | | | | | | | | | | | 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
0.3 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|-------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|
| | 0730 | 0622 | 0729 | 0705 | 0672 | 0772 | 0772 | 0772 | 0572 | 0757 | 0667 | 0766 | 0556 | 0667 | 0733 | 0636 | 0533 | 0633 | 0722 | 0722 | 0644 | 0727 | 0673 | 0733 | | 0600 |
| ANIMAL ID | 00326 | 00332 | 00332 | 00332 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cardiomyopathy | 1 | | 1 | | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 45 1.9 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Degeneration, Cystic | | | | | 4 | | | | | | | | | | | | | | | | 1 | | | 1 | 1 | 7 1.6 |
| Hypertrophy | | | | | | | | | | 2 | | | | | | | | | | | | | | | | 1 2.0 |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | 2 | | 1 2.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 1.0 |
| Zona Fasciculata, Hyperplasia | | | | | | 1 | | 1 | | | 2 | | | | | | | | | | | | 1 | | | 4 1.3 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | 1 | | | | 1 1.0 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | 1 | | | 1 | | | | | | | | | | | | | | | | | | 3 1.3 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | M | + | M | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 44 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Pars Distalis, Hyperplasia | 3 | 2 | 2 | | | 3 | 2 | | | | | | | 4 | | 4 | | | | 3 | | | 2 | | | 16 2.3 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| C-cell, Hyperplasia | | | 3 | | | 3 | 2 | | | | | | | | | | 3 | | | | | | 1 | | | 6 2.3 |
| Follicular Cell, Hyperplasia | | | | | | 1 | | | | | | | 4 | | | | | | | | 3 | | | | | 4 2.5 |

GENERAL BODY 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| DAY ON TEST | FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|-------------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|------|
| | 0730 | 0622 | 0729 | 0720 | 0672 | 0722 | 0722 | 0728 | 0579 | 0729 | 0673 | 0763 | 0532 | 0653 | 0733 | 0633 | 0728 | 0679 | 0667 | 0763 | | 0770 |
| ANIMAL ID | 00326 | 00332 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 50 |
| | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 |
| | | | | | | | | | | | | | | | | | | | | | | 2.0 |

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Clitoral Gland Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 5 | 2.0 |
| Ovary Cyst | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 6 | 2.3 |
| Uterus Endometrium, Hyperplasia, Adenomatous | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 2.0 |
| Endometrium, Hyperplasia, Cystic | | | | | | | | | | | | | | | | | | | | | | | 6 | 2.0 | |
| Stroma, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Bone Marrow Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 19 | 2.2 |
| Inflammation, Histiocytic | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Myelofibrosis | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 0 | | |
| Lymph Node, Mesenteric Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 3.0 |
| Spleen Accessory Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
0.3 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | | | | | |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| | 0730 | 0622 | 0729 | 0705 | 0672 | 0772 | 0772 | 0772 | 0572 | 0757 | 0662 | 0762 | 0655 | 0667 | 0733 | 0633 | 0622 | 0722 | 0672 | 0767 | | 0676 | 0776 | 0676 | 0776 | 0676 | 0776 | 0676 | 0776 | 0676 |
| ANIMAL ID | 00326 | 00332 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | |
| Peripheral Nerve | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Spinal Cord | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 1.8 |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 12 1.1 |
| Nose | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 9 1.7 |
| Glands, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Olfactory Epithelium, Metaplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Trachea | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Peritracheal Tissue, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Synechia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Cornea, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 3.0 |
| Lens, Cataract | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Retina, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 2.4 |
| Retina, Dysplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 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

TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------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| | 0728 | 0730 | 0732 | 0734 | 0736 | 0738 | 0740 | 0742 | 0744 | 0746 | 0748 | 0750 | 0752 | 0754 | 0756 | 0758 | 0800 | 0802 | 0804 | 0806 | 0808 | 0810 | 0812 | 0814 | | 0816 | 0818 | 0820 | 0822 | 0824 | 0826 | 0828 | 0830 | 0832 | 0834 | 0836 | 0838 | 0840 | 0842 | 0844 | 0846 | 0848 | 0850 | 0852 | 0854 | 0856 | 0858 | 0900 | 0902 | 0904 | 0906 | 0908 | 0910 | 0912 | 0914 | 0916 | 0918 | 0920 | 0922 | 0924 | 0926 | 0928 | 0930 | 0932 | 0934 | 0936 | 0938 | 0940 | 0942 | 0944 | 0946 | 0948 | 0950 | 0952 | 0954 | 0956 | 0958 | 1000 | 1002 | 1004 | 1006 | 1008 | 1010 | 1012 | 1014 | 1016 | 1018 | 1020 | 1022 | 1024 | 1026 | 1028 | 1030 | 1032 | 1034 | 1036 | 1038 | 1040 | 1042 | 1044 | 1046 | 1048 | 1050 | 1052 | 1054 | 1056 | 1058 | 1100 | 1102 | 1104 | 1106 | 1108 | 1110 | 1112 | 1114 | 1116 | 1118 | 1120 | 1122 | 1124 | 1126 | 1128 | 1130 | 1132 | 1134 | 1136 | 1138 | 1140 | 1142 | 1144 | 1146 | 1148 | 1150 | 1152 | 1154 | 1156 | 1158 | 1200 | 1202 | 1204 | 1206 | 1208 | 1210 | 1212 | 1214 | 1216 | 1218 | 1220 | 1222 | 1224 | 1226 | 1228 | 1230 | 1232 | 1234 | 1236 | 1238 | 1240 | 1242 | 1244 | 1246 | 1248 | 1250 | 1252 | 1254 | 1256 | 1258 | 1300 | 1302 | 1304 | 1306 | 1308 | 1310 | 1312 | 1314 | 1316 | 1318 | 1320 | 1322 | 1324 | 1326 | 1328 | 1330 | 1332 | 1334 | 1336 | 1338 | 1340 | 1342 | 1344 | 1346 | 1348 | 1350 | 1352 | 1354 | 1356 | 1358 | 1400 | 1402 | 1404 | 1406 | 1408 | 1410 | 1412 | 1414 | 1416 | 1418 | 1420 | 1422 | 1424 | 1426 | 1428 | 1430 | 1432 | 1434 | 1436 | 1438 | 1440 | 1442 | 1444 | 1446 | 1448 | 1450 | 1452 | 1454 | 1456 | 1458 | 1500 | 1502 | 1504 | 1506 | 1508 | 1510 | 1512 | 1514 | 1516 | 1518 | 1520 | 1522 | 1524 | 1526 | 1528 | 1530 | 1532 | 1534 | 1536 | 1538 | 1540 | 1542 | 1544 | 1546 | 1548 | 1550 | 1552 | 1554 | 1556 | 1558 | 1600 | 1602 | 1604 | 1606 | 1608 | 1610 | 1612 | 1614 | 1616 | 1618 | 1620 | 1622 | 1624 | 1626 | 1628 | 1630 | 1632 | 1634 | 1636 | 1638 | 1640 | 1642 | 1644 | 1646 | 1648 | 1650 | 1652 | 1654 | 1656 | 1658 | 1700 | 1702 | 1704 | 1706 | 1708 | 1710 | 1712 | 1714 | 1716 | 1718 | 1720 | 1722 | 1724 | 1726 | 1728 | 1730 | 1732 | 1734 | 1736 | 1738 | 1740 | 1742 | 1744 | 1746 | 1748 | 1750 | 1752 | 1754 | 1756 | 1758 | 1800 | 1802 | 1804 | 1806 | 1808 | 1810 | 1812 | 1814 | 1816 | 1818 | 1820 | 1822 | 1824 | 1826 | 1828 | 1830 | 1832 | 1834 | 1836 | 1838 | 1840 | 1842 | 1844 | 1846 | 1848 | 1850 | 1852 | 1854 | 1856 | 1858 | 1900 | 1902 | 1904 | 1906 | 1908 | 1910 | 1912 | 1914 | 1916 | 1918 | 1920 | 1922 | 1924 | 1926 | 1928 | 1930 | 1932 | 1934 | 1936 | 1938 | 1940 | 1942 | 1944 | 1946 | 1948 | 1950 | 1952 | 1954 | 1956 | 1958 | 2000 | 2002 | 2004 | 2006 | 2008 | 2010 | 2012 | 2014 | 2016 | 2018 | 2020 | 2022 | 2024 | 2026 | 2028 | 2030 | 2032 | 2034 | 2036 | 2038 | 2040 | 2042 | 2044 | 2046 | 2048 | 2050 | 2052 | 2054 | 2056 | 2058 | 2100 | 2102 | 2104 | 2106 | 2108 | 2110 | 2112 | 2114 | 2116 | 2118 | 2120 | 2122 | 2124 | 2126 | 2128 | 2130 | 2132 | 2134 | 2136 | 2138 | 2140 | 2142 | 2144 | 2146 | 2148 | 2150 | 2152 | 2154 | 2156 | 2158 | 2200 | 2202 | 2204 | 2206 | 2208 | 2210 | 2212 | 2214 | 2216 | 2218 | 2220 | 2222 | 2224 | 2226 | 2228 | 2230 | 2232 | 2234 | 2236 | 2238 | 2240 | 2242 | 2244 | 2246 | 2248 | 2250 | 2252 | 2254 | 2256 | 2258 | 2300 | 2302 | 2304 | 2306 | 2308 | 2310 | 2312 | 2314 | 2316 | 2318 | 2320 | 2322 | 2324 | 2326 | 2328 | 2330 | 2332 | 2334 | 2336 | 2338 | 2340 | 2342 | 2344 | 2346 | 2348 | 2350 | 2352 | 2354 | 2356 | 2358 | 2400 | 2402 | 2404 | 2406 | 2408 | 2410 | 2412 | 2414 | 2416 | 2418 | 2420 | 2422 | 2424 | 2426 | 2428 | 2430 | 2432 | 2434 | 2436 | 2438 | 2440 | 2442 | 2444 | 2446 | 2448 | 2450 | 2452 | 2454 | 2456 | 2458 | 2500 | 2502 | 2504 | 2506 | 2508 | 2510 | 2512 | 2514 | 2516 | 2518 | 2520 | 2522 | 2524 | 2526 | 2528 | 2530 | 2532 | 2534 | 2536 | 2538 | 2540 | 2542 | 2544 | 2546 | 2548 | 2550 | 2552 | 2554 | 2556 | 2558 | 2600 | 2602 | 2604 | 2606 | 2608 | 2610 | 2612 | 2614 | 2616 | 2618 | 2620 | 2622 | 2624 | 2626 | 2628 | 2630 | 2632 | 2634 | 2636 | 2638 | 2640 | 2642 | 2644 | 2646 | 2648 | 2650 | 2652 | 2654 | 2656 | 2658 | 2700 | 2702 | 2704 | 2706 | 2708 | 2710 | 2712 | 2714 | 2716 | 2718 | 2720 | 2722 | 2724 | 2726 | 2728 | 2730 | 2732 | 2734 | 2736 | 2738 | 2740 | 2742 | 2744 | 2746 | 2748 | 2750 | 2752 | 2754 | 2756 | 2758 | 2800 | 2802 | 2804 | 2806 | 2808 | 2810 | 2812 | 2814 | 2816 | 2818 | 2820 | 2822 | 2824 | 2826 | 2828 | 2830 | 2832 | 2834 | 2836 | 2838 | 2840 | 2842 | 2844 | 2846 | 2848 | 2850 | 2852 | 2854 | 2856 | 2858 | 2900 | 2902 | 2904 | 2906 | 2908 | 2910 | 2912 | 2914 | 2916 | 2918 | 2920 | 2922 | 2924 | 2926 | 2928 | 2930 | 2932 | 2934 | 2936 | 2938 | 2940 | 2942 | 2944 | 2946 | 2948 | 2950 | 2952 | 2954 | 2956 | 2958 | 3000 | 3002 | 3004 | 3006 | 3008 | 3010 | 3012 | 3014 | 3016 | 3018 | 3020 | 3022 | 3024 | 3026 | 3028 | 3030 | 3032 | 3034 | 3036 | 3038 | 3040 | 3042 | 3044 | 3046 | 3048 | 3050 | 3052 | 3054 | 3056 | 3058 | 3100 | 3102 | 3104 | 3106 | 3108 | 3110 | 3112 | 3114 | 3116 | 3118 | 3120 | 3122 | 3124 | 3126 | 3128 | 3130 | 3132 | 3134 | 3136 | 3138 | 3140 | 3142 | 3144 | 3146 | 3148 | 3150 | 3152 | 3154 | 3156 | 3158 | 3200 | 3202 | 3204 | 3206 | 3208 | 3210 | 3212 | 3214 | 3216 | 3218 | 3220 | 3222 | 3224 | 3226 | 3228 | 3230 | 3232 | 3234 | 3236 | 3238 | 3240 | 3242 | 3244 | 3246 | 3248 | 3250 | 3252 | 3254 | 3256 | 3258 | 3300 | 3302 | 3304 | 3306 | 3308 | 3310 | 3312 | 3314 | 3316 | 3318 | 3320 | 3322 | 3324 | 3326 | 3328 | 3330 | 3332 | 3334 | 3336 | 3338 | 3340 | 3342 | 3344 | 3346 | 3348 | 3350 | 3352 | 3354 | 3356 | 3358 | 3400 | 3402 | 3404 | 3406 | 3408 | 3410 | 3412 | 3414 | 3416 | 3418 | 3420 | 3422 | 3424 | 3426 | 3428 | 3430 | 3432 | 3434 | 3436 | 3438 | 3440 | 3442 | 3444 | 3446 | 3448 | 3450 | 3452 | 3454 | 3456 | 3458 | 3500 | 3502 | 3504 | 3506 | 3508 | 3510 | 3512 | 3514 | 3516 | 3518 | 3520 | 3522 | 3524 | 3526 | 3528 | 3530 | 3532 | 3534 | 3536 | 3538 | 3540 | 3542 | 3544 | 3546 | 3548 | 3550 | 3552 | 3554 | 3556 | 3558 | 3600 | 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4534 | 4536 | 4538 | 4540 | 4542 | 4544 | 4546 | 4548 | 4550 | 4552 | 4554 | 4556 | 4558 | 4600 | 4602 | 4604 | 4606 | 4608 | 4610 | 4612 | 4614 | 4616 | 4618 | 4620 | 4622 | 4624 | 4626 | 4628 | 4630 | 4632 | 4634 | 4636 | 4638 | 4640 | 4642 | 4644 | 4646 | 4648 | 4650 | 4652 | 4654 | 4656 | 4658 | 4700 | 4702 | 4704 | 4706 | 4708 | 4710 | 4712 | 4714 | 4716 | 4718 | 4720 | 4722 | 4724 | 4726 | 4728 | 4730 | 4732 | 4734 | 4736 | 4738 | 4740 | 4742 | 4744 | 4746 | 4748 | 4750 | 4752 | 4754 | 4756 | 4758 | 4800 | 4802 | 4804 | 4806 | 4808 | 4810 | 4812 | 4814 | 4816 | 4818 | 4820 | 4822 | 4824 | 4826 | 4828 | 4830 | 4832 | 4834 | 4836 | 4838 | 4840 | 4842 | 4844 | 4846 | 4848 | 4850 | 4852 | 4854 | 4856 | 4858 | 4900 | 4902 | 4904 | 4906 | 4908 | 4910 | 4912 | 4914 | 4916 | 4918 | 4920 | 4922 | 4924 | 4926 | 4928 | 4930 | 4932 | 4934 | 4936 | 4938 | 4940 | 4942 | 4944 | 4946 | 4948 | 4950 | 4952 | 4954 | 4956 | 4958 | 5000 | 5002 | 5004 | 5006 | 5008 | 5010 | 5012 | 5014 | 5016 | 5018 | 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TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Kava kava extract
 CAS Number: 9000-38-8

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
1.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-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| | 0728 | 0730 | 0739 | 0764 | 0773 | 0777 | 0782 | 0786 | 0794 | 0798 | 0805 | 0809 | 0817 | 0821 | 0829 | 0833 | 0841 | 0845 | 0853 | 0857 | | 0865 | 0869 | 0877 | 0881 | 0889 | 0893 | 0901 | 0905 | 0913 | 0917 | 0925 | 0929 | 0937 | 0941 | 0949 | 0953 | 0961 | 0965 | 0973 | 0977 | 0985 | 0989 | 0997 | 1001 | 1009 | 1013 | 1021 | 1025 | 1033 | 1037 | 1045 | 1049 | 1057 | 1061 | 1069 | 1073 | 1081 | 1085 | 1093 | 1097 | 1105 | 1109 | 1117 | 1121 | 1129 | 1133 | 1141 | 1145 | 1153 | 1157 | 1165 | 1169 | 1177 | 1181 | 1189 | 1193 | 1201 | 1205 | 1213 | 1217 | 1225 | 1229 | 1237 | 1241 | 1249 | 1253 | 1261 | 1265 | 1273 | 1277 | 1285 | 1289 | 1297 | 1301 | 1309 | 1313 | 1321 | 1325 | 1333 | 1337 | 1345 | 1349 | 1357 | 1361 | 1369 | 1373 | 1381 | 1385 | 1393 | 1397 | 1405 | 1409 | 1417 | 1421 | 1429 | 1433 | 1441 | 1445 | 1453 | 1457 | 1465 | 1469 | 1477 | 1481 | 1489 | 1493 | 1501 | 1505 | 1513 | 1517 | 1525 | 1529 | 1537 | 1541 | 1549 | 1553 | 1561 | 1565 | 1573 | 1577 | 1585 | 1589 | 1597 | 1601 | 1609 | 1613 | 1621 | 1625 | 1633 | 1637 | 1645 | 1649 | 1657 | 1661 | 1669 | 1673 | 1681 | 1685 | 1693 | 1697 | 1705 | 1709 | 1717 | 1721 | 1729 | 1733 | 1741 | 1745 | 1753 | 1757 | 1765 | 1769 | 1777 | 1781 | 1789 | 1793 | 1801 | 1805 | 1813 | 1817 | 1825 | 1829 | 1837 | 1841 | 1849 | 1853 | 1861 | 1865 | 1873 | 1877 | 1885 | 1889 | 1897 | 1901 | 1909 | 1913 | 1921 | 1925 | 1933 | 1937 | 1945 | 1949 | 1957 | 1961 | 1969 | 1973 | 1981 | 1985 | 1993 | 1997 | 2001 | 2005 | 2013 | 2017 | 2025 | 2029 | 2037 | 2041 | 2049 | 2053 | 2061 | 2065 | 2073 | 2077 | 2085 | 2089 | 2097 | 2101 | 2109 | 2113 | 2121 | 2125 | 2133 | 2137 | 2145 | 2149 | 2157 | 2161 | 2169 | 2173 | 2181 | 2185 | 2193 | 2197 | 2205 | 2209 | 2217 | 2221 | 2229 | 2233 | 2241 | 2245 | 2253 | 2257 | 2265 | 2269 | 2277 | 2281 | 2289 | 2293 | 2301 | 2305 | 2313 | 2317 | 2325 | 2329 | 2337 | 2341 | 2349 | 2353 | 2361 | 2365 | 2373 | 2377 | 2385 | 2389 | 2397 | 2401 | 2409 | 2413 | 2421 | 2425 | 2433 | 2437 | 2445 | 2449 | 2457 | 2461 | 2469 | 2473 | 2481 | 2485 | 2493 | 2497 | 2505 | 2509 | 2517 | 2521 | 2529 | 2533 | 2541 | 2545 | 2553 | 2557 | 2565 | 2569 | 2577 | 2581 | 2589 | 2593 | 2601 | 2605 | 2613 | 2617 | 2625 | 2629 | 2637 | 2641 | 2649 | 2653 | 2661 | 2665 | 2673 | 2677 | 2685 | 2689 | 2697 | 2701 | 2709 | 2713 | 2721 | 2725 | 2733 | 2737 | 2745 | 2749 | 2757 | 2761 | 2769 | 2773 | 2781 | 2785 | 2793 | 2797 | 2805 | 2809 | 2817 | 2821 | 2829 | 2833 | 2841 | 2845 | 2853 | 2857 | 2865 | 2869 | 2877 | 2881 | 2889 | 2893 | 2901 | 2905 | 2913 | 2917 | 2925 | 2929 | 2937 | 2941 | 2949 | 2953 | 2961 | 2965 | 2973 | 2977 | 2985 | 2989 | 2997 | 3001 | 3005 | 3013 | 3017 | 3025 | 3029 | 3037 | 3041 | 3049 | 3053 | 3061 | 3065 | 3073 | 3077 | 3085 | 3089 | 3097 | 3101 | 3109 | 3113 | 3121 | 3125 | 3133 | 3137 | 3145 | 3149 | 3157 | 3161 | 3169 | 3173 | 3181 | 3185 | 3193 | 3197 | 3205 | 3209 | 3217 | 3221 | 3229 | 3233 | 3241 | 3245 | 3253 | 3257 | 3265 | 3269 | 3277 | 3281 | 3289 | 3293 | 3301 | 3305 | 3313 | 3317 | 3325 | 3329 | 3337 | 3341 | 3349 | 3353 | 3361 | 3365 | 3373 | 3377 | 3385 | 3389 | 3397 | 3401 | 3409 | 3413 | 3421 | 3425 | 3433 | 3437 | 3445 | 3449 | 3457 | 3461 | 3469 | 3473 | 3481 | 3485 | 3493 | 3497 | 3505 | 3509 | 3517 | 3521 | 3529 | 3533 | 3541 | 3545 | 3553 | 3557 | 3565 | 3569 | 3577 | 3581 | 3589 | 3593 | 3601 | 3605 | 3613 | 3617 | 3625 | 3629 | 3637 | 3641 | 3649 | 3653 | 3661 | 3665 | 3673 | 3677 | 3685 | 3689 | 3697 | 3701 | 3709 | 3713 | 3721 | 3725 | 3733 | 3737 | 3745 | 3749 | 3757 | 3761 | 3769 | 3773 | 3781 | 3785 | 3793 | 3797 | 3805 | 3809 | 3817 | 3821 | 3829 | 3833 | 3841 | 3845 | 3853 | 3857 | 3865 | 3869 | 3877 | 3881 | 3889 | 3893 | 3901 | 3905 | 3913 | 3917 | 3925 | 3929 | 3937 | 3941 | 3949 | 3953 | 3961 | 3965 | 3973 | 3977 | 3985 | 3989 | 3997 | 4001 | 4005 | 4013 | 4017 | 4025 | 4029 | 4037 | 4041 | 4049 | 4053 | 4061 | 4065 | 4073 | 4077 | 4085 | 4089 | 4097 | 4101 | 4109 | 4113 | 4121 | 4125 | 4133 | 4137 | 4145 | 4149 | 4157 | 4161 | 4169 | 4173 | 4181 | 4185 | 4193 | 4197 | 4205 | 4209 | 4217 | 4221 | 4229 | 4233 | 4241 | 4245 | 4253 | 4257 | 4265 | 4269 | 4277 | 4281 | 4289 | 4293 | 4301 | 4305 | 4313 | 4317 | 4325 | 4329 | 4337 | 4341 | 4349 | 4353 | 4361 | 4365 | 4373 | 4377 | 4385 | 4389 | 4397 | 4401 | 4409 | 4413 | 4421 | 4425 | 4433 | 4437 | 4445 | 4449 | 4457 | 4461 | 4469 | 4473 | 4481 | 4485 | 4493 | 4497 | 4505 | 4509 | 4517 | 4521 | 4529 | 4533 | 4541 | 4545 | 4553 | 4557 | 4565 | 4569 | 4577 | 4581 | 4589 | 4593 | 4601 | 4605 | 4613 | 4617 | 4625 | 4629 | 4637 | 4641 | 4649 | 4653 | 4661 | 4665 | 4673 | 4677 | 4685 | 4689 | 4697 | 4701 | 4709 | 4713 | 4721 | 4725 | 4733 | 4737 | 4745 | 4749 | 4757 | 4761 | 4769 | 4773 | 4781 | 4785 | 4793 | 4797 | 4805 | 4809 | 4817 | 4821 | 4829 | 4833 | 4841 | 4845 | 4853 | 4857 | 4865 | 4869 | 4877 | 4881 | 4889 | 4893 | 4901 | 4905 | 4913 | 4917 | 4925 | 4929 | 4937 | 4941 | 4949 | 4953 | 4961 | 4965 | 4973 | 4977 | 4985 | 4989 | 4997 | 5001 | 5005 | 5013 | 5017 | 5025 | 5029 | 5037 | 5041 | 5049 | 5053 | 5061 | 5065 | 5073 | 5077 | 5085 | 5089 | 5097 | 5101 | 5109 | 5113 | 5121 | 5125 | 5133 | 5137 | 5145 | 5149 | 5157 | 5161 | 5169 | 5173 | 5181 | 5185 | 5193 | 5197 | 5205 | 5209 | 5217 | 5221 | 5229 | 5233 | 5241 | 5245 | 5253 | 5257 | 5265 | 5269 | 5277 | 5281 | 5289 | 5293 | 5301 | 5305 | 5313 | 5317 | 5325 | 5329 | 5337 | 5341 | 5349 | 5353 | 5361 | 5365 | 5373 | 5377 | 5385 | 5389 | 5397 | 5401 | 5409 | 5413 | 5421 | 5425 | 5433 | 5437 | 5445 | 5449 | 5457 | 5461 | 5469 | 5473 | 5481 | 5485 | 5493 | 5497 | 5505 | 5509 | 5517 | 5521 | 5529 | 5533 | 5541 | 5545 | 5553 | 5557 | 5565 | 5569 | 5577 | 5581 | 5589 | 5593 | 5601 | 5605 | 5613 | 5617 | 5625 | 5629 | 5637 | 5641 | 5649 | 5653 | 5661 | 5665 | 5673 | 5677 | 5685 | 5689 | 5697 | 5701 | 5709 | 5713 | 5721 | 5725 | 5733 | 5737 | 5745 | 5749 | 5757 | 5761 | 5769 | 5773 | 5781 | 5785 | 5793 | 5797 | 5805 | 5809 | 5817 | 5821 | 5829 | 5833 | 5841 | 5845 | 5853 | 5857 | 5865 | 5869 | 5877 | 5881 | 5889 | 5893 | 5901 | 5905 | 5913 | 5917 | 5925 | 5929 | 5937 | 5941 | 5949 | 5953 | 5961 | 5965 | 5973 | 5977 | 5985 | 5989 | 5997 | 6001 | 6005 | 6013 | 6017 | 6025 | 6029 | 6037 | 6041 | 6049 | 6053 | 6061 | 6065 | 6073 | 6077 | 6085 | 6089 | 6097 | 6101 | 6109 | 6113 | 6121 | 6125 | 6133 | 6137 | 6145 | 6149 | 6157 | 6161 | 6169 | 6173 | 6181 | 6185 | 6193 | 6197 | 6205 | 6209 | 6217 | 6221 | 6229 | 6233 | 6241 | 6245 | 6253 | 6257 | 6265 | 6269 | 6277 | 6281 | 6289 | 6293 | 6301 | 6305 | 6313 | 6317 | 6325 | 6329 | 6337 | 6341 | 6349 | 6353 | 6361 | 6365 | 6373 | 6377 | 6385 | 6389 | 6397 | 6401 | 6409 | 6413 | 6421 | 6425 | 6433 | 6437 | 6445 | 6449 | 6457 | 6461 | 6469 | 6473 | 6481 | 6485 | 6493 | 6497 | 6505 | 6509 | 6517 | 6521 | 6529 | 6533 | 6541 | 6545 | 6553 | 6557 | 6565 | 6569 | 6577 | 6581 | 6589 | 6593 | 6601 | 6605 | 6613 | 6617 | 6625 | 6629 | 6637 | 6641 | 6649 | 6653 | 6661 | 6665 | 6673 | 6677 | 6685 | 6689 | 6697 | 6701 | 6709 | 6713 | 6721 | 6725 | 6733 | 6737 | 6745 | 6749 | 6757 | 6761 | 6769 | 6773 | 6781 | 6785 | 6793 | 6797 | 6805 | 6809 | 6817 | 6821 | 6829 | 6833 | 6841 | 6845 | 6853 | 6857 | 6865 | 6869 | 6877 | 6881 | 6889 | 6893 | 6901 | 6905 | 6913 | 6917 | 6925 | 6929 | 6937 | 6941 | 6949 | 6953 | 6961 | 6965 | 6973 | 6977 | 6985 | 6989 | 6997 | 7001 | 7005 | 7013 | 7017 | 7025 | 7029 | 7037 | 7041 | 7049 | 7053 | 7061 | 7065 | 7073 | 7077 | 7085 | 7089 | 7097 | 7101 | 7109 | 7113 | 7121 | 7125 | 7133 | 7137 | 7145 | 7149 | 7157 | 7161 | 7169 | 7173 | 7181 | 7185 | 7193 | 7197 | 7205 | 7209 | 7217 | 7221 | 7229 | 7233 | 7241 | 7245 | 7253 | 7257 | 7265 | 7269 | 7277 | 7281 | 7289 | 7293 | 7301 | 7305 | 7313 | 7317 | 7325 | 7329 | 7337 | 7341 | 7349 | 7353 | 7361 | 7365 | 7373 | 7377 | 7385 | 7389 | 7397 | 7401 | 7409 | 7413 | 7421 | 7425 | 7433 | 7437 | 7445 | 7449 | 7457 | 7461 | 7469 | 7473 | 7481 | 7485 | 7493 | 7497 | 7505 | 7509 | 7517 | 7521 | 7529 | 7533 | 7541 | 7545 | 7553 | 7557 | 7565 | 7569 | 7577 | 7581 | 7589 | 7593 | 7601 | 7605 | 7613 | 7617 | 7625 | 7629 | 7637 | 7641 | 7649 | 7653 | 7661 | 7665 | 7673 | 7677 | 7685 | 7689 | 7697 | 7701 | 7709 | 7713 | 7721 | 7725 | 7733 | 7737 | 7745 | 7749 | 7757 | 7761 | 7769 | 7773 | 7781 | 7785 | 7793 | 7797 | 7805 | 7809 | 7817 | 7821 | 7829 | 7833 | 7841 | 7845 | 7853 | 7857 | 7865 | 7869 | 7877 | 7881 | 7889 | 7893 | 7901 | 7905 | 7913 | 7917 | 7925 | 7929 | 7937 | 7941 | 7949 | 7953 | 7961 | 7965 | 7973 | 7977 | 7985 | 7989 | 7997 | 8001 | 8005 | 8013 | 8017 | 8025 | 8029 | 8037 | 8041 | 8049 | 8053 | 8061 | 8065 | 8073 | 8077 | 8085 | 8089 | 8097 | 8101 | 8109 | 8113 | 8121 | 8125 | 8133 | 8137 | 8145 | 8149 | 8157 | 8161 | 8169 | 8173 | 8181 | 8185 | 8193 | 8197 | 8205 | 8209 | 8217 | 8221 | 8229 | 8233 | 8241 | 8245 | 8253 | 8257 | 8265 | 8269 | 8277 | 8281 | 8289 | 8293 | 8301 | 8305 | 8313 | 8317 | 8325 | 8329 | 8337 | 8341 | 8349 | 8353 | 8361 | 8365 | 8373 | 8377 | 8385 | 8389 | 8397 | 8401 | 8409 | 8413 | 8421 | 8425 | 8433 | 8437 | 8445 | 8449 | 8457 | 8461 | 8469 | 8473 | 8481 | 8485 | 8493 | 8497 | 8505 | 8509 | 8517 | 8521 | 8529 | 8533 | 8541 | 8545 | 8553 | 8557 | 8565 | 8569 | 8577 | 8581 | 8589 | 8593 | 8601 | 8605 | 8613 | 8617 | 8625 | 8629 | 8637 | 8641 | 8649 | 8653 | 8661 | 8665 | 8673 | 8677 | 8685 | 8689 | 8697 |

TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
1.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
|-------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|
| | 078 | 073 | 072 | 073 | 064 | 073 | 072 | 025 | 069 | 074 | 079 | 078 | 014 | 011 | 077 | 077 | 077 | 077 | 038 | 077 | | 077 | 033 | 059 |
| ANIMAL ID | 0076 | 0073 | 0072 | 0073 | 0064 | 0073 | 0072 | 0025 | 0069 | 0074 | 0079 | 0078 | 0014 | 0011 | 0077 | 0077 | 0077 | 0077 | 0038 | 0077 | 0077 | 0033 | 0059 | 0059 |

Atrium, Thrombosis

1 2.0

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|--------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Degeneration, Cystic | | | | | | 1 | | | | | | | | | | | | | | | 1 | | | 6 1.2 | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | |
| Hypertrophy | | | | | | 1 | | | | | | | | | | | | | | | 1 | | | 3 1.0 | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 | |
| Zona Fasciculata, Hyperplasia | | | | 1 | | 1 | | | | 1 | | | | | | | 1 | | | | 1 | | | 9 1.1 | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | 47 | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pars Distalis, Angiectasis | | | 2 | | | | | | | | | | | | | | | | | | | | | 2 2.5 | |
| Pars Distalis, Hyperplasia | | | | 2 | 2 | | 4 | | | 2 | 3 | 1 | | | 1 | | | 1 | 2 | | 1 | 1 | 1 | 2 | 23 2.0 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| C-cell, Hyperplasia | 2 | | | | | | | | | | | 1 | | | | | | | | | 1 | | | 4 1.3 | |
| Follicle, Cyst | | | | | | | | | 1 | | | | | | | | | | 2 | | | | | 2 1.5 | |
| Follicular Cell, Hyperplasia | | | | | | | | | | | | | | | | 4 | | | | | | | | 4 2.0 | |

GENERAL BODY SYSTEM

NONE

* .. 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 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| FISCHER 344 RATS FEMALE
1.0 G/KG | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
|-------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|
| | 078 | 079 | 070 | 071 | 072 | 073 | 074 | 075 | 076 | 077 | 078 | 079 | 080 | 081 | 082 | 083 | 084 | 085 | 086 | 087 | | 088 | 089 | |
| ANIMAL ID | 0076 | 0077 | 0078 | 0079 | 0080 | 0081 | 0082 | 0083 | 0084 | 0085 | 0086 | 0087 | 0088 | 0089 | 0090 | 0091 | 0092 | 0093 | 0094 | 0095 | 0096 | 0097 | 0098 | 0099 |

Trachea + 50

SPECIAL SENSES SYSTEM

Ear 1

Eye + 50

Cornea, Fibrosis 2 1 2.0
 Cornea, Inflammation 2 2.0
 Lens, Cataract 1 3 2.0
 Posterior Chamber, Inflammation 1 1.0
 Retina, Degeneration 1 1 12 1.7
 Retina, Gliosis 3 1 1 2.0

Harderian Gland + 50

Zymbal's Gland + 1

URINARY SYSTEM

Kidney + 50

Accumulation, Hyaline Droplet 1 3.0
 Infarct 2 3 2.0
 Mineralization 1 1 1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 2 46 1.0
 Nephropathy 1 43 1.2
 Papilla, Necrosis 1 1.0
 Pelvis, Inflammation 2 4 1.8
 Pelvis, Transitional Epithelium, Hyperplasia 1 2 1 6 1.2
 Renal Tubule, Necrosis 2 2 2.0

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

TDMS No. 20007 - 05
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/F 344/N

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

Date Report Requested: 09/21/2010
 Time Report Requested: 09:10:56
 First Dose M/F: 08/18/04 / 08/19/04
 Lab: BAT

| DAY ON TEST | FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|-----------------|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| | 078 | 077 | 077 | 077 | 067 | 077 | 077 | 022 | 066 | 077 | 077 | 011 | 011 | 077 | 077 | 077 | 077 | 077 | 033 | 077 | 077 | 077 | 033 | 055 | |
| 1.0 G/KG | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | |
| ANIMAL ID | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

*** END OF REPORT ***

* .. 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