

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

F 1 R2

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 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

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Lab: BNW

ALIMENTARY SYSTEM

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

M .. Missing tissue

† .. Tissue examined microscopically

A.. Autolysis precludes evaluation

x Lesion present

BLANK Not examined microscopically

.. Lesion present
 Insufficient tissue

BEANK :: Not examined microscopically

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	6	7	7	7	6	7	6	2	7	7	6	6	7	5	7	7	7	7	7	5	6	6	6	
	3	1	3	2	2	3	9	9	1	2	4	2	2	7	2	3	0	3	3	2	3	9	0	7
	2	4	0	9	2	0	4	6	0	9	7	0	9	1	9	0	8	0	0	9	0	9	0	4

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4

males
(cont...)

Parathyroid Gland

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

Pituitary Gland

+ +

Adenoma

X X

Thyroid Gland

+ +

C-cell, Adenoma

X X

C-cell, Carcinoma

X X

Follicular Cell, Carcinoma

GENERAL BODY SYSTEM

Peritoneum

+ +

Mesothelioma Malignant

X X

GENITAL SYSTEM

Epididymis

+ +

Mesothelioma Malignant

X X

Preputial Gland

+ +

Prostate

+ +

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

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

**males
(cont...)**

SYSTEMIC LESIONS

Multiple Organ

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

Leukemia Mononuclear

Mesothelioma Malignant

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

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

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 |
| Leukemia Mononuclear | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 23 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

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

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x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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

Parathyroid Gland

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

Pituitary Gland

+ 50

Adenoma

X 36

Thyroid Gland

+ 50

C-cell, Adenoma

3

C-cell, Carcinoma

1

Follicular Cell, Carcinoma

2

GENERAL BODY SYSTEM

Peritoneum

..... 2

Mesothelioma Malignant

..... 2

GENITAL SYSTEM

Epididymis

+ 50

Mesothelioma Malignant

..... 1

Preputial Gland

+ 50

Prostate

+ 50

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

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

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| 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 | X | X | 18 | |
| Interstitial Cell, Adenoma | X | X | | | | | | | | | | | | | X | X | X | X | X | X | X | X | X | X | 18 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node | + | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| Deep Cervical, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreatic, Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| Lymph Node, Bronchial | M | + | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 7 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 1 | |
| Lymph Node, Mediastinal | + | + | + | M | M | + | + | + | M | M | + | + | + | + | + | + | + | + | + | + | + | + | + | 34 | |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | 6 |

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

M .. Missing tissue

+ .. Tissue examined microscopically

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

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | X | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 26 |
| Thymus | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

INTEGUMENTARY SYSTEM

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

MUSCULOSKELETAL SYSTEM

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

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

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

*** TOTALS**

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

SPECIAL SENSES SYSTEM

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

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | X | | | | | | 6 |
| Lipoma | | | | | | | | | | | | | | | | | | | X | | | | | 1 |
| Renal Tubule, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Renal Tubule, Carcinoma | | | | | | | | | | | | | | | | | | | X | | | | | 1 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | X | | | | | 4 |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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

SYSTEMIC LESIONS

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

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

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

**males
(cont...)**

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Mesentery | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | X | | | | | | | | | | | | | | | | | | | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tongue | | | | | | | | | | | | | | | + | | | + | | | | | | | | |
| Papilloma | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| Tooth | | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Blood Vessel | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear, Metastatic,
Spleen | | | | | | | X | | | | | | | | | | | | | | | | | | | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

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

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 250 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**males
(cont...)**

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | X | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | X |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pheochromocytoma Benign | X | | | | | | | | X | | | | | | | | | | X | | | | | | |
| Pheochromocytoma Malignant | | | | | | | | | | X | | | | | | | | | | | | | | | |
| Bilateral, Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | X | | | | | | | | | X | | | | | | | | | | | | | | | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid 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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENF

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

**males
(cont...)**

SPECIAL SENSES SYSTEM

URINARY SYSTEM

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

DEANX : Not examined microscopically

TDMS No. 96011 - 05

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Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

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CUMENE

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

Lab: BNW

Leukemia Mononuclear

x

X

SYSTEMIC LESIONS

Multiple Organ

Leukemia Mononuclear

× × × × × × × × × × × × × ×

Mesothelioma Malignant

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

+ ... Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

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TDMS No. 96011 - 05

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Lab: BNW

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

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 49 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | 49 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Ileum | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | 47 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Jejunum | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | 47 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 29 |

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

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

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BLANK .. Not examined microscopically

TDMS No. 96011 - 05

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CUMENE

CAS Number: 98-82-8

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Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 7 | 6 | 6 | 5 | 4 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 7 | 7 |
| | 3 | 2 | 2 | 7 | 3 | 2 | 2 | 1 | 4 | 3 | 1 | 3 | 6 | 8 | 4 | 8 | 0 | 2 | 2 | 6 | 1 | 7 | 3 | 2 | 2 |
| | 0 | 9 | 9 | 5 | 0 | 9 | 8 | 8 | 3 | 6 | 3 | 0 | 5 | 6 | 1 | 0 | 5 | 9 | 4 | 5 | 1 | 4 | 9 | 9 | 9 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FISCHER 344 RATS MALE | 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 |
| 250 PPM | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

* TOTALS

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Mesentery | + | + | | + | + | | | | | | | | | | | | | | | | | | | | 13 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 4 | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Tongue | | | | | | | | | | | | | | | + | | | | | | | | | | 3 | |
| Papilloma | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Tooth | | | | | | | | | | | | | | | | | | | | | | | | | + | 1 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Blood Vessel | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear, Metastatic, | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Spleen | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 7 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 7 | 6 | 6 | 5 | 4 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 7 | 7 |
| | 3 | 2 | 2 | 7 | 3 | 2 | 2 | 1 | 4 | 3 | 1 | 3 | 6 | 8 | 4 | 8 | 0 | 2 | 2 | 6 | 1 | 7 | 3 | 2 | 2 |
| | 0 | 9 | 9 | 5 | 0 | 9 | 8 | 8 | 3 | 6 | 3 | 0 | 5 | 6 | 1 | 0 | 5 | 9 | 4 | 5 | 1 | 4 | 9 | 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 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 250 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenoma | | X | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | X | | | | | | | | | | 6 | |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Bilateral, Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | 49 | |
| 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 | X | X | X | 38 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | X | 3 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 7 | 6 | 6 | 5 | 4 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 7 | 7 |
| | 3 | 2 | 2 | 7 | 3 | 2 | 2 | 1 | 4 | 3 | 1 | 3 | 6 | 8 | 4 | 8 | 0 | 2 | 2 | 6 | 1 | 7 | 3 | 2 | 2 |
| | 0 | 9 | 9 | 5 | 0 | 9 | 8 | 8 | 3 | 6 | 3 | 0 | 5 | 6 | 1 | 0 | 5 | 9 | 4 | 5 | 1 | 4 | 9 | 9 | 9 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 |
| 250 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*** TOTALS**

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|--|--|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| C-cell, Adenoma | X | X | | | X | X | X | | | | | | | | | | | | | | | | | | | 7 | |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Follicular Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

GENERAL BODY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Peritoneum | + | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Mesothelioma Malignant | | X | | | | | | | | | | | | | | | | | | | | | | | | | 2 |

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|---|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 7 | 6 | 6 | 5 | 4 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 7 | 7 |
| | 3 | 2 | 2 | 7 | 3 | 2 | 2 | 1 | 4 | 3 | 1 | 3 | 6 | 8 | 4 | 8 | 0 | 2 | 2 | 6 | 1 | 7 | 3 | 2 | 2 |
| | 0 | 9 | 9 | 5 | 0 | 9 | 8 | 8 | 3 | 6 | 3 | 0 | 5 | 6 | 1 | 0 | 5 | 9 | 4 | 5 | 1 | 4 | 9 | 9 | 9 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 250 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*** TOTALS**

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|--|--|----|--|
| Mesothelioma Malignant | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Bilateral, Interstitial Cell, Adenoma | | X | X | X | X | X | | X | | X | X | | X | | X | X | | X | X | | X | X | | | 24 | |
| Interstitial Cell, Adenoma | | | X | | | | X | X | X | | | X | | X | | X | X | | X | | | X | | | 14 | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | + | | | + | | + | | | + | | + | | | | | | | | + | | + | | | | 10 | |
| Deep Cervical, Carcinoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | X | | | 1 | |
| Deep Cervical, Leukemia Mononuclear | | | X | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Pancreatic, Leukemia Mononuclear | | | | | | | X | | X | | | X | | X | | | | | | X | | | | | | 7 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Bronchial | M | M | M | M | M | M | + | + | M | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | 12 | | |
| Leukemia Mononuclear | | | | | | | X | | | X | | | X | | | | | | | X | X | | | | | 7 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mediastinal | M | + | + | M | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | M | + | + | 32 | |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | X | | | | | | X | | | X | | X | | | | | | X | | | | | | | 8 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| DAY ON TEST | 7 | 7 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 7 | 6 | 6 | 5 | 4 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 7 | 7 |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| | 3 | 2 | 2 | 7 | 3 | 2 | 2 | 1 | 4 | 3 | 1 | 3 | 6 | 8 | 4 | 8 | 0 | 2 | 2 | 6 | 1 | 7 | 3 | 2 | 2 |
| | 0 | 9 | 9 | 5 | 0 | 9 | 8 | 8 | 3 | 6 | 3 | 0 | 5 | 6 | 1 | 0 | 5 | 9 | 4 | 5 | 1 | 4 | 9 | 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 |
| 250 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | X | | | X | | | | | | | | | | | X | | | | 7 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | X | X | X | X | X | X | | X | | X | X | X | | X | X | X | X | X | X | X | X | X | X | X | 32 |
| Thymus | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

INTEGUMENTARY SYSTEM

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

MUSCULOSKELETAL SYSTEM

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | 7 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 7 | 6 | 6 | 5 | 4 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 7 | 7 | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| | 3 | 2 | 2 | 7 | 3 | 2 | 2 | 1 | 4 | 3 | 1 | 3 | 6 | 8 | 4 | 8 | 0 | 2 | 2 | 6 | 1 | 7 | 3 | 2 | 2 | |
| | 0 | 9 | 9 | 5 | 0 | 9 | 8 | 8 | 3 | 6 | 3 | 0 | 5 | 6 | 1 | 0 | 5 | 9 | 4 | 5 | 1 | 4 | 9 | 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 | |
| 250 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Rhabdomyosarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Granular Cell Tumor Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Alveolar/Bronchiolar Adenoma | X | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Carcinoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | | 19 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Respiratory Epithelium, Adenoma | X | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Respiratory Epithelium, Adenoma,
Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 7 | 6 | 6 | 5 | 4 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 7 | 7 |
| DAY ON TEST | 3 | 2 | 2 | 7 | 3 | 2 | 2 | 1 | 4 | 3 | 1 | 3 | 6 | 8 | 4 | 8 | 0 | 2 | 2 | 6 | 1 | 7 | 3 | 2 | 2 |
| | 0 | 9 | 9 | 5 | 0 | 9 | 8 | 8 | 3 | 6 | 3 | 0 | 5 | 6 | 1 | 0 | 5 | 9 | 4 | 5 | 1 | 4 | 9 | 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 |
| 250 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*** TOTALS**

Leukemia Mononuclear

X

X

X

5

SYSTEMIC LESIONS

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

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 4 | 6 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 5 |
| | 9 | 2 | 3 | 2 | 2 | 7 | 2 | 3 | 3 | 2 | 4 | 2 | 3 | 3 | 3 | 2 | 3 | 4 | 7 | 2 | 3 | 2 | 2 | 6 |
| | 5 | 5 | 4 | 9 | 9 | 0 | 9 | 0 | 0 | 9 | 6 | 9 | 0 | 0 | 0 | 9 | 0 | 5 | 4 | 9 | 0 | 9 | 9 | 9 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| ANIMAL ID | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 500 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 |

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 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | + | + | | | | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 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 | 6 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 5 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9 | 2 | 3 | 2 | 2 | 7 | 2 | 3 | 3 | 2 | 4 | 2 | 3 | 3 | 2 | 3 | 2 | 4 | 7 | 2 | 3 | 2 | 2 | 6 |
| | 5 | 5 | 4 | 9 | 9 | 0 | 9 | 0 | 0 | 9 | 6 | 9 | 0 | 0 | 9 | 0 | 9 | 5 | 4 | 9 | 0 | 9 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 500 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 |

males
(cont...)

males
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Mesothelioma Malignant | | | | | | | X | | | | | | | | | | | | | | | | |
| 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

| | | | |
|-------------------------------------|---|---|---|
| Lymph Node | + | + | + |
| Deep Cervical, Leukemia Mononuclear | | | X |
| Pancreatic, Leukemia Mononuclear | | X | |

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

† ... Tissue examined microscopically

Lesion present

.. Lesion present
 Insufficient tissue

M .. Missing 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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

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

males
(cont...)

Squamous Cell Papilloma

Subcutaneous Tissue, Fibroma

Subcutaneous Tissue, Lipoma

X

X

MUSCULOSKELETAL SYSTEM

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

NERVOUS SYSTEM

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

RESPIRATORY SYSTEM

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

* .. 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

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CUMENE

CAS Number: 98-82-8

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Date Report Reqstd: 01/12/2006

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Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 6 | 5 | 7 | 6 | 6 | 7 | 6 | 4 | 6 | 5 | 7 | 2 | 6 | 7 | 5 | 7 | 7 | 7 | 6 | 7 | 7 |
| | 2 | 9 | 8 | 5 | 2 | 3 | 0 | 3 | 3 | 0 | 7 | 6 | 4 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 7 | 3 | 3 |
| | 9 | 5 | 8 | 4 | 9 | 8 | 0 | 0 | 9 | 2 | 0 | 0 | 8 | 3 | 9 | 3 | 6 | 9 | 4 | 9 | 9 | 0 | 9 |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 500 PPM | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | * 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 |
| Leukemia Mononuclear | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 31 | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | 10 |
| Pancreas | | | | | | | | | | | | | | | | | | | | | | | | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

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

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CUMENE

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Lab: BNW

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

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | 1 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Blood Vessel | + | | | | | | | | | | | | | | | | | | | | | | | 1 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Alveolar/Bronchiolar Carcinoma,
Metastatic, Lung | | | | | | | | | | | | | | | | | | | | | | | | 1 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | 9 |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | 1 |

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| DAY ON TEST | 7 | 6 | 6 | 5 | 7 | 6 | 6 | 7 | 6 | 4 | 6 | 5 | 7 | 2 | 6 | 7 | 5 | 7 | 7 | 7 | 6 | 7 | 7 | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 2 | 9 | 8 | 5 | 2 | 3 | 0 | 3 | 3 | 0 | 7 | 6 | 4 | 2 | 2 | 1 | 2 | 2 | 3 | 7 | 3 | 7 | 3 | 3 |
| | 9 | 5 | 8 | 4 | 9 | 8 | 0 | 0 | 9 | 2 | 0 | 0 | 8 | 3 | 9 | 3 | 6 | 9 | 4 | 9 | 9 | 0 | 9 | 0 |
| 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 |
| 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 |
| 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 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | | X | | | | 2 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma | | | | | | | | | | | | | | | | | | | | X | X | X | X | 25 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | X | | | | 1 |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |

GENERAL BODY SYSTEM

| | | | |
|--|---|---|---|
| Peritoneum | + | + | + |
| Carcinoma, Metastatic, Urinary Bladder | | | X |
| Mesothelioma Malignant | X | X | |

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mesothelioma Malignant | X | | | | | | | | | | | | | | | | | | | | | | 2 |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

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

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Carcinoma, Metastatic, Urinary Bladder | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Mesothelioma Malignant | X | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Bilateral, Interstitial Cell, Adenoma | X | | X | X | X | | | X | X | X | | | X | X | | X | X | X | X | X | X | X | X | X | 27 | |
| Interstitial Cell, Adenoma | | | X | | | | | | | | | | | | | | | | | | | | | | | 13 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | + | + | | | | | | | | | | | | | | | | | | | | | | | 8 |
| Deep Cervical, Leukemia Mononuclear | | | X | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Bronchial | + | M | M | + | M | M | + | + | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | 11 | |
| Leukemia Mononuclear | | | X | | | X | | | X | | | X | | | X | | X | | X | | X | | X | | 8 | |

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENF

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

INTEGUMENTARY SYSTEM

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

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

*** TOTALS**

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Squamous Cell Papilloma | X | X | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Subcutaneous Tissue, Lipoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Alveolar/Bronchiolar Carcinoma,
Metastatic, Lung | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Urinary Bladder | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

NERVOUS SYSTEM

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

RESPIRATORY SYSTEM

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

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

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

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Alveolar/Bronchiolar Adenoma | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Alveolar/Bronchiolar Carcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Skin | | | | | X | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Urinary Bladder | | | | | | | | | | | | | | | | | X | | | | | | 1 |
| Leukemia Mononuclear | | X | | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 22 | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Leukemia Mononuclear | | | | | X | | | | | | | | | | | | | | | | | | 1 |
| Glands, Respiratory Epithelium, Adenoma | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Respiratory Epithelium, Adenoma | | | X | | | X | X | | | | | | | | | X | | X | | | | X | 15 |
| Respiratory Epithelium, Adenoma, Multiple | | | X | | | | | | | | | | | | X | | | | | | | | 2 |
| Pleura | | | | | | | | | | | | | | | | | + | + | | | | | 5 |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

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

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

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BLANK .. Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

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Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 6 | 5 | 7 | 7 | 7 | 6 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 6 | 6 |
| DAY ON TEST | 2 | 2 | 3 | 4 | 2 | 7 | 3 | 2 | 3 | 2 | 3 | 5 | 0 | 3 | 1 | 6 | 3 | 8 | 2 | 3 | 2 | 2 | 3 | 5 | 2 |
| | 9 | 9 | 0 | 1 | 9 | 7 | 0 | 9 | 0 | 6 | 5 | 4 | 5 | 0 | 1 | 0 | 5 | 4 | 9 | 0 | 9 | 9 | 0 | 0 | 8 |
| 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 |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**males
(cont...)**

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Carcinoma, Metastatic, Prostate | | | | | | | | | | | | | | | | | X | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | X | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Tongue | | | | | | | | | | | | | | | | | + | | | | | | | | + |

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | X | | | | | | | | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 6 | 5 | 7 | 7 | 7 | 6 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 6 | 6 |
| DAY ON TEST | 2 | 2 | 3 | 4 | 2 | 7 | 3 | 2 | 3 | 2 | 3 | 5 | 0 | 3 | 1 | 6 | 3 | 8 | 2 | 3 | 2 | 2 | 3 | 5 | 2 |
| | 9 | 9 | 0 | 1 | 9 | 7 | 0 | 9 | 0 | 6 | 5 | 4 | 5 | 0 | 1 | 0 | 5 | 4 | 9 | 0 | 9 | 9 | 0 | 0 | 8 |
| 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 |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**males
(cont...)**

Transitional Epithelium, Carcinoma

Transitional Epithelium, Papilloma

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | X | X | X | X | | X | X | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Lymphoma Malignant | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 6 | 4 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | |
| | 3 | 1 | 7 | 1 | 4 | 2 | 7 | 2 | 1 | 2 | 2 | 8 | 5 | 2 | 0 | 7 | 1 | 2 | 3 | 3 | 2 | 2 | 6 | 2 | 3 |
| | 0 | 7 | 4 | 8 | 2 | 9 | 7 | 0 | 8 | 9 | 8 | 3 | 9 | 0 | 7 | 5 | 9 | 0 | 0 | 4 | 9 | 7 | 9 | 0 | |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | * 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 | + | + | + | + | 49 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 49 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Prostate | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Hepatocellular Carcinoma | X | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | X | | | | | 1 |
| Leukemia Mononuclear | X | X | | | X | X | | | X | | | X | | X | | X | | X | X | X | | | | 25 |
| Mesentery | | | | | | | | | | | | | | | | | | | | + | | | | 6 |
| Carcinoma, Metastatic, Prostate | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| DAY ON TEST | 7 | 7 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 6 | 4 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | | |
|---------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| | 3 | 1 | 7 | 1 | 4 | 2 | 7 | 2 | 1 | 2 | 2 | 8 | 5 | 2 | 0 | 7 | 1 | 2 | 3 | 3 | 2 | 2 | 6 | 2 | 3 | |
| | 0 | 7 | 4 | 8 | 2 | 9 | 7 | 0 | 8 | 9 | 9 | 8 | 3 | 9 | 0 | 7 | 5 | 9 | 0 | 0 | 4 | 9 | 7 | 9 | 0 | |
| 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 | |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Carcinoma, Metastatic, Prostate | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 6 | 4 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 |
| | 3 | 1 | 7 | 1 | 4 | 2 | 7 | 2 | 1 | 2 | 2 | 8 | 5 | 2 | 0 | 7 | 1 | 2 | 3 | 3 | 2 | 2 | 6 | 2 |
| | 0 | 7 | 4 | 8 | 2 | 9 | 7 | 0 | 8 | 9 | 8 | 3 | 9 | 0 | 7 | 5 | 9 | 0 | 0 | 4 | 9 | 7 | 9 | 0 |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Pheochromocytoma Benign | X | X | X | | | | | | | | | | | | | | | | | | | | | | 8 |
| Pheochromocytoma Malignant | | | | X | | | | | | | | | | | | | | | | | | | | | 2 |
| Bilateral, Pheochromocytoma Benign | X | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | X | | 2 |
| 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 | X | X | 30 | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Follicular Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Follicular Cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | 2 |

GENERAL BODY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Peritoneum | | | | | | | | | | | | | | | | | | | | | | | | | + | 2 |
| Carcinoma, Metastatic, Prostate | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Mesothelium, Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |

* .. 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

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P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

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

Lab: BNW

| DAY ON TEST | 7 | 7 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 6 | 4 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 1 | 7 | 1 | 4 | 2 | 7 | 2 | 1 | 2 | 2 | 8 | 5 | 2 | 0 | 7 | 1 | 2 | 3 | 3 | 2 | 2 | 6 | 2 | 3 |
| | 0 | 7 | 4 | 8 | 2 | 9 | 7 | 0 | 8 | 9 | 9 | 8 | 3 | 9 | 0 | 7 | 5 | 9 | 0 | 0 | 4 | 9 | 7 | 9 | 0 |
| 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 |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Prostate | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| 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 | X | X | 37 |
| Interstitial Cell, Adenoma | | | | | X | X | | | | | | | | | | | | | | | | | | | 9 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | + | | + | | + | + | + | + | | | | | | | | | | | | | | | | | 14 |
| Deep Cervical, Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | 4 |

* .. 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

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Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| DAY ON TEST | 7 | 7 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 6 | 4 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|----|
| | 3 | 1 | 7 | 1 | 4 | 2 | 7 | 2 | 1 | 2 | 2 | 8 | 5 | 2 | 0 | 7 | 1 | 2 | 3 | 3 | 2 | 2 | 6 | 2 | 3 |
| | 0 | 7 | 4 | 8 | 2 | 9 | 7 | 0 | 8 | 9 | 8 | 3 | 9 | 0 | 7 | 5 | 9 | 0 | 0 | 4 | 9 | 7 | 9 | 0 | |
| 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 | |
| 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 | |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| Iliac, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | X | | | | 1 |
| Pancreatic, Leukemia Mononuclear | | | | | | | | X | X | | | | | | | | | | | X | X | | | 8 | |
| Lymph Node, Bronchial | + | M | M | M | M | + | M | M | M | M | M | M | M | M | + | M | + | M | M | + | M | + | M | M | 8 |
| Leukemia Mononuclear | | X | | | | | X | | | | | | | | | X | X | | X | X | | | | 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 | 1 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | X | | | | | | | | 1 | |
| Lymph Node, Mediastinal | + | M | M | M | M | + | + | M | + | M | M | + | + | + | + | M | + | + | + | + | + | M | + | + | 34 |
| Leukemia Mononuclear | | | | | | | X | | | | | | | | | | | | | | | | | 4 | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | X | | | | X | | | | | | | | | | X | | | X | X | | | | 11 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Prostate | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Leukemia Mononuclear | X | X | | | X | X | X | | | | | | | | | X | | X | X | X | X | X | X | | 28 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

INTEGUMENTARY SYSTEM

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

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 7 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 6 | 4 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 |
| DAY ON TEST | 3 | 1 | 7 | 1 | 4 | 2 | 7 | 2 | 1 | 2 | 2 | 8 | 5 | 2 | 0 | 7 | 1 | 2 | 3 | 3 | 2 | 2 | 6 | 2 |
| | 0 | 7 | 4 | 8 | 2 | 9 | 7 | 0 | 8 | 9 | 8 | 3 | 9 | 0 | 7 | 5 | 9 | 0 | 0 | 4 | 9 | 7 | 9 | 0 |
| 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 |
| 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 |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | |
|-----------------------------------|---|----|
| Fibroadenoma | X | 2 |
| Skin | + | 50 |
| Basal Cell Adenoma | | 1 |
| Keratoacanthoma | X | 2 |
| Keratoacanthoma, Multiple | X | 1 |
| Trichoepithelioma | | 1 |
| Subcutaneous Tissue, Fibroma | | 4 |
| Subcutaneous Tissue, Fibrosarcoma | X | 1 |
| Subcutaneous Tissue, Schwannoma | | 1 |
| Benign | X | |

MUSCULOSKELETAL SYSTEM

| | | |
|---------------------------------|---|----|
| Bone | + | 50 |
| Skeletal Muscle | | 1 |
| Carcinoma, Metastatic, Prostate | | 1 |

NERVOUS SYSTEM

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

RESPIRATORY SYSTEM

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 6 | 4 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 |
| | 3 | 1 | 7 | 1 | 4 | 2 | 7 | 2 | 1 | 2 | 2 | 8 | 5 | 2 | 0 | 7 | 1 | 2 | 3 | 3 | 2 | 2 | 6 | 2 |
| | 0 | 7 | 4 | 8 | 2 | 9 | 7 | 0 | 8 | 9 | 8 | 3 | 9 | 0 | 7 | 5 | 9 | 0 | 0 | 4 | 9 | 7 | 9 | 0 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 |
| 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 |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Alveolar/Bronchiolar Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | X | 2 |
| Alveolar/Bronchiolar Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | X | 2 |
| Alveolar/Bronchiolar Carcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Carcinoma, Metastatic, Prostate | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | X | X | | | | | | | | | | | | | | | | | | | | | | X | 19 |
| Pheochromocytoma Malignant,
Metastatic, Adrenal Medulla | | | | | | | | | | | | | | | | X | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | X | 3 |
| Respiratory Epithelium, Adenoma | | | | | | X | | | | | | | | | | | | | | | | | | | X | 4 |
| Respiratory Epithelium, Adenoma,
Multiple | | | | | | | | | | | | | | | X | | | | | | | | | | X | 6 |
| Pleura | + | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |

SPECIAL SENSES SYSTEM

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| DAY ON TEST | 7 | 7 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 6 | 4 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| | 3 | 1 | 7 | 1 | 4 | 2 | 7 | 2 | 1 | 2 | 2 | 8 | 5 | 2 | 0 | 7 | 1 | 2 | 3 | 3 | 2 | 2 | 6 | 2 | 3 |
| | 0 | 7 | 4 | 8 | 2 | 9 | 7 | 0 | 8 | 9 | 8 | 3 | 9 | 0 | 7 | 5 | 9 | 0 | 0 | 4 | 9 | 7 | 9 | 0 | |
| 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 | |
| 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 | |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | X | | | | | 1 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | + | | | | | 2 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | X | | | | | 2 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Carcinoma, Metastatic, Prostate | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | X | X | | | | X | | | X | | | X | | X | | | | | | X | X | X | | 14 | |
| Lipoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Renal Tubule, Adenoma | | | | | | | | | | | | | | | | | | | | X | X | | | | 4 |
| Renal Tubule, Carcinoma | X | | X | | | | | | | | | | | | | | | | | | | | | | 3 |
| Ureter | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Prostate | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Urethra | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Prostate | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 96011 - 05

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Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

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| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 6 | 4 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 |
| | 3 | 1 | 7 | 1 | 4 | 2 | 7 | 2 | 1 | 2 | 2 | 8 | 5 | 2 | 0 | 7 | 1 | 2 | 3 | 3 | 2 | 2 | 6 | 2 |
| | 0 | 7 | 4 | 8 | 2 | 9 | 7 | 0 | 8 | 9 | 8 | 3 | 9 | 0 | 7 | 5 | 9 | 0 | 0 | 4 | 9 | 7 | 9 | 0 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 |
| 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 |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

*** TOTALS**

Transitional Epithelium, Carcinoma

X

1

Transitional Epithelium, Papilloma

X X

2

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Histiocytic Sarcoma | | | | | | | | | | | | X | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | X | X | | | X | X | X | | | | X | | X | X | X | X | X | X | X | X | X | X | X | 28 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |

*** END OF MALE DATA ***

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

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

females
(cont...)

ALIMENTARY SYSTEM

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

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

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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

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

females
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

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

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | 6 | 6 | 7 | 7 | 7 | 5 | 5 | 6 | 6 | 4 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 6 | 5 | 6 | 3 | 7 | 7 | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 1 | 1 | 3 | 4 | 5 | 6 | 6 | 8 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 0 | 8 | 3 | 9 | 7 | 7 | 1 | 3 | |
| | 2 | 4 | 0 | 6 | 2 | 7 | 8 | 0 | 2 | 5 | 1 | 1 | 1 | 2 | 2 | 8 | 2 | 5 | 8 | 5 | 6 | 6 | 6 | 4 | 6 | 2 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Polyp Stromal | X | | | | | X | | | | | X | X | | | | | | X | | | | | | | | X |
| Sarcoma Stromal | | | | | | X | | | | | | | | | | | | | | | | | | | | |
| Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Polyp | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Epithelium, Polyp | | | | | | | | | | | | | | | | | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Deep Cervical, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Renal, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | |
| 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 | M | M | M | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Lymph Node, Mesenteric | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | |

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMEN

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

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

Lab: BNW

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

Leukemia Mononuclear

X X

INTEGUMENTARY SYSTEM

MUSCULOSKELETAL SYSTEM

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

† ... Tissue examined microscopically

Lesion present

.. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

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

Lab: BNW

| | 6 | 6 | 7 | 7 | 7 | 5 | 5 | 6 | 6 | 4 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 6 | 5 | 6 | 3 | 7 | 7 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 6 | 7 | 1 | 1 | 3 | 4 | 5 | 6 | 6 | 8 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 0 | 8 | 3 | 9 | 7 | 7 | 1 | 3 |
| | 2 | 4 | 0 | 6 | 2 | 7 | 8 | 0 | 2 | 5 | 1 | 1 | 1 | 2 | 2 | 8 | 2 | 5 | 8 | 5 | 6 | 6 | 4 | 6 | 2 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

Skeletal Muscle
Fibrous Histiocytoma. Metastatic. Skin

NERVOUS SYSTEM

RESPIRATORY SYSTEM

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

+ .. Tissue examined microscopically

x Lesion present

.. Lesion present
 Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK Not examined microscopically

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Species/Strain: RATS/F 344

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| | 6 | 6 | 7 | 7 | 7 | 5 | 5 | 6 | 6 | 4 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 6 | 5 | 6 | 3 | 7 | 7 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 6 | 7 | 1 | 1 | 3 | 4 | 5 | 6 | 6 | 8 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 0 | 8 | 3 | 9 | 7 | 7 | 1 | 3 |
| | 2 | 4 | 0 | 6 | 2 | 7 | 8 | 0 | 2 | 5 | 1 | 1 | 1 | 2 | 2 | 8 | 2 | 5 | 8 | 5 | 6 | 6 | 4 | 6 | 2 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

Multiple Organ

Leukemia Mononuclear

X X X

2

females (cont...)

* Total animals with tissue examined microscopically: Total animals with tumor

± Tissue examined microscopically

x Lesion present

.. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Large, Colon | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Large, Rectum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Sarcoma Stromal, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Duodenum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Small, Ileum | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 44 |
| Intestine Small, Jejunum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 45 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | X | | | X | | X | | X | | | | | | | | | | | | X | X | | | | 11 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | 18 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

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

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

TDMS No. 96011 - 05

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| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | |
| | 3 | 1 | 3 | 3 | 3 | 3 | 9 | 1 | 1 | 3 | 0 | 3 | 0 | 3 | 6 | 3 | 2 | 3 | 3 | 3 | 3 | 1 | 3 | 2 | 1 | 6 |
| | 1 | 9 | 1 | 2 | 1 | 2 | 2 | 6 | 3 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 8 | 2 | 2 | 2 | 6 | 2 | 2 | 8 | 8 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Tongue | + | | | | | | | | | | | | | | | | | | | | | | | | 1 | |

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

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

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| DAY ON TEST | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| | 3 | 1 | 3 | 3 | 3 | 3 | 9 | 1 | 1 | 3 | 0 | 3 | 0 | 3 | 6 | 3 | 2 | 3 | 3 | 3 | 1 | 3 | 2 | 1 | 6 |
| | 1 | 9 | 1 | 2 | 1 | 2 | 2 | 6 | 3 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 8 | 2 | 2 | 2 | 6 | 2 | 2 | 8 | 8 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Polyp Stromal | X | | X | | | | | | | | X | X | | | | | | X | X | X | X | | | 13 | |
| Sarcoma Stromal | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Vagina | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Polyp | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Epithelium, Polyp | | | | | | | | | | | | | | | | | | | | | | | | 1 | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|----|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Deep Cervical, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Renal, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 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 | 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 | 4 |
| Lymph Node, Mediastinal | +M | M | M | +M | +M | +M | +M | +M | +M | +M | +M | +M | +M | +M | +M | +M | +M | +M | +M | +M | M | M | +M | 30 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

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

*** TOTALS**

| | | |
|--|-------|----|
| Leukemia Mononuclear | X | 3 |
| Spleen | + | 50 |
| Fibrous Histiocytoma, Metastatic, Skin | X | 1 |
| Leukemia Mononuclear | X X X | 12 |
| Thymus | + | 48 |

INTEGUMENTARY SYSTEM

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

MUSCULOSKELETAL SYSTEM

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

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENF

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

Skeletal Muscle

1

Fibrous Histiocytoma, Metastatic, Skin

1

NERVOUS SYSTEM

RESPIRATORY SYSTEM

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

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

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

SPECIAL SENSES SYSTEM

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

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Lacrimal Gland | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

URINARY SYSTEM

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

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

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

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | |
| | 3 | 1 | 3 | 3 | 3 | 3 | 9 | 1 | 1 | 3 | 0 | 3 | 0 | 3 | 6 | 3 | 2 | 3 | 3 | 3 | 3 | 1 | 3 | 2 | 1 | |
| | 1 | 9 | 1 | 2 | 1 | 2 | 2 | 6 | 3 | 1 | 2 | 1 | 1 | 1 | 3 | 2 | 8 | 2 | 2 | 2 | 6 | 2 | 2 | 8 | 8 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | X | | | | | X | X | | X | | | | | | | | | | | | | | | | | 12 |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | 6 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 7 | 6 | 7 | |
| | 3 | 9 | 3 | 3 | 3 | 3 | 0 | 8 | 6 | 7 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 7 | 1 | 3 | 6 | 3 |
| | 1 | 7 | 2 | 1 | 2 | 2 | 8 | 2 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 0 | 2 | 1 | 7 | 2 | 0 | 2 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | |
| 250 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

females
(cont...)

ALIMENTARY SYSTEM

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

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | 6 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 7 | 6 | 7 | |
| | 3 | 9 | 3 | 3 | 3 | 3 | 0 | 8 | 6 | 7 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 7 | 1 | 3 | 6 | 3 |
| | 1 | 7 | 2 | 1 | 2 | 2 | 8 | 2 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 0 | 2 | 1 | 7 | 2 | 0 | 2 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | |
| 250 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

females
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tooth | | | | | | | + | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | |

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | 6 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 7 | 6 | 7 | |
| | 3 | 9 | 3 | 3 | 3 | 3 | 0 | 8 | 6 | 7 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 7 | 1 | 3 | 6 | 3 |
| | 1 | 7 | 2 | 1 | 2 | 2 | 8 | 2 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 0 | 2 | 1 | 7 | 2 | 0 | 2 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | |
| 250 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

females
(cont...)

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

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

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

females
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Carcinoma | X | | | | | | | | | | | | | | | | | | | | | | | | X |
| Carcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Fibroadenoma | X | | X | | X | | | | | | | | | | | | | | | | | | | | X |
| Fibroadenoma, Multiple | | X | | X | | | | | | | | | | | | | | | | X | X | X | X | X | X |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Subcutaneous Tissue, Schwannoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benign | | | | | | | | | | | | | | | | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

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

NERVOUS SYSTEM

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

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 7 | 6 | 7 | 7 | 5 | 7 | 5 | 0 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 7 | 7 |
| | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 1 | 3 | 0 | 3 | 3 | 9 | 4 | 6 | 1 | 5 | 2 | 3 | 3 | 9 | 3 | 0 | 3 |
| | 1 | 2 | 5 | 0 | 1 | 4 | 1 | 6 | 6 | 1 | 4 | 1 | 2 | 6 | 7 | 3 | 6 | 5 | 8 | 2 | 2 | 8 | 1 | 9 | 2 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| 250 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 49 | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | A | A | + | + | + | + | + | + | 45 | |
| Intestine Large, Colon | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | A | A | + | + | + | + | + | + | 46 | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | A | A | + | + | + | + | + | + | 46 | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | A | A | + | + | + | + | + | + | 45 | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | A | A | + | + | + | + | + | + | 45 | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | A | A | + | + | + | + | + | + | 45 | |
| Liver | + | + | + | + | + | + | + | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 25 |
| Mesentery | + | + | | + | + | | + | | | | | | | | | + | + | | | + | + | | | | 18 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | X | | | | | | | | 2 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 49 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 49 | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 7 | 6 | 7 | 7 | 5 | 7 | 5 | 0 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 7 | 7 |
| | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 1 | 3 | 0 | 3 | 3 | 9 | 4 | 6 | 1 | 5 | 2 | 3 | 3 | 9 | 3 | 0 | 3 |
| | 1 | 2 | 5 | 0 | 1 | 4 | 1 | 6 | 6 | 1 | 4 | 1 | 2 | 6 | 7 | 3 | 6 | 5 | 8 | 2 | 2 | 8 | 1 | 9 | 2 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| 250 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 49 |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Tooth | | | | | | | | | | | | | | | | | | | | | | | | | 2 |

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 49 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 49 |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | X | | | | | | | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 49 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | A | + | + | M | + | 45 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

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

Lab: BNW

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENF

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

Cervix, Polyp Stroma

1

1

HEMATOPOIETIC SYSTEM

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

M .. Missing tissue

+ .. Tissue examined microscopically

A.. Autolysis precludes evaluation

x Lesion present

BLANK Not examined microscopically

x .. Lesion present
| Insufficient tissue

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|
| | 7 | 7 | 6 | 7 | 7 | 5 | 7 | 5 | 0 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 1 | 3 | 0 | 3 | 3 | 9 | 4 | 6 | 1 | 5 | 2 | 3 | 3 | 9 | 3 | 0 | 3 |
| | 1 | 2 | 5 | 0 | 1 | 4 | 1 | 6 | 6 | 1 | 4 | 1 | 2 | 6 | 7 | 3 | 6 | 5 | 8 | 2 | 2 | 8 | 1 | 9 | 2 | |
| DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | |
| 250 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| Thymus | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + | A | + | + | + | + | + | + | 46 | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma | X | | X | | | | | | | | | | | | | | | | | | | | | | 8 |
| Carcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Fibroadenoma | | | | | | | X | | | X | | X | | | | | | X | | X | | X | | | 11 |
| Fibroadenoma, Multiple | | | | | X | | | | | | | | | | | | | | X | | | X | | | 11 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | | | X | | | | | | 2 |
| Subcutaneous Tissue, Schwannoma | | | | | | | | | | | | | | | | | | | X | | | | | | 1 |
| Benign | | | | | | | | | | | | | | | | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

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

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | 49 |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 7 | 6 | 7 | 7 | 5 | 7 | 5 | 0 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 7 | 7 |
| | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 1 | 3 | 0 | 3 | 3 | 9 | 4 | 6 | 1 | 5 | 2 | 3 | 3 | 9 | 3 | 0 | 3 |
| | 1 | 2 | 5 | 0 | 1 | 4 | 1 | 6 | 6 | 1 | 4 | 1 | 2 | 6 | 7 | 3 | 6 | 5 | 8 | 2 | 2 | 8 | 1 | 9 | 2 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| 250 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

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

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 49 | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Carcinoma, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Mediastinum, Carcinoma, Metastatic,
Uterus | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 48 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Respiratory Epithelium, Adenoma | X | | | X | | | X | | | X | | | X | | | | | | | | | | | 5 | |
| Pleura | + | + | + | + | + | | | | | | | | | | | | + | + | | | | | | + | 16 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 49 | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENF

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

SPECIAL SENSES SYSTEM

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | X | | | | | | | X | | | | | | 3 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | 49 |

SYSTEMIC LESIONS

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

+ .. Tissue examined microscopically

✗ Lesion present

.. Lesion present
 Insufficient tiss

| .. insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

ANK Not examined microscopically

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Registered: 01/12/2006

Time Report Requested: 09:48:09

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

Lab: BNW

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

ALIMENTARY SYSTEM

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

+ .. Tissue examined microscopically

x .. Lesion present

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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| DAY ON TEST | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 5 | 6 | 7 | 6 | 7 | 6 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 1 | 0 | 3 | 3 | 3 | 1 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 3 | 3 | 3 | 8 | 3 | 3 | 3 |
| | 3 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 0 | 6 | 2 | 0 | 0 | 5 | 2 | 1 | 0 | 5 | 0 | 1 | 1 | 9 | 1 | 1 | 1 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | X | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Osteosarcoma, Metastatic, Bone | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 5 | 6 | 7 | 6 | 7 | 6 | 5 | 7 | 7 | 6 | 7 | 7 | 7 |
| | 7 | 1 | 0 | 3 | 3 | 1 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 3 | 3 | 3 | 8 | 3 | 3 | 3 |
| | 3 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 0 | 6 | 2 | 0 | 0 | 5 | 2 | 1 | 0 | 5 | 0 | 1 | 1 | 9 | 1 | 1 | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

Pheochromocytoma Benign

Pheochromocytoma Malignant

Islets, Pancreatic

Carcinoma

+ X

Parathyroid Gland

+ + + + M +

Pituitary Gland

Adenoma

+ X X X X

Thyroid Gland

C-cell, Adenoma

C-cell, Carcinoma

Follicular Cell, Carcinoma

+ +

GENERAL BODY SYSTEM

Peritoneum

Carcinoma, Metastatic, Ovary

GENITAL SYSTEM

Clitoral Gland

+ +

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 96011 - 05

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Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENF

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

| | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 5 | 6 | 7 | 6 | 7 | 6 | 5 | 7 | 7 | 6 | 7 | 7 | 7 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 7 | 1 | 0 | 3 | 3 | 1 | 3 | 3 | 6 | 1 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 3 | 3 | 3 | 8 | 3 | 3 | 3 |
| | 3 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 0 | 6 | 2 | 0 | 0 | 5 | 2 | 1 | 0 | 5 | 0 | 1 | 1 | 9 | 1 | 1 | 1 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

Keratoacanthoma

X

Squamous Cell Carcinoma

Subcutaneous Tissue, Hemangiopericytoma

x

MUSCULOSKELETAL SYSTEM

Skeletal Muscle

Alveolar/Bronchiolar Carcinoma Metastatic, Lung

NERVOUS SYSTEM

Peripheral Nerve

-

Spinal Cord

-

RESPIRATORY SYSTEM

* .. 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

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Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMFNF

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

ALIMENTARY SYSTEM

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x Lesion present

BLANK Not examined microscopically

.. Lesion present
 Insufficient tissue

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| DAY ON TEST | 6 | 7 | 7 | 7 | 6 | 3 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|----|---|
| | 2 | 3 | 3 | 3 | 7 | 3 | 3 | 7 | 6 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 4 | 0 | 1 | 2 | 6 | 9 | 2 | 9 | 1 | 1 | 1 | 1 | 2 | 1 | 8 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | X | 4 |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | | | + | 2 |

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Osteosarcoma, Metastatic, Bone | | | | | | | | | | | | | | | | | | | | | | | | | | | | 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

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENF

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

GENERAL BODY SYSTEM

.....
Peritoneum + 1
Carcinoma, Metastatic, Ovary X 1

GENITAL SYSTEM

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

+ .. Tissue examined microscopically

x Lesion present

.. Lesion present
 Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK Not examined microscopically

TDMS No. 96011 - 05

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Route: RESPIRATORY EXPOSURE WHOLE BODY

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Lab: BNW

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

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cystadenocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Osteosarcoma, Metastatic, Bone | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Polyp Stromal | | | | | | | X | | | X | | X | | | | | | | | | | | | X | | | 8 | |
| Sarcoma Stromal | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Lymph Node | + | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| Deep Cervical, Squamous Cell
Carcinoma, Metastatic, Skin | | | | | | | X | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | X | | | 3 | |
| Lymph Node, Bronchial
Leukemia Mononuclear | M | M | M | + | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 8 | | |
| | | | | | | | | X | | | | | | | | | | | | | | | | | | | | 3 |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 1 | | |
| Lymph Node, Mediastinal
Alveolar/Bronchiolar Carcinoma, | + | M | M | M | M | + | + | M | M | + | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 26 | | |
| | | | | | | | | X | | | | | | | | | | | | | | | | | | | | 1 |

* .. 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

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Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENF

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R

Date Report Requested: 01/12/2006

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

Lab: BNW

Keratoacanthoma X 2
Squamous Cell Carcinoma X 1
Subcutaneous Tissue,
Hemangiopericytoma 1

MUSCULOSKELETAL SYSTEM

NERVOUS SYSTEM

RESPIRATORY SYSTEM

* .. 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

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CUMENE

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|-----------------|---|---|
| | 6 | 7 | 7 | 7 | 6 | 3 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 3 | 3 | 3 | 7 | 3 | 3 | 7 | 6 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 4 | 0 | 1 | 2 | 6 | 9 | 2 | 9 | 1 | 1 | 1 | 1 | 2 | 1 | 8 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | ..... | * TOTALS | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Alveolar/Bronchiolar Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Ovary | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | X | | | | | | | | | | | | | | | | | | | | | | 10 |
| Osteosarcoma, Metastatic, Bone | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Carcinoma, Metastatic, Skin | | | | | X | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Respiratory Epithelium, Adenoma | | | | | | | X | | | X | | | | | | | | | | X | | | | | | | | 4 |
| Pleura | | | | | | | | + | + | | | + | + | + | | | | | | | | | | | | | | 16 |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung | | | | | | | | | X | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Ovary | | | | | | | | | | | | X | | | | | | | | | | | | | | | | 1 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

SPECIAL SENSES SYSTEM

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

* .. 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

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CUMENE

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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|----------|---|----|
| | 6 | 7 | 7 | 7 | 6 | 3 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 3 | 3 | 3 | 7 | 3 | 3 | 7 | 6 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 4 | 0 | 1 | 2 | 6 | 9 | 2 | 9 | 1 | 1 | 1 | 1 | 2 | 1 | 8 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| 500 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | ..... | * TOTALS | | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Zymbal's Gland | ..... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Carcinoma | ..... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | | | | X | 8 |
| 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 | 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

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| | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 2 | 7 | 7 | 7 |
| | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 8 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 2 | 3 | 6 | 3 |
| | 1 | 2 | 2 | 8 | 1 | 2 | 1 | 3 | 0 | 7 | 1 | 1 | 1 | 2 | 2 | 1 | 4 | 1 | 8 | 0 | 7 |
| FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |

females
(cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | | | | | | | | | | | | | | | | | | | | | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cholangiocarcinoma | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | X | X | X | | | | | | | | | | | | | | | | | | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | |
| Rhabdomyosarcoma | | | | | | | | | | | | | | | | | | | | | |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 2 | 7 | 7 | 7 |
| | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 8 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 2 | 3 | 6 | 3 |
| | 1 | 2 | 2 | 8 | 1 | 2 | 1 | 3 | 0 | 7 | 1 | 1 | 1 | 2 | 2 | 1 | 4 | 1 | 8 | 0 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FISCHER 344 RATS FEMALE | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |

females
(cont...)

| | |
|-------------------------|---|
| Oral Mucosa | + |
| Squamous Cell Carcinoma | X |
| Pancreas | + |
| Lymphoma Malignant | + |
| Rhabdomyosarcoma | + |
| Salivary Glands | + |
| Stomach, Forestomach | + |
| Squamous Cell Papilloma | + |
| Stomach, Glandular | + |
| Tongue | + |

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

| | |
|----------------|---|
| Adrenal Cortex | + |
| | + |

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

TDMS No. 96011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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 | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 2 | 7 | 7 | 7 | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 8 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 2 | 3 | 6 | 3 | 3 | 3 | |
| | 1 | 2 | 2 | 8 | 1 | 2 | 1 | 3 | 0 | 7 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 4 | 1 | 8 | 0 | 7 | 1 | 2 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

Leukemia Mononuclear

Urinary Bladder

SYSTEMIC LESIONS

Multiple Organ

Leukemia Mononuclear

Lymphoma Malignant

females (cont...)

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

+ .. Tissue examined microscopically

+ .. Tissue examined
x Lesion present

.. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

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Date Report Reqstd: 01/12/2006

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Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 4 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 4 | 6 | 6 | 7 | | |
| | 3 | 3 | 1 | 3 | 4 | 3 | 9 | 3 | 3 | 8 | 0 | 9 | 1 | 3 | 3 | 5 | 9 | 3 | 3 | 3 | 3 | 0 | 2 | 3 | 3 |
| | 2 | 1 | 9 | 1 | 2 | 1 | 5 | 1 | 1 | 8 | 4 | 6 | 1 | 1 | 1 | 9 | 6 | 0 | 1 | 1 | 1 | 0 | 5 | 8 | 0 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| 1000 PPM | 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 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Duodenum | + | + | + | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Ileum | + | + | + | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Jejunum | + | + | + | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | 48 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cholangiocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | | X | | X | | | | | | | | | | | | | | | 13 |
| Lymphoma Malignant | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | + | + | | | + | + | | | | | | | | | | | 9 |
| Rhabdomyosarcoma | | | | | | | | | | | | X | | | | | | | | | | | | 1 |

* .. 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

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Species/Strain: RATS/F 344

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CUMENE

CAS Number: 98-82-8

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Date Report Reqstd: 01/12/2006

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Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 4 | 7 | 7 | 6 | 6 | 6 | 7 | 7 | 7 | 4 | 6 | 6 | 7 | |
| | 3 | 3 | 1 | 3 | 4 | 3 | 9 | 3 | 3 | 8 | 0 | 9 | 1 | 3 | 3 | 5 | 9 | 3 | 3 | 3 | 3 | 0 | 2 | 3 | 3 | |
| | 2 | 1 | 9 | 1 | 2 | 1 | 5 | 1 | 1 | 8 | 4 | 6 | 1 | 1 | 1 | 9 | 6 | 0 | 1 | 1 | 1 | 0 | 5 | 8 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | |
| 1000 PPM | 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 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Rhabdomyosarcoma | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | + | 3 |

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

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

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

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TDMS No. 96011 - 05

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P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 4 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 4 | 6 | 6 | 7 |
| | 3 | 3 | 1 | 3 | 4 | 3 | 9 | 3 | 3 | 8 | 0 | 9 | 1 | 3 | 3 | 5 | 9 | 3 | 3 | 3 | 3 | 0 | 2 | 3 | 3 |
| | 2 | 1 | 9 | 1 | 2 | 1 | 5 | 1 | 1 | 8 | 4 | 6 | 1 | 1 | 1 | 9 | 6 | 0 | 1 | 1 | 1 | 0 | 5 | 8 | 0 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| 1000 PPM | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Parathyroid Gland | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Pituitary Gland | + | + | + | + | + | + | I | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Adenoma | X | X | X | X | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 25 | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Follicular Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

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

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

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CUMENE

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 4 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 4 | 6 | 6 | 7 |
| | 3 | 3 | 1 | 3 | 4 | 3 | 9 | 3 | 3 | 8 | 0 | 9 | 1 | 3 | 3 | 5 | 9 | 3 | 3 | 3 | 3 | 0 | 2 | 3 | 3 |
| | 2 | 1 | 9 | 1 | 2 | 1 | 5 | 1 | 1 | 8 | 4 | 6 | 1 | 1 | 1 | 9 | 6 | 0 | 1 | 1 | 1 | 0 | 5 | 8 | 0 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| 1000 PPM | 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 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*** TOTALS**

| | | |
|------------------------------------|---|----|
| Carcinoma | X | 1 |
| Ovary | + | 50 |
| Leiomyosarcoma, Metastatic, Uterus | X | 1 |
| Uterus | + | 50 |
| Leiomyosarcoma | X | 1 |
| Polyp Stromal | X | 7 |
| Sarcoma Stromal | X | 1 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Deep Cervical, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 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 | |
| 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 | |
| Carcinoma, Metastatic, Zymbal'S Gland | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Lymph Node, Mediastinal | + | M | M | M | M | + | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Leukemia Mononuclear | I | | | | | | | | | | | | | | | | | | | | | | | | 1 |

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

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 4 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 4 | 6 | 6 | 7 |
| | 3 | 3 | 1 | 3 | 4 | 3 | 9 | 3 | 3 | 8 | 0 | 9 | 1 | 3 | 3 | 5 | 9 | 3 | 3 | 3 | 3 | 0 | 2 | 3 | 3 |
| | 2 | 1 | 9 | 1 | 2 | 1 | 5 | 1 | 1 | 8 | 4 | 6 | 1 | 1 | 1 | 9 | 6 | 0 | 1 | 1 | 1 | 0 | 5 | 8 | 0 |
| FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 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 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|----|
| Lymphoma Malignant | | X | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | | 13 |
| Rhabdomyosarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Thymoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma | | | | | | | X | | | | | | X | | | | | | | | | | | | | | 5 | |
| Fibroadenoma | | | | | X | X | | | X | X | X | | | | X | X | | | | | | | | | | 21 | | |
| Fibroadenoma, Multiple | | | | | | | | | X | | | | | | | | | | | | | | | | | | | 8 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. 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

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CUMENE

CAS Number: 98-82-8

Pathologist: PIERCE, J. - RENNE, R.

Date Report Reqstd: 01/12/2006

Time Report Reqstd: 09:48:09

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

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 4 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 4 | 6 | 6 | 7 | |
| | 3 | 3 | 1 | 3 | 4 | 3 | 9 | 3 | 3 | 8 | 0 | 9 | 1 | 3 | 3 | 5 | 9 | 3 | 3 | 3 | 0 | 2 | 3 | 3 |
| | 2 | 1 | 9 | 1 | 2 | 1 | 5 | 1 | 1 | 8 | 4 | 6 | 1 | 1 | 1 | 9 | 6 | 0 | 1 | 1 | 0 | 5 | 8 | 0 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| 1000 PPM | 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 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | |

| | | |
|---------------------------------|---|---|
| Leukemia Mononuclear | X | 1 |
| Mediastinum, Lymphoma Malignant | X | 1 |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nasopharyngeal Duct, Carcinoma,
Metastatic, Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Respiratory Epithelium, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | 3 |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Pleura | + | | | | | | | | | | | | | | | | | | | | | | | 20 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SPECIAL SENSES SYSTEM

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

URINARY SYSTEM

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

* .. 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

