

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

F 1 R2

Date Report Reqsted: 01/12/2006

Time Report Reqsted: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

C Number: C96011

Lock Date: 01/28/2004

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Note: Animals arranged according to days on test.

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

	DAY ON TEST	2	4	4	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7
		9	6	9	5	6	7	9	0	0	1	2	2	2	3	4	7	8	9	0	0	1	1	1	1	2
		6	7	5	8	2	1	9	0	7	3	0	2	8	2	7	4	9	4	2	8	0	2	4	9	9
FISCHER 344 RATS MALE CONTROL	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	2	4	3	4	1	2	2	4	2	1	0	4	0	1	2	4	0	3	1	0	4	0	4	0
		8	9	3	0	4	4	2	3	2	5	2	5	5	1	1	4	9	7	2	7	9	1	2	8	4

males
(cont...)

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+
Intestine Small, Jejunum	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Mesentery					+											+		+	+						+
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

DAY ON TEST		2	4	4	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7
		9	6	9	5	6	7	9	0	0	1	2	2	2	3	4	7	8	9	0	0	1	1	1	1	2
		6	7	5	8	2	1	9	0	7	3	0	2	8	2	7	4	9	4	2	8	0	2	4	9	9
FISCHER 344 RATS MALE CONTROL		.....																								
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	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	4	3	4	1	2	2	4	2	1	0	4	0	1	2	4	0	3	1	0	4	0	4	0
		8	9	3	0	4	4	2	3	2	5	2	5	5	1	1	4	9	7	2	7	9	1	2	8	4
		males (cont...)																								

males
(cont...)

Stomach, Glandular

+ +

Tongue

CARDIOVASCULAR SYSTEM

Blood Vessel

+

Heart

+ +

Pericardium, Carcinoma, Metastatic,
Lung

ENDOCRINE SYSTEM

Adrenal Cortex

+ +

Adrenal Medulla

+ +

Pheochromocytoma Benign

X

X

X

Pheochromocytoma Malignant

Islets, Pancreatic

+ +

Adenoma

Carcinoma

X

Parathyroid Gland

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

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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

| |
|----------------------------|
| Pituitary Gland | + |
| Adenoma | X | X | | | X | X | | | X | | X | X | X | X | X | X | X | X | X | | | | | X | X |
| Thyroid Gland | + |
| C-cell, Adenoma | | | | | | X | X | | | | | | | | | | | | | | | | | | |
| C-cell, Carcinoma |
| Follicular Cell, Carcinoma | |

GENERAL BODY SYSTEM

| | |
|------------|--|
| Peritoneum | |
|------------|--|

GENITAL SYSTEM

| |
|---------------------------------------|
| Epididymis | + |
| Preputial Gland | + |
| Prostate | + |
| Seminal Vesicle | + |
| Testes | + |
| Bilateral, Interstitial Cell, Adenoma | | | | X | | | | | | | | | | | | | | | X | | X | X | | X | |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

| | | |
|----------------------------------|--|-----------------|
| DAY ON TEST | | 2 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 9 | 6 | 9 | 5 | 6 | 7 | 9 | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 4 | 7 | 8 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 2 |
| | | 6 | 7 | 5 | 8 | 2 | 1 | 9 | 0 | 7 | 3 | 0 | 2 | 8 | 2 | 7 | 4 | 9 | 4 | 2 | 8 | 0 | 2 | 4 | 9 | 9 |
| | | |
| FISCHER 344 RATS MALE
CONTROL | | 0 | 0 | |
| | | 0 | 0 | |
| | | 0 | 0 | |
| | | 0 | 2 | 4 | 3 | 4 | 1 | 2 | 2 | 4 | 2 | 1 | 0 | 4 | 0 | 1 | 2 | 4 | 0 | 3 | 1 | 0 | 4 | 0 | 4 | 0 |
| | | 8 | 9 | 3 | 0 | 4 | 4 | 2 | 3 | 2 | 5 | 2 | 5 | 5 | 1 | 1 | 4 | 9 | 7 | 2 | 7 | 9 | 1 | 2 | 8 | 4 |
| | | males (cont...) | |

Interstitial Cell, Adenoma

X X X X X X X X X X

HEMATOPOIETIC SYSTEM

| |
|--------------------------------------|
| Bone Marrow | + |
| Lymph Node | | | | | | | | + | | | | | | | + | | | + | | | | | |
| Lymph Node, Bronchial | M | + | M | M | M | + | M | M | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M |
| 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 |
| Lymph Node, Mediastinal | M | M | + | M | + | M | M | M | + | M | + | M | M | + | + | + | + | + | + | + | + | + | M |
| Carcinoma, Metastatic, Thyroid Gland | |
| Lymph Node, Mesenteric | + |
| Spleen | + |
| Thymus | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

INTEGUMENTARY SYSTEM

| |
|---------------|
| Mammary Gland | + |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

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

Carcinoma, Multiple

| |
|------------------------------|
| Skin | + |
| Basal Cell Adenoma |
| Keratoacanthoma | | | | | | | | | | X | | | | | | X | | | | | | X | | |
| Sebaceous Gland, Adenoma |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | X | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

| | |
|--|---|
| Bone | + |
| Cranium, Carcinoma, Metastatic, Zymbal'S Gland | |
| Skeletal Muscle |
| Carcinoma, Metastatic, Lung |

NERVOUS SYSTEM

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

RESPIRATORY SYSTEM

| |
|--------|
| Larynx | + |
|--------|

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

| | | | | |
|----------------------------------|--|--------------------|--------------------|---|
| DAY ON TEST | | 2 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | males
(cont...) | | |
| | | 9 | 6 | 9 | 5 | 6 | 7 | 9 | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 4 | 7 | 8 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | | 2 | |
| | | 6 | 7 | 5 | 8 | 2 | 1 | 9 | 0 | 7 | 3 | 0 | 2 | 8 | 2 | 7 | 4 | 9 | 4 | 2 | 8 | 0 | 2 | 4 | 9 | | 9 | |
| | | | | |
| FISCHER 344 RATS MALE
CONTROL | | 0 | | males
(cont...) | |
| | | 0 | | | 0 |
| | | 0 | | | 0 |
| | | 0 | 2 | 4 | 3 | 4 | 1 | 2 | 2 | 4 | 2 | 1 | 0 | 4 | 0 | 1 | 2 | 4 | 0 | 3 | 1 | 0 | 4 | 0 | 4 | | | 0 |
| | | 8 | 9 | 3 | 0 | 4 | 4 | 2 | 3 | 2 | 5 | 2 | 5 | 5 | 1 | 1 | 4 | 9 | 7 | 2 | 7 | 9 | 1 | 2 | 8 | | 4 | |

| | |
|---|---|
| Lung | + |
| Alveolar/Bronchiolar Adenoma |
| Alveolar/Bronchiolar Carcinoma, Multiple |
| Pheochromocytoma Malignant, Metastatic, Adrenal Medulla | |
| Nose | + |
| Pleura | + | |
| Trachea | + |

SPECIAL SENSES SYSTEM

| |
|-----------------|
| Eye | + |
| Harderian Gland | + |
| Zymbal's Gland | |
| Carcinoma |

URINARY SYSTEM

| |
|--------|
| Kidney | + |
|--------|

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | |
|----------------------------------|--|-----------------|
| DAY ON TEST | | 2 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 9 | 6 | 9 | 5 | 6 | 7 | 9 | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 4 | 7 | 8 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 2 |
| | | 6 | 7 | 5 | 8 | 2 | 1 | 9 | 0 | 7 | 3 | 0 | 2 | 8 | 2 | 7 | 4 | 9 | 4 | 2 | 8 | 0 | 2 | 4 | 9 | 9 |
| | | |
| FISCHER 344 RATS MALE
CONTROL | | 0 | 0 | |
| | | 0 | 0 | |
| | | 0 | 0 | |
| | | 0 | 2 | 4 | 3 | 4 | 1 | 2 | 2 | 4 | 2 | 1 | 0 | 4 | 0 | 1 | 2 | 4 | 0 | 3 | 1 | 0 | 4 | 0 | 4 | 0 |
| | | 8 | 9 | 3 | 0 | 4 | 4 | 2 | 3 | 2 | 5 | 2 | 5 | 5 | 1 | 1 | 4 | 9 | 7 | 2 | 7 | 9 | 1 | 2 | 8 | 4 |
| | | males (cont...) | |

LipomaX

Renal Tubule, Adenoma

Renal Tubule, Carcinoma

| |
|-----------------|
| Urinary Bladder | + |
|-----------------|

SYSTEMIC LESIONS

| |
|------------------------|
| Multiple Organ | + |
| Leukemia Mononuclear | | | | | | | | X | X | X | X | X | | X | X | | X | X | X | X | X | X | | X | |
| Mesothelioma Malignant | | | | | | | X | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

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

ALIMENTARY SYSTEM

| | |
|---------------------------|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mesentery | | | | | | | | | | + | | + | | | | | | | | | | | | 7 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

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

Stomach, Glandular

+ 50

Tongue

+ 1

CARDIOVASCULAR SYSTEM

Blood Vessel

1

Heart

+ 50

Pericardium, Carcinoma, Metastatic,
Lung

X 1

ENDOCRINE SYSTEM

Adrenal Cortex

+ 50

Adrenal Medulla

+ 50

Pheochromocytoma Benign

X X X X 7

Pheochromocytoma Malignant

X 1

Islets, Pancreatic

+ 50

Adenoma

X 1

Carcinoma

X 2

Parathyroid Gland

+ + + M + + + + + + M + + + + + + + + + M + + M 45

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

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

HEMATOPOIETIC SYSTEM

| | |
|--------------------------------------|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | | | | + | | | | | | + | | | | | | + | | | + | | | | 7 |
| Lymph Node, Bronchial | + | + | M | M | M | + | M | M | M | M | M | M | M | M | M | M | + | M | M | M | M | M | M | 7 |
| 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 | 1 |
| Lymph Node, Mediastinal | + | + | + | + | + | + | + | M | + | + | M | + | M | + | M | + | + | + | M | + | + | M | + | 34 |
| Carcinoma, Metastatic, Thyroid Gland | | | | X | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

INTEGUMENTARY SYSTEM

| | |
|---------------|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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

| | |
|------------------------------|----|
| Carcinoma, Multiple |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | 1 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Basal Cell Adenoma | | | | | | | | | | | | | | | X | | | | | | | | | | | 1 |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | X | | | | | | | 4 |
| Sebaceous Gland, Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | 1 |
| Subcutaneous Tissue, Fibroma | | | X | | | | | | X | | | | | | | | | | | | | | | | | 3 |

MUSCULOSKELETAL SYSTEM

| | |
|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cranium, Carcinoma, Metastatic,
Zymbal'S Gland | | 1 |
| Skeletal Muscle | | | | | | | | | | | | | + | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Lung | | | | | | | | | | | | X | | | | | | | | | | | | | | 1 |

NERVOUS SYSTEM

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

RESPIRATORY SYSTEM

| | |
|--------|----|
| Larynx | + | 50 |
|--------|----|

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

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

| | |
|---|----|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Alveolar/Bronchiolar Adenoma | | | | | | | | | | | | | | | | | | X | | | | | | 1 |
| Alveolar/Bronchiolar Carcinoma, Multiple | | | | | | | | | | | X | | | | | | | | | | | | | 1 |
| Pheochromocytoma Malignant, Metastatic, Adrenal Medulla |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pleura | | | + | | | | | | | + | | | | | + | | | | | + | | | | 5 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SPECIAL SENSES SYSTEM

| | |
|-----------------|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Zymbal's Gland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

URINARY SYSTEM

| | |
|--------|----|
| Kidney | + | 50 |
|--------|----|

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

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

Lipoma 1

Renal Tubule, Adenoma X 1

Renal Tubule, Carcinoma X 1

Urinary Bladder + 50

SYSTEMIC LESIONS

| | |
|------------------------|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | X | | | | X | X | X | X | | X | | X | | X | | X | | | | X | X | | | 26 |
| Mesothelioma Malignant | | | | | | | | | | | | | | X | | X | | | | | | | | 3 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

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

ALIMENTARY SYSTEM

| |
|---------------------------|
| Esophagus | + |
| Intestine Large, Cecum | + |
| Intestine Large, Colon | + |
| Intestine Large, Rectum | + |
| Intestine Small, Duodenum | + |
| Intestine Small, Ileum | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + |
| Mesentery | | | + | + | | | | | | + | | | + | | | | | | | | + | | | + | |
| Pancreas | + |
| Salivary Glands | + |
| Stomach, Forestomach | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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

250 PPM | | ANIMAL ID | 0 | |
| | | 0 | 0 | |
| | | 2 | 2 | |
| | | 2 | 4 | 0 | 3 | 3 | 4 | 2 | 4 | 2 | 1 | 1 | 3 | 1 | 3 | 4 | 2 | 4 | 3 | 3 | 0 | 0 | 1 | 4 | 2 | 3 |
| | | 0 | 1 | 7 | 2 | 5 | 0 | 4 | 5 | 9 | 6 | 5 | 6 | 7 | 3 | 4 | 2 | 8 | 4 | 8 | 2 | 9 | 4 | 7 | 5 | 9 |
| | | males (cont...) | |

| |
|--------------------|
| Stomach, Glandular | + |
| Tongue |
| Papilloma |
| Tooth |

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

| |
|------------------------------------|
| Adrenal Cortex | + |
| Adenoma |
| Adrenal Medulla | + |
| Pheochromocytoma Benign |
| Pheochromocytoma Malignant |
| Bilateral, Pheochromocytoma Benign | |
| Islets, Pancreatic | + |
| Adenoma |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

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

males
(cont...)

Carcinoma

Parathyroid Gland

Pituitary Gland

Adenoma

Thyroid Gland

C-cell, Adenoma

C-cell, Carcinoma

Follicular Cell, Adenoma

GENERAL BODY SYSTEM

Peritoneum

GENITAL SYSTEM

Epididymis

Preputial Gland

Carcinoma

Prostate

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|----------------------------------|--|-----------------|
| DAY ON TEST | | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | | 4 | 8 | 1 | 2 | 3 | 4 | 6 | 6 | 7 | 8 | 9 | 1 | 1 | 1 | 2 | 3 | 3 | 4 | 6 | 6 | 7 | 7 | 7 | 8 | 8 |
| | | 5 | 0 | 9 | 8 | 6 | 1 | 5 | 5 | 5 | 9 | 6 | 3 | 8 | 8 | 4 | 2 | 9 | 3 | 5 | 9 | 0 | 4 | 4 | 3 | 6 |
| FISCHER 344 RATS MALE
250 PPM | | |
| | | 0 | 0 | |
| | | 0 | 0 | |
| | | 2 | 2 | |
| | | 2 | 4 | 0 | 3 | 3 | 4 | 2 | 4 | 2 | 1 | 1 | 3 | 1 | 3 | 4 | 2 | 4 | 3 | 3 | 0 | 0 | 1 | 4 | 2 | 3 |
| | | 0 | 1 | 7 | 2 | 5 | 0 | 4 | 5 | 9 | 6 | 5 | 6 | 7 | 3 | 4 | 2 | 8 | 4 | 8 | 2 | 9 | 4 | 7 | 5 | 9 |
| | | males (cont...) | |

males
(cont...)

Seminal Vesicle

+ +

Testes

+ +

Bilateral, Interstitial Cell, Adenoma

X

X X

X X

X X

X

Interstitial Cell, Adenoma

X X

X X X

X X

X

HEMATOPOIETIC SYSTEM

Bone Marrow

+ +

Lymph Node

+ + + + +

Deep Cervical, Carcinoma, Metastatic,
Skin

X

Lymph Node, Bronchial

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

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, Mediastinal

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

Carcinoma, Metastatic, Thyroid Gland

Lymph Node, Mesenteric

+ +

Spleen

+ +

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|----------------------------------|--|-----------------|
| DAY ON TEST | | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | | 4 | 8 | 1 | 2 | 3 | 4 | 6 | 6 | 7 | 8 | 9 | 1 | 1 | 1 | 2 | 3 | 3 | 4 | 6 | 6 | 7 | 7 | 7 | 8 | 8 |
| | | 5 | 0 | 9 | 8 | 6 | 1 | 5 | 5 | 5 | 9 | 6 | 3 | 8 | 8 | 4 | 2 | 9 | 3 | 5 | 9 | 0 | 4 | 4 | 3 | 6 |
| FISCHER 344 RATS MALE
250 PPM | | |
| | | 0 | 0 | |
| | | 0 | 0 | |
| | | 2 | 2 | |
| | | 2 | 4 | 0 | 3 | 3 | 4 | 2 | 4 | 2 | 1 | 1 | 3 | 1 | 3 | 4 | 2 | 4 | 3 | 3 | 0 | 0 | 1 | 4 | 2 | 3 |
| | | 0 | 1 | 7 | 2 | 5 | 0 | 4 | 5 | 9 | 6 | 5 | 6 | 7 | 3 | 4 | 2 | 8 | 4 | 8 | 2 | 9 | 4 | 7 | 5 | 9 |
| | | males (cont...) | |

Thymus

+ + + M +

INTEGUMENTARY SYSTEM

Mammary Gland

+ +

Fibroadenoma

Skin

+ +

Basal Cell Adenoma

Keratoacanthoma

Keratoacanthoma, Multiple

Sebaceous Gland, Carcinoma

X

Subcutaneous Tissue, Carcinoma,
Metastatic, Harderian Gland

X

Subcutaneous Tissue, Fibroma

Subcutaneous Tissue, Lipoma

MUSCULOSKELETAL SYSTEM

Bone

+ +

Skeletal Muscle

+ +

Rhabdomyosarcoma

X

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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

250 PPM | | ANIMAL ID | 0 |
| | | 0 | 0 |
| | | 2 | 2 |
| | | 2 | 4 | 0 | 3 | 3 | 4 | 2 | 4 | 2 | 1 | 1 | 3 | 1 | 3 | 4 | 2 | 4 | 3 | 3 | 0 | 0 | 1 | 4 | 2 | 3 |
| | | 0 | 1 | 7 | 2 | 5 | 0 | 4 | 5 | 9 | 6 | 5 | 6 | 7 | 3 | 4 | 2 | 8 | 4 | 8 | 2 | 9 | 4 | 7 | 5 | 9 |
| | | males (cont...) | |

NERVOUS SYSTEM

| |
|-------------------------------|
| Brain | + |
| Granular Cell Tumor Malignant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |

RESPIRATORY SYSTEM

| | |
|---|---|
| Larynx | + |
| Lung | + |
| Alveolar/Bronchiolar Adenoma |
| Carcinoma, Metastatic, Skin |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |
| Nose | + |
| Respiratory Epithelium, Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |
| Respiratory Epithelium, Adenoma, Multiple | |
| Pleura |
| Trachea | + |

SPECIAL SENSES SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

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

ALIMENTARY SYSTEM

| | |
|---------------------------|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Ileum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Intestine Small, Jejunum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mesentery | | | | | + | | | + | | | | | | | | + | + | + | + | | | + | | 13 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqsted: 01/12/2006

Time Report Reqsted: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | | | |
|--------------------------------------|--|-----------------------|--|--|
| DAY ON TEST | | 7
0
5 | 7
1
1 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | | |
| | | | | |
| FISCHER 344 RATS MALE

250 PPM | | 0
0
2
4
2 | 0
0
2
4
6 | 0
0
2
0
4 | 0
0
2
0
6 | 0
0
2
0
8 | 0
0
2
1
2 | 0
0
2
2
3 | 0
0
2
2
7 | 0
0
2
2
8 | 0
0
2
3
1 | 0
0
2
4
3 | 0
0
2
4
9 | 0
0
2
5
0 | 0
0
2
0
1 | 0
0
2
0
3 | 0
0
2
0
5 | 0
0
2
1
0 | 0
0
2
1
1 | 0
0
2
1
3 | 0
0
2
1
8 | 0
0
2
1
9 | 0
0
2
2
1 | 0
0
2
2
6 | 0
0
2
3
0 | | |
| | | | | |
| | | ANIMAL ID | | | |
| | | | | |
| | | | | * TOTALS | | | |

Stomach, Glandular

+ 50

Tongue

+ 3

Papilloma

X 1

Tooth

+ 1

CARDIOVASCULAR SYSTEM

Blood Vessel

1

Heart

+ 50

ENDOCRINE SYSTEM

Adrenal Cortex

+ 50

Adenoma

X 2

Adrenal Medulla

+ 50

Pheochromocytoma Benign

X X X X 6

Pheochromocytoma Malignant

X 1

Bilateral, Pheochromocytoma Benign

1

Islets, Pancreatic

+ 50

Adenoma

X X 2

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

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

Seminal Vesicle

+ 50

Testes

+ 50

Bilateral, Interstitial Cell, Adenoma

X 24

Interstitial Cell, Adenoma

X 14

HEMATOPOIETIC SYSTEM

Bone Marrow

+ 50

Lymph Node

+ 10

Deep Cervical, Carcinoma, Metastatic,
Skin

1

Lymph Node, Bronchial

M M M M M M M M M + M + + + + M + M M + M M M M M 12

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 3

Lymph Node, Mediastinal

+ + M M + M + + + + + + + M + + M M M M + M + + 32

Carcinoma, Metastatic, Thyroid Gland

X 1

Lymph Node, Mesenteric

+ 50

Spleen

+ 50

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

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

| | |
|--------|----|
| Thymus | + | 49 |
|--------|----|

INTEGUMENTARY SYSTEM

| | |
|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibroadenoma | | | | X | | | | | | | | | | | | | | | | | | | | 1 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Basal Cell Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | 1 |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | X | | | | 1 |
| Keratoacanthoma, Multiple | | | | | | | X | | | | | | | | | | | | | | | | | 1 |
| Sebaceous Gland, Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Subcutaneous Tissue, Carcinoma, Metastatic, Harderian Gland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Subcutaneous Tissue, Fibroma | | X | | | | | X | | | | | | | | | | | | X | | | | | 3 |
| Subcutaneous Tissue, Lipoma | | | | | | | | | | | | | | | | | | X | | | | | | 1 |

MUSCULOSKELETAL SYSTEM

| | |
|------------------|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Skeletal Muscle |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| Rhabdomyosarcoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | DAY ON TEST | |
|--------------------------------------|-----------|-------------|
| | | 7
0
5 | 7
1
1 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 |
| | | |
| FISCHER 344 RATS MALE

250 PPM | ANIMAL ID | 0 |
| | | 0 |
| | | 2 |
| | | 4 | 4 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 5 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 |
| | | 2 | 6 | 4 | 6 | 8 | 2 | 3 | 7 | 8 | 1 | 3 | 9 | 0 | 1 | 3 | 5 | 0 | 1 | 3 | 8 | 9 | 1 | 6 | 0 |
| | | | * TOTALS |

| | |
|--|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Harderian Gland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

URINARY SYSTEM

| | |
|-------------------------|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Renal Tubule, Adenoma | | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | 4 |
| Renal Tubule, Carcinoma | | | | | | | | | | | X | | | | | | | | | | | | | | 1 |
| Ureter |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SYSTEMIC LESIONS

| | |
|------------------------|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | X | X | | | | | X | X | X | X | X | | | X | X | X | X | | X | X | X | X | | X | 32 |
| Mesothelioma Malignant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | | |
|----------------------------------|-------------|-------------|--------------------|
| FISCHER 344 RATS MALE
500 PPM | DAY ON TEST | 2
1
3 | 4
6
0 | 4
9
5 | 5
2
3 | 5
5
4 | 5
6
9 | 6
0
0 | 6
2
5 | 6
2
6 | 6
3
4 | 6
3
8 | 6
3
9 | 6
4
5 | 6
4
6 | 6
4
8 | 6
7
0 | 6
7
0 | 6
7
4 | 6
7
9 | 6
8
8 | 6
9
5 | 7
0
2 | 7
2
9 | 7
2
9 | males
(cont...) |
| | | 0
0
4
4
1 | 0
0
4
3
7 | 0
0
4
0
1 | 0
0
4
3
9 | 0
0
4
2
9 | 0
0
4
2
4 | 0
0
4
3
5 | 0
0
4
0
2 | 0
0
4
0
2 | 0
0
4
0
2 | 0
0
4
0
3 | 0
0
4
3
1 | 0
0
4
3
4 | 0
0
4
1
9 | 0
0
4
1
1 | 0
0
3
0
6 | 0
0
3
2
6 | 0
0
4
2
0 | 0
0
4
4
8 | 0
0
4
2
8 | 0
0
2
2
7 | 0
0
3
3
5 | 0
0
0
0
4 | | |

males
(cont...)

ALIMENTARY SYSTEM

| |
|---------------------------|
| Esophagus | + |
| Intestine Large, Cecum | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | + |
| Intestine Large, Rectum | + |
| Intestine Small, Duodenum | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + |
| Hepatocellular Adenoma |
| Mesentery | | | | | | | + | | | | | | | | | | | | | + | | + | | | |
| Pancreas | + |
| Salivary Glands | + |
| Stomach, Forestomach | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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

500 PPM | | ANIMAL ID | 0 |
| | | 0 | 0 |
| | | 4 | 4 |
| | | 4 | 3 | 0 | 3 | 2 | 4 | 2 | 3 | 0 | 4 | 0 | 3 | 3 | 1 | 1 | 3 | 0 | 3 | 2 | 4 | 2 | 2 | 3 | 0 | 0 |
| | | 1 | 7 | 1 | 9 | 9 | 4 | 5 | 2 | 2 | 2 | 3 | 1 | 4 | 9 | 1 | 8 | 6 | 6 | 0 | 8 | 8 | 7 | 5 | 4 | 5 |
| males (cont...) | | |

| |
|--------------------|
| Stomach, Glandular | + |
| Tongue |

CARDIOVASCULAR SYSTEM

| | |
|--|---|
| Blood Vessel |
| Heart | + |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung | |

ENDOCRINE SYSTEM

| |
|----------------------------|
| Adrenal Cortex | + |
| Adenoma | | | | | | | | | | X | | | | | | | | | | | | | | | |
| Adrenal Medulla | + |
| Pheochromocytoma Benign | | | | | | | | | | X | | | | | | | | | X | | X | | | | |
| Pheochromocytoma Malignant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | | |
| Islets, Pancreatic | + |
| Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | | |
| Carcinoma |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

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

500 PPM | | |
| | | 0 | 0 |
| | | 0 | 0 |
| | | 4 | 4 |
| | | 4 | 3 | 0 | 3 | 2 | 4 | 2 | 3 | 0 | 4 | 0 | 3 | 3 | 1 | 1 | 3 | 0 | 3 | 2 | 4 | 2 | 2 | 3 | 0 | 0 |
| | | 1 | 7 | 1 | 9 | 9 | 4 | 5 | 2 | 2 | 2 | 3 | 1 | 4 | 9 | 1 | 8 | 6 | 6 | 0 | 8 | 8 | 7 | 5 | 4 | 5 |
| | | males (cont...) | |

Parathyroid Gland

+ +

Pituitary Gland

+ + + + + A + + + + + + + + + + + + + + + + + + +

Adenoma

X X

Thyroid Gland

+ +

C-cell, Adenoma

X

C-cell, Carcinoma

GENERAL BODY SYSTEM

Peritoneum

+ +

Carcinoma, Metastatic, Urinary Bladder

X

GENITAL SYSTEM

Epididymis

+ +

Preputial Gland

+ +

Carcinoma

Prostate

+ +

Carcinoma, Metastatic, Urinary Bladder

X

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|----------------------------------|--|-----------------|
| DAY ON TEST | | 2 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | |
| | | 1 | 6 | 9 | 2 | 5 | 5 | 6 | 0 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 7 | 7 | 7 | 7 | 8 | 9 | 0 | 2 | 2 |
| | | 3 | 0 | 5 | 3 | 4 | 4 | 9 | 0 | 5 | 6 | 4 | 8 | 9 | 5 | 6 | 8 | 0 | 0 | 4 | 9 | 8 | 5 | 2 | 9 | 9 |
| FISCHER 344 RATS MALE
500 PPM | | |
| | | 0 | 0 |
| | | 0 | 0 |
| | | 4 | 4 |
| | | 4 | 3 | 0 | 3 | 2 | 4 | 2 | 3 | 0 | 4 | 0 | 3 | 3 | 1 | 1 | 3 | 0 | 3 | 2 | 4 | 2 | 2 | 3 | 0 | 0 |
| | | 1 | 7 | 1 | 9 | 9 | 4 | 5 | 2 | 2 | 2 | 3 | 1 | 4 | 9 | 1 | 8 | 6 | 6 | 0 | 8 | 8 | 7 | 5 | 4 | 5 |
| | | males (cont...) | |

Seminal Vesicle

+ +

Testes

+ +

Bilateral, Interstitial Cell, Adenoma

X X

Interstitial Cell, Adenoma

X X

HEMATOPOIETIC SYSTEM

Bone Marrow

+ +

Lymph Node

+ +

Lymph Node, Bronchial

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

Lymph Node, Mandibular

M M

Lymph Node, Mediastinal

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

Lymph Node, Mesenteric

+ +

Spleen

+ +

Thymus

+ +

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

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

500 PPM | | |
| | | 0 | 0 |
| | | 0 | 0 |
| | | 4 | 4 |
| | | 4 | 3 | 0 | 3 | 2 | 4 | 2 | 3 | 0 | 4 | 0 | 3 | 3 | 1 | 1 | 3 | 0 | 3 | 2 | 4 | 2 | 2 | 3 | 0 | 0 |
| | | 1 | 7 | 1 | 9 | 9 | 4 | 5 | 2 | 2 | 2 | 3 | 1 | 4 | 9 | 1 | 8 | 6 | 6 | 0 | 8 | 8 | 7 | 5 | 4 | 5 |
| | | males (cont...) | |

INTEGUMENTARY SYSTEM

| |
|------------------------------|
| Mammary Gland | + |
| Carcinoma |
| Fibroadenoma |
| Skin | + |
| Basal Cell Adenoma |
| Basal Cell Carcinoma | | | | | | | | X | | | | | | | | | | | | X | | | | | |
| Keratoacanthoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | |
| Squamous Cell Papilloma |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | | | | X | | | | | X |
| Subcutaneous Tissue, Lipoma | |

MUSCULOSKELETAL SYSTEM

| | |
|--|---|
| Bone | + |
| Skeletal Muscle | + | |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung | |
| Carcinoma, Metastatic, Urinary Bladder | X | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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

500 PPM | | ANIMAL ID | 0 | 0 |
| | | 0 | 0 | 0 |
| | | 4 | 4 | 4 |
| | | 4 | 3 | 0 | 3 | 2 | 4 | 2 | 3 | 0 | 4 | 0 | 3 | 3 | 1 | 1 | 3 | 0 | 3 | 2 | 4 | 2 | 2 | 3 | 0 | 0 |
| | | 1 | 7 | 1 | 9 | 9 | 4 | 5 | 2 | 2 | 2 | 3 | 1 | 4 | 9 | 1 | 8 | 6 | 6 | 0 | 8 | 8 | 7 | 5 | 4 | 5 |
| | | | males (cont...) | |

NERVOUS SYSTEM

| |
|------------------|
| Brain | + |
| Peripheral Nerve | + | |
| Spinal Cord | + | |

RESPIRATORY SYSTEM

| | |
|---|---|
| Larynx | + |
| Lung | + |
| Alveolar/Bronchiolar Adenoma |
| Alveolar/Bronchiolar Carcinoma, Multiple | |
| Carcinoma, Metastatic, Skin |
| Carcinoma, Metastatic, Urinary Bladder | X | |
| Nose | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Glands, Respiratory Epithelium, Adenoma |
| Respiratory Epithelium, Adenoma | | | | | | | | | | | | | X | | | | X | | X | | X | | | | X |
| Respiratory Epithelium, Adenoma, Multiple | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|--|--|----------------|
| | | 2 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | |
| DAY ON TEST | | 1 | 6 | 9 | 2 | 5 | 5 | 6 | 0 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 7 | 7 | 7 | 7 | 8 | 9 | 0 | 2 | 2 |
| | | 3 | 0 | 5 | 3 | 4 | 4 | 9 | 0 | 5 | 6 | 4 | 8 | 9 | 5 | 6 | 8 | 0 | 0 | 4 | 9 | 8 | 5 | 2 | 9 | 9 |
| | | |
| FISCHER 344 RATS MALE | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 500 PPM |  | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | 4 | 3 | 0 | 3 | 2 | 4 | 2 | 3 | 0 | 4 | 0 | 3 | 3 | 1 | 1 | 3 | 0 | 3 | 2 | 4 | 2 | 2 | 3 | 0 | 0 |
| | | 1 | 7 | 1 | 9 | 9 | 4 | 5 | 2 | 2 | 2 | 3 | 1 | 4 | 9 | 1 | 8 | 6 | 6 | 0 | 8 | 8 | 7 | 5 | 4 | 5 |
| | | males (cont..) | |
| | | |
| Pleura | | + |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung | | |
| | | |
| Trachea | | + | + |
| | | |
| SPECIAL SENSES SYSTEM | | |
| | | |
| Eye | | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | |
| Harderian Gland | | + | + |
| | | |
| URINARY SYSTEM | | |
| | | |
| Kidney | | + | + |
| Bilateral, Renal Tubule, Carcinoma | | X |
| Renal Tubule, Adenoma | | X X X |
| Renal Tubule, Carcinoma | | |
| | | |
| Urethra | | + |
| | | |
| Urinary Bladder | | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Transitional Epithelium, Carcinoma | | X X |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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

SYSTEMIC LESIONS

| |
|------------------------|
| Multiple Organ | + |
| Leukemia Mononuclear | | X | X | X | X | | | X | X | X | | X | X | X | X | | X | X | X | X | X | X | X | X | |
| Mesothelioma Malignant | | | | | | | | | | | X | X | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | | | |
|---|--|-----------|---|----------|
| DAY ON TEST | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| <hr style="border-top: 1px dotted black;"/> | | | | |
| FISCHER 344 RATS MALE

500 PPM | | ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | | | 0 | 0 | | |
| | | | | 4 | 4 | |
| | | | | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 3 | 4 |
| | | | | 7 | 0 | 2 | 6 | 8 | 1 | 3 | 4 | 6 | 0 | 0 | 3 | 5 | 6 | 8 | 9 | 3 | 4 | 5 | 7 | 2 | 3 | 7 |
| | | | | * TOTALS | |

ALIMENTARY SYSTEM

| | |
|---------------------------|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hepatocellular Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Mesentery | | | + | | | | + | | | | + | | + | + | | | + | | | | + | | | 10 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | DAY ON TEST | 7 | |
|-----------------------|-------------|----------|
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| FISCHER 344 RATS MALE | ANIMAL ID | 0 | |
| 500 PPM | | 0 | |
| | | 4 | |
| | | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 4 | 5 | |
| | | 7 | 0 | 2 | 6 | 8 | 1 | 3 | 4 | 6 | 0 | 0 | 3 | 5 | 6 | 8 | 9 | 3 | 4 | 5 | 7 | 2 | 3 | 7 | 9 | 0 | * TOTALS |

| | |
|--------------------|----|
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Tongue | | | | | | | | | | | + | | | | | | | | | | | | | | | 1 |

CARDIOVASCULAR SYSTEM

| | |
|--|----|
| Blood Vessel |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung | | | | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

ENDOCRINE SYSTEM

| | |
|----------------------------|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | X | | | | | | X | | | | | | | | | | | | | | 3 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pheochromocytoma Benign | | X | X | | | | | | | | X | | | | X | | | | | X | X | | | | | 9 |
| Pheochromocytoma Malignant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| Carcinoma | | | X | | | | | X | | | | | | | | | | | | | | | | | | 2 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | | |
|----------------------------------|---|-----------------------|--|
| FISCHER 344 RATS MALE
500 PPM | DAY ON TEST | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
3
0 | 7
2
3
0 | 7
2
3
0 | 7
2
3
0 | 7
2
3
0 | 7
2
3
0 | 7
2
3
0 | 7
2
3
0 | 7
2
3
0 | 7
2
3
0 | |
| | <hr style="border-top: 1px dotted black;"/> | | |
| | ANIMAL ID | 0
0
4
0
7 | 0
0
4
1
0 | 0
0
4
1
2 | 0
0
4
1
6 | 0
0
4
1
8 | 0
0
4
2
1 | 0
0
4
2
3 | 0
0
4
2
4 | 0
0
4
2
6 | 0
0
4
3
0 | 0
0
4
4
0 | 0
0
4
4
3 | 0
0
4
4
5 | 0
0
4
4
6 | 0
0
4
4
8 | 0
0
4
4
9 | 0
0
4
4
3 | 0
0
4
4
4 | 0
0
4
4
5 | 0
0
4
4
7 | 0
0
4
4
2 | 0
0
4
4
3 | 0
0
4
4
7 | |
| | | | |
| | * TOTALS | |

Parathyroid Gland

+ + + + + + + M + + + + + + + + + + + + + + + 49

Pituitary Gland

+ 49

Adenoma

X X X X X X X X X X X X X X X X X X X 25

Thyroid Gland

+ 50

C-cell, Adenoma

1

C-cell, Carcinoma

X 1

GENERAL BODY SYSTEM

Peritoneum

+ 4

Carcinoma, Metastatic, Urinary Bladder

1

GENITAL SYSTEM

Epididymis

+ 50

Preputial Gland

+ 50

Carcinoma

X 1

Prostate

+ 50

Carcinoma, Metastatic, Urinary Bladder

1

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|---|--|----------|
| DAY ON TEST | | 7 |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <hr style="border-top: 1px dashed black;"/> | | |
| FISCHER 344 RATS MALE
500 PPM | | 0 |
| | | 0 |
| | | 4 |
| | | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 3 | 4 |
| | | 7 | 0 | 2 | 6 | 8 | 1 | 3 | 4 | 6 | 0 | 0 | 3 | 5 | 6 | 8 | 9 | 3 | 4 | 5 | 7 | 2 | 3 | 7 |
| | | * TOTALS |

NERVOUS SYSTEM

| | |
|------------------|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Peripheral Nerve |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Spinal Cord |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

RESPIRATORY SYSTEM

| | |
|---|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Alveolar/Bronchiolar Adenoma | | | | | | | | | | | | | | | | X | | | | | | | | | 2 |
| Alveolar/Bronchiolar Carcinoma, Multiple |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Carcinoma, Metastatic, Skin |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Carcinoma, Metastatic, Urinary Bladder |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Glands, Respiratory Epithelium, Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | 1 |
| Respiratory Epithelium, Adenoma | X | X | | | X | X | | X | | | | X | X | | | X | | | | | | X | | X | 15 |
| Respiratory Epithelium, Adenoma, Multiple | | | | | | | | | | | X | | | | | | | | | | | | | | 2 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Lab: BNW

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

SYSTEMIC LESIONS

[illegible]

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

1000 PPM | | ANIMAL ID | 0 |
| | | 0 | 0 |
| | | 6 | 6 |
| | | 3 | 4 | 0 | 1 | 1 | 4 | 2 | 4 | 2 | 1 | 1 | 3 | 2 | 1 | 4 | 2 | 0 | 3 | 4 | 3 | 1 | 1 | 2 | 3 | 3 |
| | | 8 | 2 | 4 | 2 | 8 | 0 | 9 | 6 | 5 | 1 | 7 | 0 | 4 | 6 | 8 | 8 | 6 | 2 | 1 | 7 | 3 | 5 | 7 | 4 | 3 |
| | | males (cont...) | |

| |
|----------------------|
| Salivary Glands | + |
| Stomach, Forestomach | + |
| Stomach, Glandular | + |
| Tongue | | | | | | | | | | | + | | | + | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | |
|--|---|
| Heart | + |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung | |
| Carcinoma, Metastatic, Prostate |

ENDOCRINE SYSTEM

| |
|------------------------------------|
| Adrenal Cortex | + |
| Adrenal Medulla | + |
| Pheochromocytoma Benign |
| Pheochromocytoma Malignant |
| Bilateral, Pheochromocytoma Benign | |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

| | | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | | | | | |
|-----------------------------------|-----------|--------------------|--|--|--|--|--|
| DAY ON TEST | | 5 | 1 | 4 | 5 | 8 | 0 | 1 | 2 | 2 | 3 | 3 | 4 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 8 | 0 | 1 | 1 | 1 | 2 | | | | | |
| | | 3 | 5 | 1 | 4 | 4 | 0 | 8 | 4 | 8 | 5 | 5 | 2 | 0 | 0 | 7 | 4 | 7 | 7 | 7 | 8 | 5 | 1 | 7 | 8 | 0 | | | | | |
| | | | | | | | |
| FISCHER 344 RATS MALE
1000 PPM | ANIMAL ID | 0 | 0 | | | | | |
| | | 0 | 0 | | | | | |
| | | 6 | 6 | | | | | |
| | | 3 | 4 | 0 | 1 | 1 | 4 | 2 | 4 | 2 | 1 | 1 | 3 | 2 | 1 | 4 | 2 | 0 | 3 | 4 | 3 | 1 | 1 | 2 | 3 | 3 | | | | | |
| | | 8 | 2 | 4 | 2 | 8 | 0 | 9 | 6 | 5 | 1 | 7 | 0 | 4 | 6 | 8 | 8 | 6 | 2 | 1 | 7 | 3 | 5 | 7 | 4 | 3 | | | | | |
| | | males
(cont...) | | | | | |
| Islets, Pancreatic | | + | + | | | | | | |
| Adenoma | | | | | | | |
| Carcinoma | | | | | | | |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | | | | | | |
| Pituitary Gland | | + | + | | | | | | |
| Adenoma | | X | X | | X | | X | X | | X | X | X | X | | X | X | X | | | X | X | | X | | X | X | | | | | |
| Thyroid Gland | | + | + | | | | | | |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | X | | | | | | | | | | | | |
| C-cell, Carcinoma | | | | | | | |
| Follicular Cell, Adenoma | | | X | | | | | | | | | |
| Follicular Cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | X | | | | | | | | | | |

GENERAL BODY SYSTEM

| | |
|---------------------------------|---|
| Peritoneum | + |
| Carcinoma, Metastatic, Prostate | X |

GENITAL SYSTEM

| |
|---------------------------------|
| Epididymis | + |
| Carcinoma, Metastatic, Prostate | | | | X | |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

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

1000 PPM | | 0 | 0 | |
| | | 0 | 0 | |
| | | 6 | 6 | |
| | | 3 | 4 | 0 | 1 | 1 | 4 | 2 | 4 | 2 | 1 | 1 | 3 | 2 | 1 | 4 | 2 | 0 | 3 | 4 | 3 | 1 | 1 | 2 | 3 | 3 |
| ANIMAL ID | | 8 | 2 | 4 | 2 | 8 | 0 | 9 | 6 | 5 | 1 | 7 | 0 | 4 | 6 | 8 | 8 | 6 | 2 | 1 | 7 | 3 | 5 | 7 | 4 | 3 |
| | | males (cont...) | |

| |
|---------------------------------------|
| Preputial Gland | + |
| Prostate | + |
| Carcinoma | | | | X | |
| Seminal Vesicle | + |
| Carcinoma, Metastatic, Prostate | | | | X | |
| Testes | + |
| Bilateral, Interstitial Cell, Adenoma | | | X | X | | X | | X | | | | | X | | X | X | X | X | | X | | X | X | X | X |
| Interstitial Cell, Adenoma | | | | | X | | X | | | | X | X | | X | | | | | X | | X | | | | |

HEMATOPOIETIC SYSTEM

| |
|-------------------------|
| Bone Marrow | + |
| Lymph Node | | | + | | + | | + | | | + | | | | | + | | + | | | | | + | | + | |
| Lymph Node, Bronchial | M | + | M | M | M | + | M | + | M | M | M | M | + | M | + | M | M | M | M | M | M | M | M | M | M |
| 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 |
| Lymph Node, Mediastinal | + | + | M | + | + | M | M | M | + | M | + | + | + | + | + | M | M | M | + | + | + | + | M | M | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

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

1000 PPM | | ANIMAL ID | 0 |
| | | 0 | 0 |
| | | 6 | 6 |
| | | 3 | 4 | 0 | 1 | 1 | 4 | 2 | 4 | 2 | 1 | 1 | 3 | 2 | 1 | 4 | 2 | 0 | 3 | 4 | 3 | 1 | 1 | 2 | 3 | 3 |
| | | 8 | 2 | 4 | 2 | 8 | 0 | 9 | 6 | 5 | 1 | 7 | 0 | 4 | 6 | 8 | 8 | 6 | 2 | 1 | 7 | 3 | 5 | 7 | 4 | 3 |
| | | males (cont...) | |

| |
|---------------------------------|
| Lymph Node, Mesenteric | + |
| Spleen | + |
| Carcinoma, Metastatic, Prostate | | | | X | |
| Thymus | + |

INTEGUMENTARY SYSTEM

| |
|-----------------------------------|
| Mammary Gland | + |
| Fibroadenoma |
| Skin | + |
| Basal Cell Adenoma |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | X | | | | | | | |
| Keratoacanthoma, Multiple |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |
| Trichoepithelioma |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | X | | | | | X | | | |
| Subcutaneous Tissue, Fibrosarcoma | |
| Subcutaneous Tissue, Schwannoma |
| Benign | | | | | | | | | | | | | | | X | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |
|---|--|-----------------|
| DAY ON TEST | | 5 | 1 | 4 | 5 | 8 | 0 | 1 | 2 | 2 | 3 | 3 | 4 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 8 | 0 | 1 | 1 | 1 | 2 |
| | | 3 | 5 | 1 | 4 | 4 | 0 | 8 | 4 | 8 | 5 | 5 | 2 | 0 | 0 | 7 | 4 | 7 | 7 | 7 | 7 | 8 | 5 | 1 | 7 | 8 | 0 |
| FISCHER 344 RATS MALE | | 0 | 0 |
| 1000 PPM | | 0 | 0 |
| ANIMAL ID | | 6 | 6 |
| | | 3 | 4 | 0 | 1 | 1 | 4 | 2 | 4 | 2 | 1 | 1 | 3 | 2 | 1 | 4 | 2 | 0 | 3 | 4 | 3 | 1 | 1 | 2 | 3 | 3 | 3 |
| | | 8 | 2 | 4 | 2 | 8 | 0 | 9 | 6 | 5 | 1 | 7 | 0 | 4 | 6 | 8 | 8 | 6 | 2 | 1 | 7 | 3 | 5 | 7 | 4 | 3 | 3 |
| | | males (cont...) | |
| Bone | | + | + | |
| Skeletal Muscle | | |
| Carcinoma, Metastatic, Prostate | | |
| | | |
| NERVOUS SYSTEM | | |
| Brain | | + | + | |
| | | |
| RESPIRATORY SYSTEM | | |
| Larynx | | + | + | |
| Lung | | + | + | |
| Alveolar/Bronchiolar Adenoma | | |
| Alveolar/Bronchiolar Carcinoma | | |
| Alveolar/Bronchiolar Carcinoma, Multiple | | |
| Carcinoma, Metastatic, Prostate | | |
| Carcinoma, Metastatic, Thyroid Gland | | |
| Pheochromocytoma Malignant, Metastatic, Adrenal Medulla | | |
| Nose | | + | + | |
| Respiratory Epithelium, Adenoma | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

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

1000 PPM | | |
| | | 0 | 0 | |
| | | 0 | 0 | |
| | | 6 | 6 | |
| | | 3 | 4 | 0 | 1 | 1 | 4 | 2 | 4 | 2 | 1 | 1 | 3 | 2 | 1 | 4 | 2 | 0 | 3 | 4 | 3 | 1 | 1 | 2 | 3 | 3 |
| | | 8 | 2 | 4 | 2 | 8 | 0 | 9 | 6 | 5 | 1 | 7 | 0 | 4 | 6 | 8 | 8 | 6 | 2 | 1 | 7 | 3 | 5 | 7 | 4 | 3 |
| | | males (cont...) | |

Respiratory Epithelium, Adenoma,
Multiple

X

Pleura

+

+

Trachea

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

SPECIAL SENSES SYSTEM

Eye

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

Harderian Gland

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

Zymbal's Gland

+

+

Carcinoma

X

X

URINARY SYSTEM

Kidney

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

Carcinoma, Metastatic, Prostate

X

Lipoma

X

Renal Tubule, Adenoma

X

X

Renal Tubule, Carcinoma

X

Ureter

+

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | FISCHER 344 RATS MALE | | males
(cont...) |
|-----------------------|--|-----------------------|--------------------|
| | | 1000 PPM | |
| | | ANIMAL ID | |
| DAY ON TEST | | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | | |
| | | 5 | 1 | 4 | 5 | 8 | 0 | 1 | 2 | 2 | 3 | 3 | 4 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 8 | 0 | 1 | 1 | 1 | 2 | |
| | | 3 | 5 | 1 | 4 | 4 | 0 | 8 | 4 | 8 | 5 | 5 | 2 | 0 | 0 | 7 | 4 | 7 | 7 | 7 | 8 | 5 | 1 | 7 | 8 | 0 | |
| FISCHER 344 RATS MALE | | 0 | 0 | |
| | | 0 | 0 | |
| | | 6 | 6 | |
| | | 3 | 4 | 0 | 1 | 1 | 4 | 2 | 4 | 2 | 1 | 1 | 3 | 2 | 1 | 4 | 2 | 0 | 3 | 4 | 3 | 1 | 1 | 2 | 3 | 3 | |
| | | 8 | 2 | 4 | 2 | 8 | 0 | 9 | 6 | 5 | 1 | 7 | 0 | 4 | 6 | 8 | 8 | 6 | 2 | 1 | 7 | 3 | 5 | 7 | 4 | 3 | |

males
(cont...)

Carcinoma, Metastatic, Prostate

X

Urethra

+

Carcinoma, Metastatic, Prostate

X

Urinary Bladder

+ +

Transitional Epithelium, Carcinoma

Transitional Epithelium, Papilloma

X

SYSTEMIC LESIONS

Multiple Organ

+ +

Histiocytic Sarcoma

Leukemia Mononuclear

Lymphoma Malignant

Mesothelioma Malignant

X X X X X X X X X X X X X X X X X X X

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|---|--|----------|
| | | 7 | 7 | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 6 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <hr style="border-top: 1px dotted black;"/> | | |
| FISCHER 344 RATS MALE

1000 PPM | | 0 | 0 | |
| | | 0 | 0 | |
| | | 6 | 6 | |
| | | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 4 | 4 |
| | | 0 | 1 | 2 | 5 | 8 | 9 | 1 | 2 | 1 | 5 | 6 | 9 | 3 | 7 | 9 | 3 | 7 | 9 | 4 | 0 | 3 | 6 | 4 | 5 |
| | | * TOTALS | |

ALIMENTARY SYSTEM

| | |
|---------------------------------|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Prostate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Hepatocellular Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | 2 |
| Mesentery | | | | | + | | | | | | | | | + | | | | | | | | | | | 6 |
| Carcinoma, Metastatic, Prostate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Prostate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|--|--|----------|
| DAY ON TEST | | 7 | | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| | | 6 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| FISCHER 344 RATS MALE

1000 PPM

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

| | |
|--------------------|----|
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | X | | | | | | X | | | | | | | | | | 2 |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | 1 |

| | |
|-------------------|----|
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | 48 |
|-------------------|----|

| | |
|-----------------|----|
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | X | | X | | X | X | | | | | | X | | X | X | X | | X | X | | X | X | X | 30 |

| | |
|----------------------------|----|
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| C-cell, Adenoma | | | | | X | | | | | X | | | | | X | | | | | | | | | | 4 |
| C-cell, Carcinoma | | | | | | | X | | X | | | | | | | | | | | | | | | | 2 |
| Follicular Cell, Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Follicular Cell, Carcinoma | | | | | | | | | | | | | | | | | | X | | | | | | | 2 |

GENERAL BODY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|---|
| Peritoneum | | | | | | | | | | | | | | | | + | | | | | | | | | 2 |
| Carcinoma, Metastatic, Prostate | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

GENITAL SYSTEM

| | |
|---------------------------------|----|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Prostate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | | |
|-----------------------------------|-------------|-----------------------|--|
| FISCHER 344 RATS MALE
1000 PPM | DAY ON TEST | 7
2
6 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | | |
| | <hr/> | | |
| | ANIMAL ID | 0
0
6
1
0 | 0
0
6
0
1 | 0
0
6
0
2 | 0
0
6
0
5 | 0
0
6
0
8 | 0
0
6
1
9 | 0
0
6
2
1 | 0
0
6
2
2 | 0
0
6
3
1 | 0
0
6
3
5 | 0
0
6
3
6 | 0
0
6
3
9 | 0
0
6
3
3 | 0
0
6
4
7 | 0
0
6
4
9 | 0
0
6
0
3 | 0
0
6
0
7 | 0
0
6
0
9 | 0
0
6
1
4 | 0
0
6
2
0 | 0
0
6
2
3 | 0
0
6
2
6 | 0
0
6
4
4 | 0
0
6
4
5 | |
| | * TOTALS | | |

| | |
|---------------------------------------|----|
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Prostate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Bilateral, Interstitial Cell, Adenoma | X | X | | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | X | X | 37 |
| Interstitial Cell, Adenoma | | | X | | | | | | | | | | X | | | | | | | | | | | 9 |

HEMATOPOIETIC SYSTEM

| | |
|-------------------------|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | + | | + | | | | | + | | | | + | | | | + | | | | + | | | | 14 |
| Lymph Node, Bronchial | + | M | M | M | M | M | M | + | M | M | M | M | M | M | M | M | M | M | M | + | M | M | M | 8 |
| 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 | 1 |
| Lymph Node, Mediastinal | + | + | + | + | M | + | M | M | + | M | + | + | + | + | M | + | M | + | + | + | + | + | + | 34 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|---|-----------|----------|
| | | 7 | 7 | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 6 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <hr style="border-top: 1px dotted black;"/> | | |
| FISCHER 344 RATS MALE

1000 PPM | ANIMAL ID | 0 | 0 | |
| | | 0 | 0 | |
| | | 6 | 6 | |
| | | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 4 | 4 |
| | | 0 | 1 | 2 | 5 | 8 | 9 | 1 | 2 | 1 | 5 | 6 | 9 | 3 | 7 | 9 | 3 | 7 | 9 | 4 | 0 | 3 | 6 | 4 | 5 |
| | | * TOTALS | |

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

| | |
|--------|----|
| Spleen | + | 50 |
|--------|----|

| | |
|---------------------------------|---|
| Carcinoma, Metastatic, Prostate | 1 |
|---------------------------------|---|

| | |
|--------|----|
| Thymus | + | 50 |
|--------|----|

INTEGUMENTARY SYSTEM

| | |
|---------------|----|
| Mammary Gland | + | 50 |
|---------------|----|

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|---|
| Fibroadenoma | | | | | | X | | | | | | | | | | | | | | | | | | X | | 2 |
|--------------|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|---|

| | |
|------|----|
| Skin | + | 50 |
|------|----|

| | | | | | | | |
|--------------------|---|--|--|--|--|--|---|
| Basal Cell Adenoma | X | | | | | | 1 |
|--------------------|---|--|--|--|--|--|---|

| | | | |
|-----------------|---|--|---|
| Keratoacanthoma | X | | 2 |
|-----------------|---|--|---|

| | |
|---------------------------|---|
| Keratoacanthoma, Multiple | 1 |
|---------------------------|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|---|
| Trichoepithelioma | | | | | | | | | | | | | | | | X | | | | | | | | | | 1 |
|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|---|
| Subcutaneous Tissue, Fibroma | | | | | | X | | | | | | | | | | | | | | X | | | | | | 4 |
|------------------------------|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Subcutaneous Tissue, Fibrosarcoma | | | | | | | | | | | | | X | | | | | | | | | | | | | 1 |
|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|---|

| | |
|---------------------------------|---|
| Subcutaneous Tissue, Schwannoma | 1 |
|---------------------------------|---|

Benign

MUSCULOSKELETAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | 7
2
6 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | | | |
|---|--|-----------------------|-------------|----------|---|---|
| DAY ON TEST | | | | | | |
| FISCHER 344 RATS MALE | | 0
0
6
1
0 | 0
0
6
0
1 | 0
0
6
0
2 | 0
0
6
0
5 | 0
0
6
0
8 | 0
0
6
1
9 | 0
0
6
2
1 | 0
0
6
2
2 | 0
0
6
3
3 | 0
0
6
3
3 | 0
0
6
3
3 | 0
0
6
4
4 | 0
0
6
4
4 | 0
0
6
4
9 | 0
0
6
0
3 | 0
0
6
0
7 | 0
0
6
0
9 | 0
0
6
0
4 | 0
0
6
1
0 | 0
0
6
2
3 | 0
0
6
2
6 | 0
0
6
4
4 | 0
0
6
4
5 | | | | |
| 1000 PPM | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | * TOTALS | | |
| Bone |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Skeletal Muscle |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | | |
| Carcinoma, Metastatic, Prostate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | | |
| | | | | | | |
| NERVOUS SYSTEM | | | | | | |
| | | | | | | |
| Brain |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| | | | | | | |
| RESPIRATORY SYSTEM | | | | | | |
| | | | | | | |
| Larynx |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Lung |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Alveolar/Bronchiolar Adenoma | | X | | | | | | | | | | | | | | | | | | | | X | 2 | | | | | |
| Alveolar/Bronchiolar Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | 2 | | | |
| Alveolar/Bronchiolar Carcinoma, Multiple |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | | |
| Carcinoma, Metastatic, Prostate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | | |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | X | | | | | | | | | | | | | | | | | | 1 | | |
| Pheochromocytoma Malignant, Metastatic, Adrenal Medulla |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | | |
| Nose |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Respiratory Epithelium, Adenoma | | | | | | | | | | | | | | | | X | | | | | | | | | | | X | 4 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | DAY ON TEST | |
|---------------------------------------|-----------|-------------|
| | | 7
2
6 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
2
9 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 | 7
3
0 |
| | | |
| FISCHER 344 RATS MALE

1000 PPM | ANIMAL ID | 0 |
| | | 0 |
| | | 6 |
| | | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 4 | 4 |
| | | 0 | 1 | 2 | 5 | 8 | 9 | 1 | 2 | 1 | 5 | 6 | 9 | 3 | 7 | 9 | 3 | 7 | 9 | 4 | 0 | 3 | 6 | 4 | 5 |
| | | * TOTALS | |

| | |
|---|----|
| Respiratory Epithelium, Adenoma, Multiple | X | X | | | | | | | | | | | | | | | | X | X | | | X | | 6 |
| Pleura | | | + | | | | | | | + | | + | | | | | | | | | + | | | 6 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SPECIAL SENSES SYSTEM

| | |
|-----------------|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Zymbal's Gland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |

URINARY SYSTEM

| | |
|---------------------------------|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Prostate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Lipoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Renal Tubule, Adenoma | | | | | | | | | | | | | X | | | | | | | | X | | | 4 |
| Renal Tubule, Carcinoma | | | | X | | | | | | | | | | | | | | | | | X | | | 3 |
| Ureter |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | females (cont...) | |
|--|--|-------------------|
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | females (cont...) | |
| | | |

ALIMENTARY SYSTEM

| | |
|--|---|
| Esophagus | + |
| Intestine Large, Cecum | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + |
| Intestine Large, Colon | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + |
| Intestine Large, Rectum | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + |
| Sarcoma Stromal, Metastatic, Uterus |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |
| Intestine Small, Duodenum | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + |
| Intestine Small, Ileum | A | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + |
| Intestine Small, Jejunum | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + |
| Liver | + |
| Fibrous Histiocytoma, Metastatic, Skin |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |
| Mesentery | + | + | | | | + | | + | + | | | + | | | | | | + | + | | | | | | |
| Pancreas | + |
| Salivary Glands | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | |
|------------------------------------|--|-------------------|
| DAY ON TEST | | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |
| | | 7 | 8 | 9 | 0 | 1 | 4 | 5 | 9 | 1 | 1 | 2 | 3 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 8 | 0 | 0 | 1 | 1 | 1 |
| | | 4 | 5 | 2 | 1 | 9 | 7 | 8 | 6 | 3 | 8 | 8 | 5 | 0 | 2 | 2 | 3 | 8 | 4 | 6 | 8 | 2 | 5 | 0 | 6 | 6 |
| FISCHER 344 RATS FEMALE
CONTROL | | |
| | | 0 | 0 |
| | | 0 | 0 |
| | | 1 | 1 |
| | | 2 | 1 | 3 | 3 | 2 | 0 | 0 | 2 | 3 | 1 | 4 | 2 | 0 | 0 | 0 | 4 | 5 | 0 | 2 | 1 | 3 | 1 | 0 | 0 | 2 |
| | | 3 | 0 | 2 | 8 | 7 | 6 | 7 | 1 | 4 | 6 | 2 | 0 | 8 | 1 | 9 | 0 | 0 | 2 | 2 | 9 | 6 | 8 | 3 | 4 | 4 |
| | | females (cont...) | |

| |
|----------------------|
| Stomach, Forestomach | + |
| Stomach, Glandular | + |
| Tongue |

CARDIOVASCULAR SYSTEM

| |
|-------|
| Heart | + |
|-------|

ENDOCRINE SYSTEM

| |
|----------------------------|
| Adrenal Cortex | + |
| Adrenal Medulla | + |
| Pheochromocytoma Benign |
| Pheochromocytoma Complex |
| Pheochromocytoma Malignant | |
| Islets, Pancreatic | + |
| Adenoma |
| Carcinoma |
| Parathyroid Gland | + | + | + | + | M | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | |
|-------------------------|--|-------------------|
| DAY ON TEST | | 7 | 8 | 9 | 0 | 1 | 4 | 5 | 9 | 1 | 1 | 2 | 3 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 8 | 0 | 0 | 1 | 1 | 1 |
| | | 4 | 5 | 2 | 1 | 9 | 7 | 8 | 6 | 3 | 8 | 8 | 5 | 0 | 2 | 2 | 3 | 8 | 4 | 6 | 8 | 2 | 5 | 0 | 6 | 6 |
| | | |
| FISCHER 344 RATS FEMALE | | 0 | 0 |
| ANIMAL ID | | 0 | 0 |
| CONTROL | | 1 | 1 |
| | | 2 | 1 | 3 | 3 | 2 | 0 | 0 | 2 | 3 | 1 | 4 | 2 | 0 | 0 | 0 | 4 | 5 | 0 | 2 | 1 | 3 | 1 | 0 | 0 | 2 |
| | | 3 | 0 | 2 | 8 | 7 | 6 | 7 | 1 | 4 | 6 | 2 | 0 | 8 | 1 | 9 | 0 | 0 | 2 | 2 | 9 | 6 | 8 | 3 | 4 | 4 |
| | | females (cont...) | |

Pituitary Gland

Adenoma

Carcinoma

Thyroid Gland

Fibrous Histiocytoma, Metastatic, Skin

C-cell, Adenoma

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland

Adenoma

Carcinoma

Carcinoma, Multiple

Ovary

Uterus

Polyp Stromal

Sarcoma Stromal

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | | |
|------------------------------------|--|-----------|-------------------|
| DAY ON TEST | | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |
| | | 7 | 8 | 9 | 0 | 1 | 4 | 5 | 9 | 1 | 1 | 2 | 3 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 8 | 0 | 0 | 1 | 1 | 1 |
| | | 4 | 5 | 2 | 1 | 9 | 7 | 8 | 6 | 3 | 8 | 8 | 5 | 0 | 2 | 2 | 3 | 8 | 4 | 6 | 8 | 2 | 5 | 0 | 6 | 6 |
| | | | |
| FISCHER 344 RATS FEMALE
CONTROL | | ANIMAL ID | 0 | 0 |
| | | 0 | 0 | 0 |
| | | 1 | 1 | 1 |
| | | 2 | 1 | 3 | 3 | 2 | 0 | 0 | 2 | 3 | 1 | 4 | 2 | 0 | 0 | 0 | 4 | 5 | 0 | 2 | 1 | 3 | 1 | 0 | 0 | 2 |
| | | 3 | 0 | 2 | 8 | 7 | 6 | 7 | 1 | 4 | 6 | 2 | 0 | 8 | 1 | 9 | 0 | 0 | 2 | 2 | 9 | 6 | 8 | 3 | 4 | 4 |
| | | | females (cont...) | |

females
(cont...)

Vagina
Polyp
Epithelium, Polyp

+
X

HEMATOPOIETIC SYSTEM

| | |
|--|---|
| Bone Marrow | + |
| Lymph Node | | | + | | | | | | | | | | | | | | | + | | | | | | | | + |
| Lymph Node, Bronchial | 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, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | + | M | M | M | M | M | M | M | + | + | M | M | |
| Lymph Node, Mediastinal | + | + | + | + | M | M | M | M | + | + | + | M | M | + | M | + | + | M | M | + | + | M | + | M | + | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | |
| Spleen | + |
| Fibrous Histiocytoma, Metastatic, Skin |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | |
| Thymus | + |

INTEGUMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | |
|------------------------------------|-----------|-------------------|
| DAY ON TEST | | 7 | 8 | 9 | 0 | 1 | 4 | 5 | 9 | 1 | 1 | 2 | 3 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 8 | 0 | 0 | 1 | 1 | 1 |
| | | 4 | 5 | 2 | 1 | 9 | 7 | 8 | 6 | 3 | 8 | 8 | 5 | 0 | 2 | 2 | 3 | 8 | 4 | 6 | 8 | 2 | 5 | 0 | 6 | 6 |
| | | |
| FISCHER 344 RATS FEMALE
CONTROL | ANIMAL ID | 0 | 0 | |
| | | 0 | 0 | |
| | | 1 | 1 | |
| | | 2 | 1 | 3 | 3 | 2 | 0 | 0 | 2 | 3 | 1 | 4 | 2 | 0 | 0 | 0 | 4 | 5 | 0 | 2 | 1 | 3 | 1 | 0 | 0 | 2 |
| | | 3 | 0 | 2 | 8 | 7 | 6 | 7 | 1 | 4 | 6 | 2 | 0 | 8 | 1 | 9 | 0 | 0 | 2 | 2 | 9 | 6 | 8 | 3 | 4 | 4 |
| | | females (cont...) | |

females
(cont...)

Mammary Gland

Carcinoma

Carcinoma, Multiple

Fibroadenoma

Fibroadenoma, Multiple

Skin

Fibrous Histiocytoma

MUSCULOSKELETAL SYSTEM

Bone

Vertebra, Osteosarcoma

Skeletal Muscle

Fibrous Histiocytoma, Metastatic, Skin

NERVOUS SYSTEM

Brain

Carcinoma, Metastatic, Pituitary Gland

Glioma Malignant

Oligodendroglioma Malignant

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| FISCHER 344 RATS FEMALE
CONTROL | | ANIMAL ID | DAY ON TEST | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | | |
|------------------------------------|--|-----------|-------------|-------------------|
| | | | | 7 | 8 | 9 | 0 | 1 | 4 | 5 | 9 | 1 | 1 | 2 | 3 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 8 | 0 | 0 | 1 | 1 | 1 |
| | | | | 4 | 5 | 2 | 1 | 9 | 7 | 8 | 6 | 3 | 8 | 8 | 5 | 0 | 2 | 2 | 3 | 8 | 4 | 6 | 8 | 2 | 5 | 0 | 6 | 6 |
| | | | | 0 | 0 | | |
| | | | | 0 | 0 | | |
| | | | | 1 | 1 | | |
| | | | | 2 | 1 | 3 | 3 | 2 | 0 | 0 | 2 | 3 | 1 | 4 | 2 | 0 | 0 | 0 | 4 | 5 | 0 | 2 | 1 | 3 | 1 | 0 | | |
| | | | | 3 | 0 | 2 | 8 | 7 | 6 | 7 | 1 | 4 | 6 | 2 | 0 | 8 | 1 | 9 | 0 | 0 | 2 | 2 | 9 | 6 | 8 | 3 | | |
| | | | | females (cont...) | |

RESPIRATORY SYSTEM

| | |
|--|---|
| Larynx | + |
| Lung | + |
| Alveolar/Bronchiolar Carcinoma |
| Fibrous Histiocytoma, Metastatic, Skin | |
| Osteosarcoma, Metastatic, Bone |
| Nose | + |
| Turbinate, Chondroma |
| Pleura |
| Trachea | + |

SPECIAL SENSES SYSTEM

| |
|-----------------|
| Eye | + |
| Harderian Gland | + |
| Lacrimal Gland | |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

| | | |
|-------------------------|-------------|-------|
| | DAY ON TEST | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |
| | | 7 | 8 | 9 | 0 | 1 | 4 | 5 | 9 | 1 | 1 | 2 | 3 | 6 | 6 | 6 | 6 | 7 | 7 | 8 | 0 | 0 | 1 | 1 | 1 |
| | | 4 | 5 | 2 | 1 | 9 | 7 | 8 | 6 | 3 | 8 | 8 | 5 | 0 | 2 | 2 | 3 | 8 | 4 | 6 | 8 | 2 | 5 | 0 | 6 |
| | | | |
| FISCHER 344 RATS FEMALE | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| CONTROL | | 1 | 1 |
| | | 2 | 1 | 3 | 3 | 2 | 0 | 0 | 2 | 3 | 1 | 4 | 2 | 0 | 0 | 0 | 4 | 5 | 0 | 2 | 1 | 3 | 1 | 0 | 2 |
| | | 3 | 0 | 2 | 8 | 7 | 6 | 7 | 1 | 4 | 6 | 2 | 0 | 8 | 1 | 9 | 0 | 0 | 2 | 2 | 9 | 6 | 8 | 3 | 4 |
| | | | 4 |

females
(cont...)

Zymbal's Gland

+

Carcinoma

X

URINARY SYSTEM

| |
|-----------------|
| Kidney | + |
| Urinary Bladder | + |
| Leiomyosarcoma | | | | | | | | | | | | | | X | | | | | | | | | | | |

SYSTEMIC LESIONS

| |
|----------------------|
| Multiple Organ | + |
| Leukemia Mononuclear | | | X | | | | | | | X | X | | X | | | | X | | | | | | X | X | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | DAY ON TEST | 7 | 7 |
|------------------------------------|-------------|----------|
| | | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 6 | 6 | 8 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| FISCHER 344 RATS FEMALE
CONTROL | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| | | 1 | 1 |
| | | 3 | 4 | 4 | 4 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 4 | 4 |
| | | 3 | 6 | 9 | 8 | 1 | 2 | 3 | 6 | 8 | 0 | 5 | 7 | 9 | 5 | 4 | 5 | 7 | 5 | 9 | 1 | 1 | 3 | 4 |
| | | * TOTALS | |

ALIMENTARY SYSTEM

| | |
|--|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Sarcoma Stromal, Metastatic, Uterus |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Small, Ileum | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 |
| Intestine Small, Jejunum | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibrous Histiocytoma, Metastatic, Skin |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Mesentery | | | | + | + | + | + | | | + | | | | + | | | + | | | | + | + | + | 18 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | DAY ON TEST | | | |
|------------------------------------|-----------|---|----------|
| | | 7
1
6 | 7
1
6 | 7
1
8 | 7
2
2 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | | |
| | | | |
| FISCHER 344 RATS FEMALE
CONTROL | ANIMAL ID | 0 | | |
| | | 0 | | |
| | | 1 | | |
| | | 3 | 4 | 4 | 4 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | | |
| | | 3 | 6 | 9 | 8 | 1 | 2 | 3 | 6 | 8 | 0 | 5 | 7 | 9 | 5 | 4 | 5 | 7 | 5 | 9 | 1 | 1 | 3 | 4 | 5 | 7 | * TOTALS |

| | |
|----------------------|----|
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Tongue | | | | | | | | | | + | | | | | | | | | | | | | | | | 1 |

CARDIOVASCULAR SYSTEM

| | |
|-------|----|
| Heart | + | 50 |
|-------|----|

ENDOCRINE SYSTEM

| | |
|----------------------------|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pheochromocytoma Benign | | | | | | | | | | X | | | | | | | | | | | | | | | | 1 |
| Pheochromocytoma Complex | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Pheochromocytoma Malignant | | | | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | X | | | | | | | | 1 |
| Carcinoma | | | | | | | | | | | | | X | | | | | | | | | | | | | 1 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|---|--|----------|
| DAY ON TEST | | 7 | |
| | | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 6 | 6 | 8 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| <hr style="border-top: 1px dotted black;"/> | | |
| FISCHER 344 RATS FEMALE
CONTROL | | 0 | |
| | | 0 | |
| | | 1 | |
| | | 3 | 4 | 4 | 4 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 4 | 4 | |
| | | 3 | 6 | 9 | 8 | 1 | 2 | 3 | 6 | 8 | 0 | 5 | 7 | 9 | 5 | 4 | 5 | 7 | 5 | 9 | 1 | 1 | 3 | 4 | 5 |
| | | * TOTALS |

| | | | |
|--|----|----|--|
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | | X | X | X | X | | | X | X | 35 | |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | |
| <hr/> | | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Fibrous Histiocytoma, Metastatic, Skin |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | |
| C-cell, Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | X | | 3 | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | |
|---------------------|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Carcinoma, Multiple | | | | | | | | | X | | | | | | | | | | | | | | | | 1 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Polyp Stromal | | | | X | | X | X | X | | | | X | X | | | X | X | X | | | X | | X | | 13 |
| Sarcoma Stromal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | 7 | 7 | |
|-------------------------|--|----------|--|
| DAY ON TEST | | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 6 | 6 | 8 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | | |
| FISCHER 344 RATS FEMALE | | 0 | 0 | |
| | | 0 | 0 | |
| ANIMAL ID | | 1 | 1 | |
| CONTROL | | 3 | 4 | 4 | 4 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 4 | |
| | | 3 | 6 | 9 | 8 | 1 | 2 | 3 | 6 | 8 | 0 | 5 | 7 | 9 | 5 | 4 | 5 | 7 | 5 | 9 | 1 | 1 | 3 | |
| | | * TOTALS | |

| | | |
|-------------------|---|---|
| Vagina | + | 2 |
| Polyp | | 1 |
| Epithelium, Polyp | X | 1 |

HEMATOPOIETIC SYSTEM

| | |
|--|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| Lymph Node, Bronchial | M | M | + | M | M | M | + | M | M | M | M | M | + | M | + | M | M | M | M | M | M | M | M | 7 |
| 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 | 4 |
| Lymph Node, Mediastinal | + | M | M | + | M | + | + | + | M | M | + | + | M | + | + | M | M | + | + | + | + | + | + | 30 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | 48 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibrous Histiocytoma, Metastatic, Skin |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Thymus | + | + | M | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | 48 |

INTEGUMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | DAY ON TEST | 7 | 7 |
|-------------------------|-------------|----------|
| | | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 6 | 6 | 8 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| FISCHER 344 RATS FEMALE | | 0 | 0 |
| CONTROL | | 0 | 0 |
| ANIMAL ID | | 1 | 1 |
| | | 3 | 4 | 4 | 4 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 4 | 4 |
| | | 3 | 6 | 9 | 8 | 1 | 2 | 3 | 6 | 8 | 0 | 5 | 7 | 9 | 5 | 4 | 5 | 7 | 5 | 9 | 1 | 1 | 3 | 4 |
| | | * TOTALS | |

| | |
|------------------------|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma | | | X | X | | | | | X | | | X | | X | | | | | | | | | | 8 |
| Carcinoma, Multiple | | | | | | | | | | | | X | | X | | | | | | | | | | 2 |
| Fibroadenoma | | | X | | | | X | X | X | | X | | | X | | X | X | X | | X | | X | | 17 |
| Fibroadenoma, Multiple | X | | | X | | | | | | | | | | | | | | | | | X | | | 7 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibrous Histiocytoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

MUSCULOSKELETAL SYSTEM

| | |
|--|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Vertebra, Osteosarcoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Skeletal Muscle |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Fibrous Histiocytoma, Metastatic, Skin |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

NERVOUS SYSTEM

| | |
|--|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Pituitary Gland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Glioma Malignant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Oligodendroglioma Malignant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | DAY ON TEST | 7 | 7 |
|------------------------------------|-------------|----------|
| | | 1 | 1 | 1 | 2 | 3 |
| | | 6 | 6 | 8 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| FISCHER 344 RATS FEMALE
CONTROL | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| | | 1 | 1 |
| | | 3 | 4 | 4 | 4 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 4 | 4 | 4 |
| | | 3 | 6 | 9 | 8 | 1 | 2 | 3 | 6 | 8 | 0 | 5 | 7 | 9 | 5 | 4 | 5 | 7 | 5 | 9 | 1 | 1 | 3 | 4 | 5 |
| | | * TOTALS | |

RESPIRATORY SYSTEM

| | |
|--|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Alveolar/Bronchiolar Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Fibrous Histiocytoma, Metastatic, Skin |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Osteosarcoma, Metastatic, Bone |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Turbinate, Chondroma | | | | | | | | | | | | | | X | | | | | | | | | | | 1 |
| Pleura | | | + | | | | + | + | | + | | | + | | | + | + | + | + | + | | | | | 15 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SPECIAL SENSES SYSTEM

| | |
|-----------------|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lacrimal Gland | | | | | | | | | | | | | + | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqsted: 01/12/2006

Time Report Reqsted: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | 7 | 7 |
|------------------------------------|-----------|----------|
| DAY ON TEST | | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 6 | 6 | 8 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | |
| FISCHER 344 RATS FEMALE
CONTROL | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| | | 1 | 1 |
| | | 3 | 4 | 4 | 4 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 4 | 4 |
| | | 3 | 6 | 9 | 8 | 1 | 2 | 3 | 6 | 8 | 0 | 5 | 7 | 9 | 5 | 4 | 5 | 7 | 5 | 9 | 1 | 1 | 3 | 4 |
| | | * TOTALS | |

Zymbal's Gland

1

Carcinoma

1

URINARY SYSTEM

Kidney

+ 50

Urinary Bladder

+ 50

Leiomyosarcoma

1

SYSTEMIC LESIONS

Multiple Organ

+ 50

Leukemia Mononuclear

X X X X X 12

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|------------------------------------|-------------|----------------------|
| FISCHER 344 RATS FEMALE
250 PPM | DAY ON TEST | 0
1
6 | 5
1
4 | 5
3
6 | 5
4
7 | 5
6
2 | 5
7
1 | 5
9
1 | 5
9
8 | 6
2
8 | 6
3
5 | 6
5
5 | 6
6
0 | 6
6
3 | 6
7
0 | 6
7
3 | 6
8
8 | 6
9
6 | 6
9
7 | 7
0
2 | 7
0
4 | 7
0
9 | 7
1
6 | 7
1
7 | 7
3
0 | 7
3
1 | females
(cont...) |
| | | |
| | | |
| | ANIMAL ID | 0
0
3
3
4 | 0
0
3
3
1 | 0
0
3
3
3 | 0
0
3
4
0 | 0
0
3
0
8 | 0
0
3
2
1 | 0
0
3
1
2 | 0
0
3
4
7 | 0
0
3
4
4 | 0
0
3
2
8 | 0
0
3
4
3 | 0
0
3
2
4 | 0
0
3
4
1 | 0
0
3
1
9 | 0
0
0
4
9 | 0
0
3
0
9 | 0
0
3
0
7 | 0
0
3
0
9 | 0
0
3
0
2 | 0
0
3
0
6 | 0
0
3
4
6 | 0
0
3
4
9 | 0
0
3
4
2 | 0
0
2
2
2 | 0
0
3
2
9 | |

ALIMENTARY SYSTEM

| |
|---------------------------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Intestine Large, Cecum | A | + | A | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Intestine Large, Colon | A | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Intestine Large, Rectum | A | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Intestine Small, Duodenum | A | + | A | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Intestine Small, Ileum | A | + | A | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Intestine Small, Jejunum | A | + | A | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Liver | + |
| Mesentery | | | | + | | + | | + | | | | | | | | | | | | | | + | + | + | + |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Stomach, Forestomach | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | | |
|------------------------------------|-------------|-------------|----------------------|
| FISCHER 344 RATS FEMALE
250 PPM | DAY ON TEST | 0
1
6 | 5
1
4 | 5
3
6 | 5
4
7 | 5
6
2 | 5
7
1 | 5
9
1 | 5
9
8 | 6
2
8 | 6
3
5 | 6
5
5 | 6
6
0 | 6
6
3 | 6
7
0 | 6
7
3 | 6
8
8 | 6
9
6 | 6
9
7 | 7
0
2 | 7
0
4 | 7
0
9 | 7
1
6 | 7
1
7 | 7
3
0 | 7
3
1 | females
(cont...) |
| | | 0
0
3
3
4 | 0
0
3
3
1 | 0
0
3
3
3 | 0
0
3
4
0 | 0
0
3
0
8 | 0
0
3
2
1 | 0
0
3
1
2 | 0
0
3
4
7 | 0
0
3
4
4 | 0
0
3
4
8 | 0
0
3
4
3 | 0
0
3
4
4 | 0
0
3
4
2 | 0
0
1
4
9 | 0
0
3
4
9 | 0
0
3
3
7 | 0
0
3
3
9 | 0
0
3
3
2 | 0
0
3
4
6 | 0
0
3
4
6 | 0
0
3
4
9 | 0
0
3
4
2 | 0
0
3
4
2 | 0
0
2
2
9 | | |
| | ANIMAL ID | 0
0
3
3
4 | 0
0
3
3
1 | 0
0
3
3
3 | 0
0
3
4
0 | 0
0
3
0
8 | 0
0
3
2
1 | 0
0
3
1
2 | 0
0
3
4
7 | 0
0
3
4
4 | 0
0
3
4
8 | 0
0
3
4
3 | 0
0
3
4
4 | 0
0
1
4
9 | 0
0
3
4
9 | 0
0
3
3
7 | 0
0
3
3
9 | 0
0
3
4
2 | 0
0
3
4
6 | 0
0
3
4
6 | 0
0
3
4
9 | 0
0
3
4
2 | 0
0
3
4
2 | 0
0
2
2
9 | | | |
| | | 0
0
3
3
4 | 0
0
3
3
1 | 0
0
3
3
3 | 0
0
3
4
0 | 0
0
3
0
8 | 0
0
3
2
1 | 0
0
3
1
2 | 0
0
3
4
7 | 0
0
3
4
4 | 0
0
3
4
8 | 0
0
3
4
3 | 0
0
3
4
4 | 0
0
1
4
9 | 0
0
3
4
9 | 0
0
3
3
7 | 0
0
3
3
9 | 0
0
3
4
2 | 0
0
3
4
6 | 0
0
3
4
6 | 0
0
3
4
9 | 0
0
3
4
2 | 0
0
3
4
2 | 0
0
2
2
9 | | | |

females
(cont...)

Stomach, Glandular

+ A + + +

Tongue

Tooth

+

CARDIOVASCULAR SYSTEM

Heart

+ +

ENDOCRINE SYSTEM

Adrenal Cortex

+ A + + +

Adrenal Medulla

+ A + + +

Pheochromocytoma Malignant

Islets, Pancreatic

+ A + + +

Parathyroid Gland

+ + + + + + + + + + + + + + + + + M + + + A M + +

Pituitary Gland

+ +

Adenoma

X X X X X X X X X X X X X X X X X X X X

Carcinoma

X

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| DAY ON TEST | | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
|---|--|-------------------|
| | | 1 | 1 | 3 | 4 | 6 | 7 | 9 | 9 | 2 | 3 | 5 | 6 | 6 | 7 | 7 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 3 | 3 |
| | | 6 | 4 | 6 | 7 | 2 | 1 | 1 | 8 | 8 | 5 | 5 | 0 | 3 | 0 | 3 | 8 | 6 | 7 | 2 | 4 | 9 | 6 | 7 | 0 | 1 |
| FISCHER 344 RATS FEMALE
250 PPM
ANIMAL ID | | 0 | 0 | |
| | | 0 | 0 | |
| | | 3 | 3 | |
| | | 3 | 3 | 3 | 4 | 0 | 2 | 1 | 4 | 4 | 2 | 4 | 2 | 4 | 1 | 0 | 0 | 3 | 0 | 0 | 3 | 4 | 4 | 2 | 2 | 0 |
| | | 4 | 1 | 3 | 0 | 8 | 1 | 2 | 7 | 4 | 8 | 3 | 4 | 1 | 9 | 9 | 7 | 9 | 2 | 6 | 6 | 9 | 2 | 2 | 9 | 1 |
| | | females (cont...) | |

| |
|--------------------------|
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| C-cell, Adenoma | | | | | | | | | | | | X | | | | | X | | | | | | | | | |
| Follicular Cell, Adenoma | | | | | | | X | | | | | | | | | | | | | | | | | | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| |
|-----------------------------|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Granulosa Cell Tumor Benign | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Carcinoma |
| Polyp Stromal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | |
| Polyp Stromal, Multiple |
| Cervix, Polyp Stromal | | | | | | | | | | | | | | | | | X | | | | | | | | | |

HEMATOPOIETIC SYSTEM

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

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|---|--|-------------------|
| DAY ON TEST | | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 1 | 1 | 3 | 4 | 6 | 7 | 9 | 9 | 2 | 3 | 5 | 6 | 6 | 7 | 7 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 3 | 3 |
| | | 6 | 4 | 6 | 7 | 2 | 1 | 1 | 8 | 8 | 5 | 5 | 0 | 3 | 0 | 3 | 8 | 6 | 7 | 2 | 4 | 9 | 6 | 7 | 0 | 1 |
| FISCHER 344 RATS FEMALE
250 PPM
ANIMAL ID | | |
| | | 0 | 0 |
| | | 0 | 0 |
| | | 3 | 3 |
| | | 3 | 3 | 3 | 4 | 0 | 2 | 1 | 4 | 4 | 2 | 4 | 2 | 4 | 1 | 0 | 0 | 3 | 0 | 0 | 3 | 4 | 4 | 2 | 2 | 0 |
| | | 4 | 1 | 3 | 0 | 8 | 1 | 2 | 7 | 4 | 8 | 3 | 4 | 1 | 9 | 9 | 7 | 9 | 2 | 6 | 6 | 9 | 2 | 2 | 9 | 1 |
| | | females (cont...) | |

Lymph Node

+

+

Lymph Node, Bronchial

M M M + M + + M M M M M M M M M M M + M M M A M M M

Lymph Node, Mandibular

M M M M M M M M M M M + M M M M M M M M M A M M M

Lymph Node, Mediastinal

+ + + + M M + M M + M + M + M + M M M + + A + M +

Lymph Node, Mesenteric

+ + + + + + + + + + + + + + + + + + + A + + +

Spleen

+ +

Thymus

+ + + + + + + + + + + M + + + + + + + + + A + + +

INTEGUMENTARY SYSTEM

Mammary Gland

+ +

Adenoma

X

Carcinoma

X

X

X

Carcinoma, Multiple

Fibroadenoma

X

X

X

X

Fibroadenoma, Multiple

X

X

X

X

Skin

+ +

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | |
|------------------------------------|--|-------------------|
| DAY ON TEST | | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 1 | 1 | 3 | 4 | 6 | 7 | 9 | 9 | 2 | 3 | 5 | 6 | 6 | 7 | 7 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 3 | 3 |
| | | 6 | 4 | 6 | 7 | 2 | 1 | 1 | 8 | 8 | 5 | 5 | 0 | 3 | 0 | 3 | 8 | 6 | 7 | 2 | 4 | 9 | 6 | 7 | 0 | 1 |
| | | |
| FISCHER 344 RATS FEMALE
250 PPM | | 0 | 0 | |
| | | 0 | 0 | |
| | | 3 | 3 | |
| | | 3 | 3 | 3 | 4 | 0 | 2 | 1 | 4 | 4 | 2 | 4 | 2 | 4 | 1 | 0 | 0 | 3 | 0 | 0 | 3 | 4 | 4 | 2 | 2 | 0 |
| ANIMAL ID | | 4 | 1 | 3 | 0 | 8 | 1 | 2 | 7 | 4 | 8 | 3 | 4 | 1 | 9 | 9 | 7 | 9 | 2 | 6 | 6 | 9 | 2 | 2 | 9 | 1 |
| | | females (cont...) | |

Subcutaneous Tissue, Fibroma

Subcutaneous Tissue, Schwannoma

Benign

X

X

MUSCULOSKELETAL SYSTEM

| |
|-----------------------|
| Bone | + |
| Cranium, Osteosarcoma | X | |

NERVOUS SYSTEM

| | |
|--|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Carcinoma, Metastatic, Pituitary Gland | | | | | X | | | | | X | | | | | | | | | | | | | | | |
| Meningioma Benign | | | | | | | | | | | | | | | | X | | | | | | | | | |
| Peripheral Nerve | | | + | |
| Spinal Cord | | | + | |

RESPIRATORY SYSTEM

| |
|--------|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Lung | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | |
|------------------------------------|--|-----------|
| DAY ON TEST | | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 1 | 1 | 3 | 4 | 6 | 7 | 9 | 9 | 2 | 3 | 5 | 6 | 6 | 7 | 7 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 3 | 3 |
| | | 6 | 4 | 6 | 7 | 2 | 1 | 1 | 8 | 8 | 5 | 5 | 0 | 3 | 0 | 3 | 8 | 6 | 7 | 2 | 4 | 9 | 6 | 7 | 0 | 1 |
| | | |
| FISCHER 344 RATS FEMALE
250 PPM | | 0 | 0 | |
| | | 0 | 0 |
| | | ANIMAL ID | 3 |
| | | 3 | 3 | 3 | 4 | 0 | 2 | 1 | 4 | 4 | 2 | 4 | 2 | 4 | 1 | 0 | 0 | 3 | 0 | 0 | 3 | 4 | 4 | 2 | 2 | 0 |
| | | 4 | 1 | 3 | 0 | 8 | 1 | 2 | 7 | 4 | 8 | 3 | 4 | 1 | 9 | 9 | 7 | 9 | 2 | 6 | 6 | 9 | 2 | 2 | 9 | 1 |
| females (cont...) | | |

Carcinoma, Metastatic, Uterus

Mediastinum, Carcinoma, Metastatic, Uterus

Nose

Respiratory Epithelium, Adenoma

+

+

+

+

+

A

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

A

+

+

+

Pleura

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

Trachea

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

A

+

+

+

SPECIAL SENSES SYSTEM

Eye

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

A

+

+

+

Harderian Gland

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

A

+

+

+

URINARY SYSTEM

Kidney

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

Urinary Bladder

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

A

+

+

+

SYSTEMIC LESIONS

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| FISCHER 344 RATS FEMALE
250 PPM | | DAY ON TEST |
|------------------------------------|--|-------------------|
| | | 0 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 1 | 1 | 3 | 4 | 6 | 7 | 9 | 9 | 2 | 3 | 5 | 6 | 6 | 7 | 7 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 3 | 3 | 3 | 3 | |
| | | 6 | 4 | 6 | 7 | 2 | 1 | 1 | 8 | 8 | 5 | 5 | 0 | 3 | 0 | 3 | 8 | 6 | 7 | 2 | 4 | 9 | 6 | 7 | 0 | 1 | 1 | 1 | |
| | | |
| ANIMAL ID | | 0 | 0 | |
| | | 0 | 0 | |
| | | 3 | 3 | |
| | | 3 | 3 | 3 | 4 | 0 | 2 | 1 | 4 | 4 | 2 | 4 | 2 | 4 | 1 | 0 | 0 | 3 | 0 | 0 | 3 | 4 | 4 | 4 | 2 | 2 | 0 | 0 | 0 |
| | | 4 | 1 | 3 | 0 | 8 | 1 | 2 | 7 | 4 | 8 | 3 | 4 | 1 | 9 | 9 | 7 | 9 | 2 | 6 | 6 | 9 | 2 | 2 | 9 | 1 | 1 | 1 | |
| | | females (cont...) | |

Multiple Organ

Histiocytic Sarcoma

Leukemia Mononuclear

| | |
|---|--|
| + | |
| | |
| | | | | | X | | | X | | X | | X | X | | X | X | | | | X | X | X | X | | | X | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| FISCHER 344 RATS FEMALE
250 PPM | | DAY ON TEST | | |
|------------------------------------|--|-----------------------|--|
| | | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | |
| | | | |
| ANIMAL ID | | 0
0
3
0
4 | 0
0
3
1
1 | 0
0
3
1
6 | 0
0
3
1
7 | 0
0
3
2
6 | 0
0
3
3
0 | 0
0
3
3
2 | 0
0
3
3
5 | 0
0
3
3
7 | 0
0
3
4
8 | 0
0
3
0
3 | 0
0
3
1
5 | 0
0
3
1
0 | 0
0
3
1
3 | 0
0
3
1
4 | 0
0
3
1
5 | 0
0
3
2
8 | 0
0
3
2
0 | 0
0
3
2
3 | 0
0
3
2
5 | 0
0
3
3
7 | 0
0
3
4
8 | 0
0
3
4
5 | |
| | | | |
| | | | |
| | | | |
| | | * TOTALS | | |

ALIMENTARY SYSTEM

| | |
|---------------------------|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mesentery | | | + | + | + | + | + | | | | | | | + | + | | + | + | | + | | | | 18 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| FISCHER 344 RATS FEMALE
250 PPM | | DAY ON TEST | |
|------------------------------------|--|-----------------------|
| | | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 |
| | | | |
| ANIMAL ID | | 0
0
3
0
4 | 0
0
3
1
1 | 0
0
3
1
6 | 0
0
3
1
7 | 0
0
3
2
6 | 0
0
3
3
0 | 0
0
3
3
2 | 0
0
3
3
5 | 0
0
3
3
7 | 0
0
3
3
8 | 0
0
3
4
3 | 0
0
3
0
5 | 0
0
3
1
0 | 0
0
3
1
3 | 0
0
3
1
4 | 0
0
3
1
5 | 0
0
3
2
8 | 0
0
3
2
0 | 0
0
3
2
3 | 0
0
3
2
5 | 0
0
3
3
7 | 0
0
3
4
5 | 0
0
3
4
6 | 0
0
3
5
0 |
| | | |
| | | |
| | | |
| | | * TOTALS | |

Stomach, Glandular

+ 49

Tongue

+ + 2

Tooth

+ 2

CARDIOVASCULAR SYSTEM

Heart

+ 50

ENDOCRINE SYSTEM

Adrenal Cortex

+ 49

Adrenal Medulla

+ 49

Pheochromocytoma Malignant

X 1

Islets, Pancreatic

+ 49

Parathyroid Gland

+ M M + + 45

Pituitary Gland

+ 50

Adenoma

X 33

Carcinoma

1

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | 7 | |
|-------------------------|--|----------|
| DAY ON TEST | | 3 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| FISCHER 344 RATS FEMALE | | 0 | |
| ANIMAL ID | | 0 | |
| 250 PPM | | 3 | |
| | | 0 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 4 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 5 | |
| | | 4 | 1 | 6 | 7 | 6 | 0 | 2 | 5 | 7 | 8 | 3 | 5 | 0 | 3 | 4 | 5 | 8 | 0 | 3 | 5 | 7 | 8 | 5 | 6 | 0 | * TOTALS |

| | |
|--------------------------|----|
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| C-cell, Adenoma | | | | | | X | | | | | | | | | | | X | | | | | | | | | | 4 |
| Follicular Cell, Adenoma | | | | | | | | | | | X | | | | | | | | | | | | | | | | 2 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | |
|-----------------------------|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Carcinoma | | | | | | | X | | | | | | | | | | | | | | | | | | | | 2 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Granulosa Cell Tumor Benign |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | 1 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Carcinoma | | | | | | | | | | | | | | | | X | | | | | | | | | | | 1 |
| Polyp Stromal | | | | X | X | | | X | | X | | | | | | | | | X | X | | | | | | | 7 |
| Polyp Stromal, Multiple |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | | 1 |
| Cervix, Polyp Stromal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

HEMATOPOIETIC SYSTEM

| | |
|-------------|----|
| Bone Marrow | + | 49 |
|-------------|----|

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | |
|------------------------------------|-------------|-----------------------|
| FISCHER 344 RATS FEMALE
250 PPM | DAY ON TEST | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 |
| | ANIMAL ID | 0
0
3
0
4 | 0
0
3
1
1 | 0
0
3
1
6 | 0
0
3
1
7 | 0
0
3
2
6 | 0
0
3
3
0 | 0
0
3
3
2 | 0
0
3
3
5 | 0
0
3
3
7 | 0
0
3
3
8 | 0
0
3
4
3 | 0
0
3
5
0 | 0
0
3
5
0 | 0
0
3
5
0 | 0
0
3
5
0 | 0
0
3
5
0 | 0
0
3
5
0 | 0
0
3
5
0 | 0
0
3
5
0 | 0
0
3
5
0 | 0
0
3
5
0 | 0
0
3
5
0 | 0
0
3
5
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 |
| | | 0 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 4 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 5 |
| | | 4 | 1 | 6 | 7 | 6 | 0 | 2 | 5 | 7 | 8 | 3 | 5 | 0 | 3 | 4 | 5 | 8 | 0 | 3 | 5 | 7 | 8 | 5 |
| | | * TOTALS | |

| | | |
|-------------------------|----|----|
| Lymph Node | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | | |
| Lymph Node, Bronchial | M | M | + | + | M | M | M | M | M | M | M | M | M | M | M | + | M | M | M | M | + | M | + | M | 9 | |
| Lymph Node, Mandibular | M | 1 | |
| Lymph Node, Mediastinal | + | + | M | M | M | + | + | + | M | M | + | + | + | M | M | + | M | + | + | + | + | + | + | M | M | 28 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Thymus | + | + | + | + | + | + | M | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 | |

INTEGUMENTARY SYSTEM

| | |
|------------------------|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Carcinoma | | | | | X | | | | | | | | X | | | | X | | | X | X | | | | 8 |
| Carcinoma, Multiple | | | | | | | | | | | | | | | X | | | | | | | | | | 1 |
| Fibroadenoma | X | | | | | X | | X | X | | | | | X | | | X | | | X | | | | | 11 |
| Fibroadenoma, Multiple | | | X | X | | | | | | | X | X | | | | | X | X | | | | | X | | 11 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

| | | |
|------------------------------------|--|----------|
| DAY ON TEST | | 7 | |
| | | 3 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | |
| FISCHER 344 RATS FEMALE
250 PPM | | 0 | |
| | | 0 | |
| | | 3 | |
| | | 0 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 4 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 5 | |
| | | 4 | 1 | 6 | 7 | 6 | 0 | 2 | 5 | 7 | 8 | 3 | 5 | 0 | 3 | 4 | 5 | 8 | 0 | 3 | 5 | 7 | 8 | 5 | 6 | 0 | * TOTALS |

| | | |
|--|---|---|
| Subcutaneous Tissue, Fibroma | X | 2 |
| Subcutaneous Tissue, Schwannoma Benign | | 1 |

MUSCULOSKELETAL SYSTEM

| | |
|-----------------------|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cranium, Osteosarcoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

NERVOUS SYSTEM

| | |
|--|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Carcinoma, Metastatic, Pituitary Gland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| Meningioma Benign |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Peripheral Nerve |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Spinal Cord |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

RESPIRATORY SYSTEM

| | |
|--------|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Species/Strain: RATS/F 344

CUMENE

Pathologist: PIERCE, J. - RENNE, R.

Lab: BNW

SPECIAL SENSES SYSTEM

URINARY SYSTEM

SYSTEMIC LESIONS

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
! .. Insufficient tissue

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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | 7 | 7 |
|-------------------------|--|----------|
| DAY ON TEST | | 3 | 3 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| FISCHER 344 RATS FEMALE | | 0 | 0 |
| ANIMAL ID | | 0 | 0 |
| 250 PPM | | 3 | 3 |
| | | 0 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 4 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 4 |
| | | 4 | 1 | 6 | 7 | 6 | 0 | 2 | 5 | 7 | 8 | 3 | 5 | 0 | 3 | 4 | 5 | 8 | 0 | 3 | 5 | 7 | 8 | 5 | 6 |
| | | * TOTALS | |

| | |
|----------------------|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Histiocytic Sarcoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | 1 |
| Leukemia Mononuclear | | | X | | | X | X | | | X | | X | X | | X | X | | | X | X | X | X | | | 25 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| FISCHER 344 RATS FEMALE
500 PPM | ANIMAL ID | DAY ON TEST | |
|------------------------------------|-----------|-------------|----------------------|
| | | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 3 | 1 | 2 | 3 | 3 | 7 | 1 | 1 | 2 | 2 | 4 | 6 | 6 | 7 | 7 | 8 | 0 | 1 | 2 | 3 | 3 | 3 | 3 | 3 |
| | | 9 | 6 | 8 | 0 | 0 | 9 | 1 | 2 | 4 | 5 | 5 | 0 | 1 | 3 | 6 | 9 | 4 | 5 | 2 | 0 | 0 | 0 | 1 | 1 |
| | | 0 | 0 |
| | | 0 | 0 |
| | | 5 | 5 |
| | | 3 | 1 | 4 | 1 | 1 | 3 | 1 | 0 | 2 | 1 | 1 | 0 | 3 | 0 | 3 | 2 | 0 | 0 | 3 | 1 | 1 | 2 | 2 | 2 |
| | | 1 | 0 | 0 | 3 | 9 | 3 | 6 | 6 | 6 | 4 | 8 | 9 | 4 | 1 | 0 | 2 | 3 | 2 | 8 | 2 | 7 | 7 | 0 | 3 |
| | | | females
(cont...) |

ALIMENTARY SYSTEM

| |
|-------------------------------------|
| Esophagus | + |
| Intestine Large, Cecum | + |
| Intestine Large, Colon | + |
| Leiomyosarcoma |
| Intestine Large, Rectum | + |
| Intestine Small, Duodenum | + |
| Intestine Small, Ileum | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + |
| Mesentery | | | + | + | + | + | | | | + | + | + | | | | | | | | | + | | | + |
| Oral Mucosa | | | | | + | | | | | | | | | | | | | | | | | | | |
| Pharyngeal, Squamous Cell Carcinoma | | | | | X | | | | | | | | | | | | | | | | | | | |
| Pancreas | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | |
|------------------------------------|-------------|-------------------|
| FISCHER 344 RATS FEMALE
500 PPM | DAY ON TEST | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 3 | 1 | 2 | 3 | 3 | 7 | 1 | 1 | 2 | 2 | 4 | 6 | 6 | 7 | 7 | 8 | 0 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 9 | 6 | 8 | 0 | 0 | 9 | 1 | 2 | 4 | 5 | 5 | 0 | 1 | 3 | 6 | 9 | 4 | 5 | 2 | 0 | 0 | 0 | 1 | 1 | 1 |
| | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| | | 5 | 5 |
| | | 3 | 1 | 4 | 1 | 1 | 3 | 1 | 0 | 2 | 1 | 1 | 0 | 3 | 0 | 3 | 2 | 0 | 0 | 3 | 1 | 1 | 2 | 2 | 2 | 2 |
| | | 1 | 0 | 0 | 3 | 9 | 3 | 6 | 6 | 6 | 4 | 8 | 9 | 4 | 1 | 0 | 2 | 3 | 2 | 8 | 2 | 7 | 7 | 0 | 1 | 3 |
| | | females (cont...) | |

| |
|-------------------------|
| Salivary Glands | + |
| Stomach, Forestomach | + |
| Squamous Cell Papilloma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |
| Stomach, Glandular | + |
| Tongue |

CARDIOVASCULAR SYSTEM

| | |
|---|---|
| Heart | + |
| Osteosarcoma, Metastatic, Bone |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |
| Pericardium, Alveolar/Bronchiolar Carcinoma, Metastatic, Lung | X | |

ENDOCRINE SYSTEM

| |
|--------------------------------|
| Adrenal Cortex | + |
| Osteosarcoma, Metastatic, Bone |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |
| Adrenal Medulla | + |
| Pheochromocytoma Benign |
| Pheochromocytoma Malignant |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | |
|------------------------------------|-------------|-------------------|
| | DAY ON TEST | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 3 | 1 | 2 | 3 | 3 | 7 | 1 | 1 | 2 | 2 | 4 | 6 | 6 | 7 | 7 | 8 | 0 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 9 | 6 | 8 | 0 | 0 | 9 | 1 | 2 | 4 | 5 | 5 | 0 | 1 | 3 | 6 | 9 | 4 | 5 | 2 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| FISCHER 344 RATS FEMALE
500 PPM | | 0 | 0 |
| | ANIMAL ID | 0 | 0 |
| | | 5 | 5 |
| | | 3 | 1 | 4 | 1 | 1 | 3 | 1 | 0 | 2 | 1 | 1 | 0 | 3 | 0 | 3 | 2 | 0 | 0 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | | 1 | 0 | 0 | 3 | 9 | 3 | 6 | 6 | 6 | 4 | 8 | 9 | 4 | 1 | 0 | 2 | 3 | 2 | 8 | 2 | 7 | 7 | 0 | 1 | 3 | 3 |
| | | females (cont...) | |

| |
|----------------------------|
| Islets, Pancreatic | + |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | |
| Parathyroid Gland | + | + | M | + |
| Pituitary Gland | + |
| Adenoma | | | X | X | | | X | | X | | X | | | | | X | X | X | X | X | X | X | | | | X | |
| Thyroid Gland | + |
| C-cell, Adenoma |
| C-cell, Carcinoma |
| Follicular Cell, Carcinoma | |

GENERAL BODY SYSTEM

| | |
|------------------------------|---|
| Peritoneum | + |
| Carcinoma, Metastatic, Ovary | X |

GENITAL SYSTEM

| |
|----------------|
| Clitoral Gland | + |
| Ovary | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | DAY ON TEST | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|------------------------------------|-------------|-------------------|
| | | 3 | 1 | 2 | 3 | 3 | 7 | 1 | 1 | 2 | 2 | 4 | 6 | 6 | 7 | 7 | 8 | 0 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 9 | 6 | 8 | 0 | 0 | 9 | 1 | 2 | 4 | 5 | 5 | 0 | 1 | 3 | 6 | 9 | 4 | 5 | 2 | 0 | 0 | 0 | 1 | 1 | 1 |
| FISCHER 344 RATS FEMALE
500 PPM | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| | | 5 | 5 |
| | | 3 | 1 | 4 | 1 | 1 | 3 | 1 | 0 | 2 | 1 | 1 | 0 | 3 | 0 | 3 | 2 | 0 | 0 | 3 | 1 | 1 | 2 | 2 | 2 | 2 |
| | | 1 | 0 | 0 | 3 | 9 | 3 | 6 | 6 | 6 | 4 | 8 | 9 | 4 | 1 | 0 | 2 | 3 | 2 | 8 | 2 | 7 | 7 | 0 | 1 | 3 |
| | | females (cont...) | |

Cystadenocarcinoma

X

Osteosarcoma, Metastatic, Bone

X

Uterus

+ +

Polyp Stromal

X

X

X

Sarcoma Stromal

X

HEMATOPOIETIC SYSTEM

Bone Marrow

+ +

Lymph Node

+

+

+

Deep Cervical, Squamous Cell
Carcinoma, Metastatic, Skin

X

Lymph Node, Bronchial

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, Mandibular

M M

Lymph Node, Mediastinal

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

Alveolar/Bronchiolar Carcinoma,
Metastatic, Lung

X

Carcinoma, Metastatic, Thyroid Gland

Squamous Cell Carcinoma, Metastatic,
Skin

X

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | DAY ON TEST | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|------------------------------------|-------------|-------------------|
| | | 3 | 1 | 2 | 3 | 3 | 7 | 1 | 1 | 2 | 2 | 4 | 6 | 6 | 7 | 7 | 8 | 0 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 9 | 6 | 8 | 0 | 0 | 9 | 1 | 2 | 4 | 5 | 5 | 0 | 1 | 3 | 6 | 9 | 4 | 5 | 2 | 0 | 0 | 0 | 1 | 1 | 1 |
| FISCHER 344 RATS FEMALE
500 PPM | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| | | 5 | 5 |
| | | 3 | 1 | 4 | 1 | 1 | 3 | 1 | 0 | 2 | 1 | 1 | 0 | 3 | 0 | 3 | 2 | 0 | 0 | 3 | 1 | 1 | 2 | 2 | 2 | 2 |
| | | 1 | 0 | 0 | 3 | 9 | 3 | 6 | 6 | 6 | 4 | 8 | 9 | 4 | 1 | 0 | 2 | 3 | 2 | 8 | 2 | 7 | 7 | 0 | 1 | 3 |
| | | females (cont...) | |

Lymph Node, Mesenteric

Carcinoma, Metastatic, Ovary

.....

+ + + M +

X

Spleen

.....

+ +

Thymus

.....

+ +

INTEGUMENTARY SYSTEM

Mammary Gland

.....

+ +

Carcinoma

X

Carcinoma, Multiple

Fibroadenoma

X

X

X

X

X

X

X

X

X

X

X

X

Fibroadenoma, Multiple

X

X

X

Skin

.....

+ +

Basal Cell Carcinoma

Keratoacanthoma

X

Squamous Cell Carcinoma

X

Subcutaneous Tissue,
Hemangiopericytoma

X

MUSCULOSKELETAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | |
|------------------------------------|-------------|-------------------|
| FISCHER 344 RATS FEMALE
500 PPM | DAY ON TEST | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 3 | 1 | 2 | 3 | 3 | 7 | 1 | 1 | 2 | 2 | 4 | 6 | 6 | 7 | 7 | 8 | 0 | 1 | 2 | 3 | 3 | 3 | 3 | 3 |
| | | 9 | 6 | 8 | 0 | 0 | 9 | 1 | 2 | 4 | 5 | 5 | 0 | 1 | 3 | 6 | 9 | 4 | 5 | 2 | 0 | 0 | 0 | 1 | 1 |
| | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| | | 5 | 5 |
| | | 3 | 1 | 4 | 1 | 1 | 3 | 1 | 0 | 2 | 1 | 1 | 0 | 3 | 0 | 3 | 2 | 0 | 0 | 3 | 1 | 1 | 2 | 2 | 2 |
| | | 1 | 0 | 0 | 3 | 9 | 3 | 6 | 6 | 6 | 4 | 8 | 9 | 4 | 1 | 0 | 2 | 3 | 2 | 8 | 2 | 7 | 7 | 0 | 3 |
| | | females (cont...) | |

| | |
|--|---|
| Bone | + |
| Vertebra, Osteosarcoma | X | |
| Skeletal Muscle | + | |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung | X | |

NERVOUS SYSTEM

| |
|----------------------------|
| Brain | + |
| Granular Cell Tumor Benign | |
| Peripheral Nerve | | | | + | |
| Spinal Cord | | | | + | |

RESPIRATORY SYSTEM

| |
|--------------------------------|
| Larynx | + |
| Lung | + |
| Alveolar/Bronchiolar Carcinoma | X | |
| Carcinoma, Metastatic, Ovary | | | | | | | | | | | | | | X | | | | | | | | | | |
| Osteosarcoma, Metastatic, Bone | | | | | | | | X | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

| | | | |
|--|-------------|---|---|
| FISCHER 344 RATS FEMALE
500 PPM | DAY ON TEST | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 3 | 1 | 2 | 3 | 3 | 7 | 1 | 1 | 2 | 2 | 4 | 6 | 6 | 7 | 7 | 8 | 0 | 1 | 2 | 3 | 3 | 3 | 3 | 3 |
| | | 9 | 6 | 8 | 0 | 0 | 9 | 1 | 2 | 4 | 5 | 5 | 0 | 1 | 3 | 6 | 9 | 4 | 5 | 2 | 0 | 0 | 0 | 1 | 1 |
| | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
|  |  | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 3 | 1 | 4 | 1 | 1 | 3 | 1 | 0 | 2 | 1 | 1 | 0 | 3 | 0 | 3 | 2 | 0 | 0 | 3 | 1 | 1 | 2 | 2 | 2 |
| | | 1 | 0 | 0 | 3 | 9 | 3 | 6 | 6 | 6 | 4 | 8 | 9 | 4 | 1 | 0 | 2 | 3 | 2 | 8 | 2 | 7 | 7 | 0 | 3 |
| | | females (cont...) |
| Squamous Cell Carcinoma, Metastatic, Skin | | X | |
| Nose | | + | |
| Respiratory Epithelium, Adenoma | | | |
| Pleura | | + | |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung | | X | |
| Carcinoma, Metastatic, Ovary | | X | |
| Trachea | | + | |

SPECIAL SENSES SYSTEM

| | |
|-----------------|---|
| Eye | + |
| Harderian Gland | + |
| Zymbal's Gland | |
| Carcinoma | |

URINARY SYSTEM

| | |
|--------|---|
| Kidney | + |
|--------|---|

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | DAY ON TEST | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|------------------------------------|-------------|-------------------|
| | | 3 | 1 | 2 | 3 | 3 | 7 | 1 | 1 | 2 | 2 | 4 | 6 | 6 | 7 | 7 | 8 | 0 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 9 | 6 | 8 | 0 | 0 | 9 | 1 | 2 | 4 | 5 | 5 | 0 | 1 | 3 | 6 | 9 | 4 | 5 | 2 | 0 | 0 | 0 | 1 | 1 | 1 |
| FISCHER 344 RATS FEMALE
500 PPM | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| | | 5 | 5 |
| | | 3 | 1 | 4 | 1 | 1 | 3 | 1 | 0 | 2 | 1 | 1 | 0 | 3 | 0 | 3 | 2 | 0 | 0 | 3 | 1 | 1 | 2 | 2 | 2 | 2 |
| | | 1 | 0 | 0 | 3 | 9 | 3 | 6 | 6 | 6 | 4 | 8 | 9 | 4 | 1 | 0 | 2 | 3 | 2 | 8 | 2 | 7 | 7 | 0 | 1 | 3 |
| | | females (cont...) | |

Urinary Bladder

+ +

SYSTEMIC LESIONS

Multiple Organ

+ +

Leukemia Mononuclear

X X X X X X X X X X X X X X X X X X X X

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | 7 | 7 | |
|------------------------------------|-----------|----------|
| DAY ON TEST | | 3 | 3 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | |
| FISCHER 344 RATS FEMALE
500 PPM | ANIMAL ID | 0 | 0 | |
| | | 0 | 0 | |
| | | 5 | 5 | |
| | | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 4 | 4 | 5 |
| | | 4 | 5 | 8 | 5 | 6 | 7 | 9 | 2 | 4 | 5 | 6 | 7 | 4 | 5 | 7 | 8 | 1 | 5 | 9 | 2 | 1 | 3 | 8 | 9 |
| | | * TOTALS | |

ALIMENTARY SYSTEM

| | |
|-------------------------------------|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leiomyosarcoma | | | | | | | | | | | | | | X | | | | | | | | | | 1 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mesentery | + | | | + | + | + | | + | | | + | | | | | + | | | | | + | | | 17 |
| Oral Mucosa |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Pharyngeal, Squamous Cell Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | |
|------------------------------------|-------------|----------|
| | DAY ON TEST | 7 | 7 |
| | | 3 | 3 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| FISCHER 344 RATS FEMALE
500 PPM | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| | | 5 | 5 |
| | | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 4 | 4 |
| | | 4 | 5 | 8 | 5 | 6 | 7 | 9 | 2 | 4 | 5 | 6 | 7 | 4 | 5 | 7 | 8 | 1 | 5 | 9 | 2 | 1 | 3 | 8 |
| | | * TOTALS | |

| | |
|-------------------------|----|
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Squamous Cell Papilloma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Tongue |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + | + |  | 2 |

CARDIOVASCULAR SYSTEM

| | |
|--|----|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Osteosarcoma, Metastatic, Bone |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Pericardium, Alveolar/Bronchiolar
Carcinoma, Metastatic, Lung | | 1 |

ENDOCRINE SYSTEM

| | |
|--------------------------------|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Osteosarcoma, Metastatic, Bone |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pheochromocytoma Benign |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | 1 |
| Pheochromocytoma Malignant | | | | | | | | | | | X | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

| FISCHER 344 RATS FEMALE
500 PPM | | ANIMAL ID | | DAY ON TEST | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | | | | | | |
|------------------------------------|--|-----------|--|-------------|--|----------|
| | | | | | | 3 | | | |
| | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| FISCHER 344 RATS FEMALE
500 PPM | | ANIMAL ID | | DAY ON TEST | | 0 | | | | | | |
| | | | | | | 0 | | | |
| | | | | | | 5 | | |
| | | | | | | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 4 | 4 | 5 | |
| FISCHER 344 RATS FEMALE
500 PPM | | ANIMAL ID | | DAY ON TEST | | 4 | 5 | 8 | 5 | 6 | 7 | 9 | 2 | 4 | 5 | 6 | 7 | 4 | 5 | 7 | 8 | 1 | 5 | 9 | 2 | 1 | 3 | 8 | 9 | 0 | * TOTALS |

| | |
|----------------------------|----|
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | 48 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | X | | X | | | | | X | | X | X | | X | X | X | X | | X | X | X | X | X | X | 28 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| C-cell, Adenoma | | | | | X | | | | | | | | | | | | | | | X | | | | 2 |
| C-cell, Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | 1 |
| Follicular Cell, Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | 1 |

GENERAL BODY SYSTEM

| | |
|------------------------------|---|
| Peritoneum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Carcinoma, Metastatic, Ovary |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

GENITAL SYSTEM

| | |
|----------------|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|---|--|----------|
| DAY ON TEST | | 7 | 7 |
| | | 3 | 3 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| <hr style="border-top: 1px dotted black;"/> | | |
| FISCHER 344 RATS FEMALE
ANIMAL ID
500 PPM | | 0 | 0 |
| | | 0 | 0 |
| | | 5 | 5 |
| | | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 4 | 4 |
| | | 4 | 5 | 8 | 5 | 6 | 7 | 9 | 2 | 4 | 5 | 6 | 7 | 4 | 5 | 7 | 8 | 1 | 5 | 9 | 2 | 1 | 3 | 8 |
| | | * TOTALS | |

Cystadenocarcinoma

1

Osteosarcoma, Metastatic, Bone

1

Uterus

+ +

50

Polyp Stromal

X X

X

X

X

8

Sarcoma Stromal

1

HEMATOPOIETIC SYSTEM

Bone Marrow

+ +

50

Lymph Node

+

5

Deep Cervical, Squamous Cell
Carcinoma, Metastatic, Skin

1

Lymph Node, Bronchial

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

8

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

1

Lymph Node, Mediastinal

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

26

Alveolar/Bronchiolar Carcinoma,
Metastatic, Lung

1

Carcinoma, Metastatic, Thyroid Gland

X

1

Squamous Cell Carcinoma, Metastatic,
Skin

1

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|---|--|----------|
| DAY ON TEST | | 7 | 7 |
| | | 3 | 3 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| <hr style="border-top: 1px dotted black;"/> | | |
| FISCHER 344 RATS FEMALE
ANIMAL ID | | 0 | 0 |
| | | 0 | 0 |
| | | 5 | 5 |
| | | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 4 | 4 |
| 500 PPM | | 4 | 5 | 8 | 5 | 6 | 7 | 9 | 2 | 4 | 5 | 6 | 7 | 4 | 5 | 7 | 8 | 1 | 5 | 9 | 2 | 1 | 3 | 8 |
| | | * TOTALS | |

| | |
|------------------------------|----|
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Carcinoma, Metastatic, Ovary |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

INTEGUMENTARY SYSTEM

| | |
|--|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Carcinoma, Multiple |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Fibroadenoma | | X | | X | | | | X | X | | X | | | X | | | | X | X | X | X | X | X | X | 24 |
| Fibroadenoma, Multiple | | | X | | X | | | | | | X | | X | | | | X | | | | | | | | 8 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Basal Cell Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | 1 |
| Keratoacanthoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | 2 |
| Squamous Cell Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Subcutaneous Tissue,
Hemangiopericytoma | | 1 |

MUSCULOSKELETAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

| | | |
|------------------------------------|-------------|----------|
| | DAY ON TEST | 7 | 7 |
| | | 3 | 3 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| FISCHER 344 RATS FEMALE
500 PPM | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| | | 5 | 5 |
| | | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 4 | 4 | 5 |
| | | 4 | 5 | 8 | 5 | 6 | 7 | 9 | 2 | 4 | 5 | 6 | 7 | 4 | 5 | 7 | 8 | 1 | 5 | 9 | 2 | 1 | 3 | 8 | 9 |
| | | * TOTALS | |

| | |
|--|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Vertebra, Osteosarcoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Skeletal Muscle |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

NERVOUS SYSTEM

| | |
|----------------------------|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Granular Cell Tumor Benign | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| Peripheral Nerve |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Spinal Cord |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

RESPIRATORY SYSTEM

| | |
|--------------------------------|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Alveolar/Bronchiolar Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Carcinoma, Metastatic, Ovary |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Osteosarcoma, Metastatic, Bone |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | DAY ON TEST | | |
|-------------------------|--|-----------------------|--|
| | | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | |
| | | | |
| FISCHER 344 RATS FEMALE | | | |
| 500 PPM | | ANIMAL ID | | |
| | | 0
0
5
2
4 | 0
0
5
2
5 | 0
0
5
2
8 | 0
0
5
3
5 | 0
0
5
3
6 | 0
0
5
3
7 | 0
0
5
3
9 | 0
0
5
4
2 | 0
0
5
4
4 | 0
0
5
4
5 | 0
0
5
4
6 | 0
0
5
4
7 | 0
0
5
5
4 | 0
0
5
5
5 | 0
0
5
5
7 | 0
0
5
5
8 | 0
0
5
5
1 | 0
0
5
5
5 | 0
0
5
5
9 | 0
0
5
6
2 | 0
0
5
6
3 | 0
0
5
6
8 | 0
0
5
7
9 | |
| | | | |
| | | | |
| | | * TOTALS | | |

Squamous Cell Carcinoma, Metastatic,
Skin

1

Nose

+ +

50

Respiratory Epithelium, Adenoma

X X X X

4

Pleura

+ +

16

Alveolar/Bronchiolar Carcinoma,
Metastatic, Lung

1

Carcinoma, Metastatic, Ovary

1

Trachea

+ +

50

SPECIAL SENSES SYSTEM

Eye

+ +

50

Harderian Gland

+ +

50

Zymbal's Gland

+

1

Carcinoma

X

1

URINARY SYSTEM

Kidney

+ +

50

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | |
|------------------------------------|-------------|----------|
| | DAY ON TEST | 7 | |
| | | 3 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| FISCHER 344 RATS FEMALE
500 PPM | | 0 | |
| | ANIMAL ID | 0 | |
| | | 5 | |
| | | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 4 | 4 | 4 | 5 | |
| | | 4 | 5 | 8 | 5 | 6 | 7 | 9 | 2 | 4 | 5 | 6 | 7 | 4 | 5 | 7 | 8 | 1 | 5 | 9 | 2 | 1 | 3 | 8 | 9 | 0 | * TOTALS |

| | |
|-----------------|----|
| Urinary Bladder | + | 50 |
|-----------------|----|

SYSTEMIC LESIONS

| | |
|----------------------|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | X | X | | X | | | | X | | X | | X | | X | | X | | X | X | | | | | 23 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | females (cont...) | |
|-------------------------------------|-------------|-------------------|
| FISCHER 344 RATS FEMALE
1000 PPM | DAY ON TEST | 2 | 4 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 6 | 0 | 1 | 4 | 0 | 1 | 1 | 2 | 2 | 3 | 5 | 7 | 8 | 8 | 9 | 9 | 9 | 9 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 7 | 0 | 1 | 2 | 7 | 8 | 9 | 5 | 8 | 8 | 9 | 4 | 3 | 8 | 5 | 6 | 6 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | |
| | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 2 | 4 | 3 | 3 | 1 | 0 | 2 | 4 | 2 | 4 | 4 | 1 | 0 | 3 | 3 | 3 | 4 | 3 | 0 | 2 | 4 | 5 | 0 | 0 | 0 | |
| | | 2 | 7 | 8 | 0 | 0 | 4 | 8 | 8 | 0 | 9 | 1 | 8 | 8 | 5 | 2 | 7 | 2 | 6 | 9 | 1 | 3 | 0 | 1 | 5 | 7 | |

ALIMENTARY SYSTEM

| |
|---------------------------|
| Esophagus | + |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | + |
| Intestine Large, Rectum | + |
| Adenoma |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + |
| Liver | + |
| Cholangiocarcinoma |
| Mesentery | | | | | | | | | | + | | | | | | | + | + | | + | | | | + |
| Rhabdomyosarcoma |
| Oral Mucosa | + | |
| Squamous Cell Carcinoma | X | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | |
|-------------------------------------|-------------|-------------------|
| FISCHER 344 RATS FEMALE
1000 PPM | DAY ON TEST | 2 | 4 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 6 | 0 | 1 | 4 | 0 | 1 | 1 | 2 | 2 | 3 | 5 | 7 | 8 | 8 | 9 | 9 | 9 | 0 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 7 | 0 | 1 | 2 | 7 | 8 | 9 | 5 | 8 | 8 | 9 | 4 | 3 | 8 | 5 | 6 | 6 | 4 | 0 | 0 | 0 | 0 | 1 | 1 |
| | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| | | 7 | 7 |
| | | 2 | 4 | 3 | 3 | 1 | 0 | 2 | 4 | 2 | 4 | 4 | 1 | 0 | 3 | 3 | 3 | 4 | 3 | 0 | 2 | 4 | 5 | 0 | 0 |
| | | 2 | 7 | 8 | 0 | 0 | 4 | 8 | 8 | 0 | 9 | 1 | 8 | 8 | 5 | 2 | 7 | 2 | 6 | 9 | 1 | 3 | 0 | 1 | 5 |
| | | females (cont...) | |

| |
|-------------------------|
| Pancreas | + |
| Rhabdomyosarcoma | | | | | | | | | | | | | | | | X | | | | | | | | | |
| Salivary Glands | + |
| Stomach, Forestomach | + |
| Squamous Cell Papilloma | |
| Stomach, Glandular | + |
| Tongue | | | | | | | | | + | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

| |
|-----------------|
| Adrenal Cortex | + |
| Adenoma |
| Adrenal Medulla | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

| | | |
|-------------------------------------|-------------|-------------------|
| FISCHER 344 RATS FEMALE
1000 PPM | DAY ON TEST | 2 | 4 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 6 | 0 | 1 | 4 | 0 | 1 | 1 | 2 | 2 | 3 | 5 | 7 | 8 | 8 | 9 | 9 | 9 | 0 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 7 | 0 | 1 | 2 | 7 | 8 | 9 | 5 | 8 | 8 | 9 | 4 | 3 | 8 | 5 | 6 | 6 | 4 | 0 | 0 | 0 | 0 | 1 | 1 |
| | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| | | 7 | 7 |
| | | 2 | 4 | 3 | 3 | 1 | 0 | 2 | 4 | 2 | 4 | 4 | 1 | 0 | 3 | 3 | 3 | 4 | 3 | 0 | 2 | 4 | 5 | 0 | 0 |
| | | 2 | 7 | 8 | 0 | 0 | 4 | 8 | 8 | 0 | 9 | 1 | 8 | 8 | 5 | 2 | 7 | 2 | 6 | 9 | 1 | 3 | 0 | 1 | 5 |
| | | females (cont...) | |

| |
|--------------------------|
| Islets, Pancreatic | + |
| Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | X | | | X | | X | | X | | X | X | | X | | X | | X | X | X | | X |
| Carcinoma | | | | | | | | | | | | | X | | | | | | | | | | | |
| Thyroid Gland | + |
| C-cell, Adenoma |
| C-cell, Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | | |
| Follicular Cell, Adenoma | | | | | | | | | | | | | | | | | | | | X | | | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| |
|----------------|
| Clitoral Gland | + |
| Carcinoma |
| Ovary | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

| | | |
|-------------------------------------|-------------|-------------------|
| FISCHER 344 RATS FEMALE
1000 PPM | DAY ON TEST | 2 | 4 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 6 | 0 | 1 | 4 | 0 | 1 | 1 | 2 | 2 | 3 | 5 | 7 | 8 | 8 | 9 | 9 | 9 | 0 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 7 | 0 | 1 | 2 | 7 | 8 | 9 | 5 | 8 | 8 | 9 | 4 | 3 | 8 | 5 | 6 | 6 | 4 | 0 | 0 | 0 | 0 | 1 | 1 |
| | ANIMAL ID | 0 | 0 |
| | | 0 | 0 |
| | | 7 | 7 |
| | | 2 | 4 | 3 | 3 | 1 | 0 | 2 | 4 | 2 | 4 | 4 | 1 | 0 | 3 | 3 | 3 | 4 | 3 | 0 | 2 | 4 | 5 | 0 | 0 |
| | | 2 | 7 | 8 | 0 | 0 | 4 | 8 | 8 | 0 | 9 | 1 | 8 | 8 | 5 | 2 | 7 | 2 | 6 | 9 | 1 | 3 | 0 | 1 | 5 |
| | | females (cont...) | |

| |
|------------------------------------|
| Leiomyosarcoma, Metastatic, Uterus | X | |
| Uterus | + |
| Leiomyosarcoma | X | |
| Polyp Stromal | X | |
| Sarcoma Stromal | X | |

HEMATOPOIETIC SYSTEM

| |
|---------------------------------------|
| Bone Marrow | + |
| Lymph Node | + | |
| Lymph Node, Bronchial | M | M | M | M | M | M | M | M | + | M | M | M | + | M | M | M | M | + | M | M | M | M | + | M |
| 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 |
| Carcinoma, Metastatic, Zymbal'S Gland | X | |
| Lymph Node, Mediastinal | M | + | M | + | + | M | M | + | M | M | + | + | M | + | M | + | + | M | M | + | + | + | M | + |
| Carcinoma, Metastatic, Thyroid Gland | X | |
| Lymph Node, Mesenteric | + |
| Spleen | + |
| Rhabdomyosarcoma | X | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | |
|--|--|-------------------|
| DAY ON TEST | | 2 | 4 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 6 | 0 | 1 | 4 | 0 | 1 | 1 | 2 | 2 | 3 | 5 | 7 | 8 | 8 | 9 | 9 | 9 | 0 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 7 | 0 | 1 | 2 | 7 | 8 | 9 | 5 | 8 | 8 | 9 | 4 | 3 | 8 | 5 | 6 | 6 | 4 | 0 | 0 | 0 | 0 | 1 | 1 |
| FISCHER 344 RATS FEMALE
1000 PPM
ANIMAL ID | | 0 | 0 |
| | | 0 | 0 |
| | | 7 | 7 |
| | | 2 | 4 | 3 | 3 | 1 | 0 | 2 | 4 | 2 | 4 | 4 | 1 | 0 | 3 | 3 | 3 | 4 | 3 | 0 | 2 | 4 | 5 | 0 | 0 |
| | | 2 | 7 | 8 | 0 | 0 | 4 | 8 | 8 | 0 | 9 | 1 | 8 | 8 | 5 | 2 | 7 | 2 | 6 | 9 | 1 | 3 | 0 | 1 | 5 |
| | | females (cont...) | |

| |
|----------------|
| Thymus | + |
| Thymoma Benign | | | | | | X | | | | | | | | | | | | | | | | | | |

INTEGUMENTARY SYSTEM

| |
|------------------------------|
| Mammary Gland | + |
| Adenoma | | | | | | | | | | | X | | | | | | | | | | | | | |
| Carcinoma | | | | X | | X | | | | | | | X | | | | | X | | | | | | |
| Fibroadenoma | | | | | | | X | X | X | X | X | X | X | X | | X | X | | | X | | | X | |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | | | | | X | | | | | |
| Skin | + |
| Keratoacanthoma |
| Squamous Cell Papilloma | | | | | | | | | | | | | X | | | | | | | | | | | |
| Subcutaneous Tissue, Fibroma | |

MUSCULOSKELETAL SYSTEM

| |
|------------------|
| Bone | + |
| Skeletal Muscle | + | | | | |
| Rhabdomyosarcoma | | | | | | | | | | | | | | | | | | | | X | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

| | | |
|--|--|-------------------|
| DAY ON TEST | | 2 | 4 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 6 | 0 | 1 | 4 | 0 | 1 | 1 | 2 | 2 | 3 | 5 | 7 | 8 | 8 | 9 | 9 | 9 | 0 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 7 | 0 | 1 | 2 | 7 | 8 | 9 | 5 | 8 | 8 | 9 | 4 | 3 | 8 | 5 | 6 | 6 | 4 | 0 | 0 | 0 | 0 | 1 | 1 |
| FISCHER 344 RATS FEMALE
1000 PPM
ANIMAL ID | | 0 | 0 |
| | | 0 | 0 |
| | | 7 | 7 |
| | | 2 | 4 | 3 | 3 | 1 | 0 | 2 | 4 | 2 | 4 | 4 | 1 | 0 | 3 | 3 | 3 | 4 | 3 | 0 | 2 | 4 | 5 | 0 | 0 |
| | | 2 | 7 | 8 | 0 | 0 | 4 | 8 | 8 | 0 | 9 | 1 | 8 | 8 | 5 | 2 | 7 | 2 | 6 | 9 | 1 | 3 | 0 | 1 | 5 |
| | | females (cont...) | |

SPECIAL SENSES SYSTEM

| |
|-----------------|
| Eye | + |
| Harderian Gland | + |
| Zymbal's Gland | | | | | + | | | | | | | | | | | | | | | | | | | |
| Carcinoma | | | | | X | | | | | | | | | | | | | | | | | | | |

URINARY SYSTEM

| |
|-----------------|
| Kidney | + |
| Urinary Bladder | + |

SYSTEMIC LESIONS

| |
|----------------------|
| Multiple Organ | + |
| Leukemia Mononuclear | | | | X | | X | | | | | | X | | X | X | | X | | | | | | X | |
| Lymphoma Malignant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|--|--|----------|
| DAY ON TEST | | 7 | 7 | |
| | | 3 | 3 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| FISCHER 344 RATS FEMALE
ANIMAL ID
1000 PPM | | |
| | | 0 | 0 | |
| | | 0 | 0 | |
| | | 7 | 7 | |
| | | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 1 | 1 | 1 | 2 |
| | | 1 | 2 | 3 | 7 | 9 | 3 | 5 | 7 | 9 | 1 | 3 | 4 | 9 | 0 | 4 | 5 | 6 | 2 | 3 | 6 | 4 | 5 | 6 | |
| | | * TOTALS | |

ALIMENTARY SYSTEM

| | |
|---------------------------|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cholangiocarcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Mesentery | | | | | + | | + | | | | + | | | | | | | | | | | + | | 9 |
| Rhabdomyosarcoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Oral Mucosa |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Squamous Cell Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | DAY ON TEST | | |
|-------------------------------------|-----------|---|
| | | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | |
| | | |
| FISCHER 344 RATS FEMALE
1000 PPM | ANIMAL ID | 0 | |
| | | 0 | |
| | | 7 | |
| | | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 |
| | | 1 | 2 | 3 | 7 | 9 | 3 | 5 | 7 | 9 | 1 | 3 | 4 | 9 | 0 | 4 | 5 | 6 | 2 | 3 | 6 | 4 | 5 | 6 | 4 | 6 |
| | | * TOTALS | | |

| | |
|-------------------------|----|
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Rhabdomyosarcoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Squamous Cell Papilloma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Tongue | | | | | | | | | | | | | | | | | | | + | | | | + | | | 3 |

CARDIOVASCULAR SYSTEM

| | |
|--------------|----|
| Blood Vessel |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

ENDOCRINE SYSTEM

| | |
|-----------------|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Species/Strain: RATS/F 344

Pathologist: PIERCE, J. - RENNE, R.

Lab: BNW

*** TOTALS**

50

1

47

49

25

1

50

2

2

20

NONE

[illegible]

50

1

50

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|--|--|----------|
| DAY ON TEST | | 7 | 7 | |
| | | 3 | 3 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| FISCHER 344 RATS FEMALE
ANIMAL ID
1000 PPM | | |
| | | 0 | 0 | |
| | | 0 | 0 | |
| | | 7 | 7 | |
| | | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 1 | 1 | 1 | 2 |
| | | 1 | 2 | 3 | 7 | 9 | 3 | 5 | 7 | 9 | 1 | 3 | 4 | 9 | 0 | 4 | 5 | 6 | 2 | 3 | 6 | 4 | 5 | 6 | 4 |
| | | * TOTALS | |

Leiomyosarcoma, Metastatic, Uterus

1

Uterus

+ +

50

Leiomyosarcoma

1

Polyp Stromal

X

X

7

Sarcoma Stromal

1

HEMATOPOIETIC SYSTEM

Bone Marrow

+ +

50

Lymph Node

+

2

Lymph Node, Bronchial

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

5

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

4

Carcinoma, Metastatic, Zymbal'S Gland

1

Lymph Node, Mediastinal

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

31

Carcinoma, Metastatic, Thyroid Gland

X

2

Lymph Node, Mesenteric

+ +

50

Spleen

+ +

50

Rhabdomyosarcoma

1

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Requested: 01/12/2006

Time Report Requested: 09:48:09

First Dose M/F: 06/04/01 / 06/04/01

Lab: BNW

| | | |
|-------------------------------------|--|-----------------------|
| | | DAY ON TEST | |
| | | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
1 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 | 7
3
2 |
| | | |
| FISCHER 344 RATS FEMALE
1000 PPM | | ANIMAL ID | |
| | | 0
0
7
1
1 | 0
0
7
1
2 | 0
0
7
1
3 | 0
0
7
1
7 | 0
0
7
1
9 | 0
0
7
2
3 | 0
0
7
2
5 | 0
0
7
2
7 | 0
0
7
2
9 | 0
0
7
3
1 | 0
0
7
3
3 | 0
0
7
3
4 | 0
0
7
3
9 | 0
0
7
4
0 | 0
0
7
4
4 | 0
0
7
4
5 | 0
0
7
4
6 | 0
0
7
0
2 | 0
0
7
0
3 | 0
0
7
0
6 | 0
0
7
1
4 | 0
0
7
1
5 | 0
0
7
1
6 | 0
0
7
2
4 |
| | | |
| | | |
| | | |
| | | * TOTALS | |

| | |
|----------------|----|
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Thymoma Benign |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

INTEGUMENTARY SYSTEM

| | |
|------------------------------|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Carcinoma | | | | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| Fibroadenoma | X | X | | | X | X | | | X | | X | | | | | | X | | X | X | | | | | 21 |
| Fibroadenoma, Multiple | | | | | | | | | | | X | | | X | X | X | X | | | | | X | X | | 8 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Keratoacanthoma | | | | | | | | | | | | | | | | | X | | | | | | | | 1 |
| Squamous Cell Papilloma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | X | | | | | | | | | | | | | | 1 |

MUSCULOSKELETAL SYSTEM

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

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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

| | | |
|-------------------------------------|-----------|----------|
| | | 7 | |
| | | 3 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | |
| FISCHER 344 RATS FEMALE
1000 PPM | ANIMAL ID | 0 | |
| | | 0 | |
| | | 7 | |
| | | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 1 | 1 | 1 | 2 |
| | | 1 | 2 | 3 | 7 | 9 | 3 | 5 | 7 | 9 | 1 | 3 | 4 | 9 | 0 | 4 | 5 | 6 | 2 | 3 | 6 | 4 | 5 | 6 | 4 |
| | | * TOTALS |

NERVOUS SYSTEM

| | |
|--|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Astrocytoma Malignant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | | | | 1 |
| Carcinoma, Metastatic, Pituitary Gland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| | |
| Spinal Cord |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

RESPIRATORY SYSTEM

| | |
|---|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Alveolar/Bronchiolar Adenoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Nasopharyngeal Duct, Carcinoma, Metastatic, Oral Mucosa |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Respiratory Epithelium, Adenoma | | | | | | | | | | X | | | | | | | X | | | | | | | 3 |
| | |
| Pleura | + | + | + | | | + | + | | | | | | + | + | + | + | | + | | | | + | | 20 |
| | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

| | | |
|-------------------------------------|-------------|----------|
| FISCHER 344 RATS FEMALE
1000 PPM | DAY ON TEST | 7 |
| | | 3 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | ANIMAL ID | 0 |
| | | 0 |
| | | 7 |
| | | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 1 | 1 | 1 | 2 |
| | | 1 | 2 | 3 | 7 | 9 | 3 | 5 | 7 | 9 | 1 | 3 | 4 | 9 | 0 | 4 | 5 | 6 | 2 | 3 | 6 | 4 | 5 | 6 | 4 |
| | | * TOTALS |

SPECIAL SENSES SYSTEM

| | |
|-----------------|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Zymbal's Gland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

URINARY SYSTEM

| | |
|-----------------|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SYSTEMIC LESIONS

| | |
|----------------------|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | X | | X | | X | | | | | | | | | | | | X | | | X | | | | X | | 13 |
| Lymphoma Malignant |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

*** END OF REPORT ***

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

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