





















































































































































































































TDMS No. 88105 - 03  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 ISOEUGENOL  
 CAS Number: 97-54-1  
 Pathologist: Blackshear, P. - GRUMBEIN, S.

Date Report Reqsted: 09/28/2006  
 Time Report Reqsted: 17:46:24  
 First Dose M/F: 04/22/02 / 04/23/02  
 Lab: BNW

DAY ON TEST		7	7	7	7	7	5	7	6	7	7	7	7	7	6	7	7	7	7	7	4	7	7	7	7	
		3	3	3	3	3	2	3	6	3	3	3	3	3	8	3	3	3	3	3	9	3	1	3	3	
		2	2	1	2	0	9	1	0	0	0	1	2	0	3	1	2	1	0	1	2	9	1	4	0	2
<b>FISCHER 344 RATS FEMALE</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>150 MG/KG</b>	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	
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
		<b>* TOTALS</b>																								

Mammary Gland

+ 50

Skin

+ 50

**MUSCULOSKELETAL SYSTEM**

Bone  
Hyperostosis

+ 50  
 1 3.0

**NERVOUS SYSTEM**

Brain  
Hemorrhage

+ 50  
 1 3.0

**RESPIRATORY SYSTEM**

Lung  
Inflammation, Chronic Active  
Alveolar Epithelium, Hyperplasia  
Bronchiole, Hyperplasia

+ 50  
 1 1 1 2 1 4 3 2 1 3 1.3  
 16 1.4  
 1 2.0

Nose  
Inflammation, Suppurative  
Thrombosis  
Glands, Hyperplasia  
Olfactory Epithelium, Accumulation,

+ A + + 49  
 3 2 2 2.5  
 1 3.0  
 1 1.0  
 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 37 1.2

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





TDMS No. 88105 - 03  
 Test Type: CHRONIC  
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 Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 ISOEUGENOL  
 CAS Number: 97-54-1  
 Pathologist: Blackshear, P. - GRUMBEIN, S.

Date Report Reqsted: 09/28/2006  
 Time Report Reqsted: 17:46:24  
 First Dose M/F: 04/22/02 / 04/23/02  
 Lab: BNW

| DAY ON TEST                                 |                  | 0 | 6 | 7 | 7 | 0 | 6 | 7 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 |   |
|---|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   |                  | 2 | 0 | 3 | 3 | 2 | 9 | 3 | 3 | 3 | 5 | 3 | 9 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | 4 |
|   |                  | 4 | 6 | 2 | 1 | 3 | 5 | 2 | 0 | 2 | 1 | 1 | 6 | 0 | 0 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 9 | 1 | 2 | 7 |
| <b>FISCHER 344 RATS FEMALE</b><br>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 |   |
|   | <b>300 MG/KG</b> | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |   |
|   |                  | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |   |
|   | 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<br>Parasite Metazoan | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum                    | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum                       | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Intestine Small, Jejunum                     | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                             |   | X | X | X |   | X | X | X | X | X | X | X | X |   | X | X | X | X | X | X | X | X | X | X | X |
| Clear Cell Focus                             |   |   |   |   |   |   |   |   |   |   | X |   | X | X |   |   |   |   |   |   |   |   | X |   |   |
| Eosinophilic Focus                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | X |   |   |
| Hepatodiaphragmatic Nodule                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |
| Mixed Cell Focus                             |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bile Duct, Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatocyte, Mitotic Alteration               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 x .. Lesion present  
 l .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
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TDMS No. 88105 - 03  
 Test Type: CHRONIC  
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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 ISOEUGENOL  
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 Time Report Reqsted: 17:46:24  
 First Dose M/F: 04/22/02 / 04/23/02  
 Lab: BNW

| DAY ON TEST  |           | 0 | 6 | 7 | 7 | 0 | 6 | 7 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 |   |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |           | 2 | 0 | 3 | 3 | 2 | 9 | 3 | 3 | 3 | 5 | 3 | 9 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | 4 |
|  |           | 4 | 6 | 2 | 1 | 3 | 5 | 2 | 0 | 2 | 1 | 1 | 6 | 0 | 0 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 9 | 1 | 2 | 7 |
| <b>FISCHER 344 RATS FEMALE</b><br><b>300 MG/KG</b> | 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 |   |
|  |           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |   |
|  |           | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |   |
|  | 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...)

|                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mesentery             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fat, Necrosis         | + |   |   |   |   | + |   |   |   |   |   |   |   |   | + | + | + |   |   |   | + |   | + | + |   |
|                       | 2 |   |   |   |   | 2 |   |   |   |   |   |   |   |   | 2 | 2 | 2 |   |   |   |   |   | 2 | 2 |   |
| Oral Mucosa           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreas              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Acinus, Atrophy       |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Acinus, Hyperplasia   |   |   |   |   |   |   |   |   |   |   | 3 |   | 2 |   |   |   |   | 2 |   |   |   |   |   |   |   |
| Salivary Glands       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Stomach, Forestomach  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Hyperplasia, Squamous |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Stomach, Glandular    | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Atrophy               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization        |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**CARDIOVASCULAR SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Blood Vessel                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Heart                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Cardiomyopathy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Pericardium, Inflammation, Granulomatous |   |   | 1 | 1 |   | 1 | 1 | 1 | 1 | 1 | 2 |   | 1 | 1 |   | 1 | 1 | 1 | 1 | 1 |   |   | 1 | 1 |  |
| Pericardium, Inflammation, Acute         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 x .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked  
 Page 99

TDMS No. 88105 - 03  
 Test Type: CHRONIC  
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 Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
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 First Dose M/F: 04/22/02 / 04/23/02  
 Lab: BNW

| DAY ON TEST                                 |                  | 0 | 6 | 7 | 7 | 0 | 6 | 7 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 |   |
|---|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   |                  | 2 | 0 | 3 | 3 | 2 | 9 | 3 | 3 | 3 | 5 | 3 | 9 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | 4 |
|   |                  | 4 | 6 | 2 | 1 | 3 | 5 | 2 | 0 | 2 | 1 | 1 | 6 | 0 | 0 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 9 | 1 | 2 | 7 |
| <b>FISCHER 344 RATS FEMALE</b><br>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 |   |
|   | <b>300 MG/KG</b> | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |   |
|   |                  | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |   |
|   | 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...)

**ENDOCRINE SYSTEM**

|                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex             | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Degeneration, Cystic       |   |   |   | 3 |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia                |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | 2 | 2 | 2 | 2 | 2 | 2 |   |   |   |   |   |
| Hypertrophy                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic  |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adrenal Medulla            | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Hyperplasia                |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Islets, Pancreatic         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Parathyroid Gland          | + | + | M | M | + | + | + | + | + | + | + | + | + | + | + | M | M | + | + | + | M | + | + | + |   |
| Pituitary Gland            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Pars Distalis, Angiectasis |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |
| Pars Distalis, Hyperplasia |   |   | 3 |   |   |   |   |   | 3 | 2 |   |   |   |   |   |   |   |   | 2 |   |   |   | 3 | 1 | 3 |
| Thyroid Gland              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| C-cell, Hyperplasia        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 2 |   |   |   |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

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

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

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 Lab: BNW

| DAY ON TEST                                 |                  | 0 | 6 | 7 | 7 | 0 | 6 | 7 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 |   |
|---|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   |                  | 2 | 0 | 3 | 3 | 2 | 9 | 3 | 3 | 3 | 5 | 3 | 9 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | 4 |
|   |                  | 4 | 6 | 2 | 1 | 3 | 5 | 2 | 0 | 2 | 1 | 1 | 6 | 0 | 0 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 9 | 1 | 2 | 7 |
| <b>FISCHER 344 RATS FEMALE</b><br>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 |   |
|   | <b>300 MG/KG</b> | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |   |
|   |                  | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |   |
|   | 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...)

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland<br>Hyperplasia<br>Inflammation, Chronic Active | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ovary<br>Cyst   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Oviduct   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Uterus  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

**HEMATOPOIETIC SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node<br>Deep Cervical, Ectasia<br>Deep Cervical, Hemorrhage         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mandibular  | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M |
| Lymph Node, Mesenteric  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen<br>Hematopoietic Cell Proliferation<br>Inflammation, Granulomatous | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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

TDMS No. 88105 - 03  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 ISOEUGENOL  
 CAS Number: 97-54-1  
 Pathologist: Blackshear, P. - GRUMBEIN, S.

Date Report Requested: 09/28/2006  
 Time Report Requested: 17:46:24  
 First Dose M/F: 04/22/02 / 04/23/02  
 Lab: BNW

|                                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                | DAY ON TEST | 0 | 6 | 7 | 7 | 0 | 6 | 7 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 |
|                                |             | 2 | 0 | 3 | 3 | 2 | 9 | 3 | 3 | 3 | 5 | 3 | 9 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | 4 |
|                                |             | 4 | 6 | 2 | 1 | 3 | 5 | 2 | 0 | 2 | 1 | 1 | 6 | 0 | 0 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 9 | 1 | 2 | 7 |
| <b>FISCHER 344 RATS FEMALE</b> | 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 |
| <b>300 MG/KG</b>               |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|                                |             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |   |
|                                |             | 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...)**

|                            |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|----------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Necrosis                   |  | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Thymus Inflammation, Acute |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
|                            |  | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

**INTEGUMENTARY SYSTEM**

|                           |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland Galactocele |  | + | + | + | + | + | + | X | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skin                      |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

**MUSCULOSKELETAL SYSTEM**

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

**NERVOUS SYSTEM**

|                  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain            |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Peripheral Nerve |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |

**RESPIRATORY SYSTEM**

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

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

TDMS No. 88105 - 03  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 ISOEUGENOL  
 CAS Number: 97-54-1  
 Pathologist: Blackshear, P. - GRUMBEIN, S.

Date Report Reqsted: 09/28/2006  
 Time Report Reqsted: 17:46:24  
 First Dose M/F: 04/22/02 / 04/23/02  
 Lab: BNW

| DAY ON TEST   | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | females<br>(cont...) |   |
|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|
|   | 0         | 6 | 7 | 7 | 0 | 6 | 7 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 |                      | 5 |
|   | 2         | 0 | 3 | 3 | 2 | 9 | 3 | 3 | 3 | 5 | 3 | 9 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | 4                    |   |
|   | 4         | 6 | 2 | 1 | 3 | 5 | 2 | 0 | 2 | 1 | 1 | 6 | 0 | 0 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 9 | 1 | 2 | 7                    |   |
| <b>FISCHER 344 RATS FEMALE</b>                      | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                    |   |
| <b>300 MG/KG</b>                                    | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                    |   |
|   | 3         | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3                    |   |
|   | 5         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7                    |   |
|   | 1         | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5                    | 5 |
| Cyst  |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      | 4 |
| Inflammation, Acute                                 | 2         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| Inflammation, Chronic Active                        |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| Alveolar Epithelium, Hyperplasia                    |           |   |   | 1 |   |   | 1 |   |   | 1 |   |   |   | 1 | 1 |   | 1 | 1 |   |   | 1 |   |   |   |                      |   |
| Alveolus, Infiltration Cellular, Histiocyte         |           |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| Bronchiole, Hyperplasia                             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| Nose  | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |                      |   |
| Inflammation, Suppurative                           |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      | 2 |
| Inflammation, Chronic                               |           |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      | 2 |
| Glands, Dilatation                                  |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| Glands, Hyperplasia                                 |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |                      |   |
| Olfactory Epithelium, Accumulation, Hyaline Droplet |           |   | 1 | 1 |   | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 |   | 2 | 1 | 1 |   |   | 2 |   |   | 1 | 2                    |   |
| Olfactory Epithelium, Atrophy                       |           |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1 |   |   |                      |   |
| Olfactory Epithelium, Metaplasia, Respiratory       |           |   |   |   |   |   |   |   |   |   |   | 1 | 2 |   |   |   |   | 2 | 1 |   |   | 2 | 1 |   | 1                    |   |
| Olfactory Epithelium, Metaplasia, Squamous          |           |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| Respiratory Epithelium, Hyperplasia                 |           |   |   |   |   | 2 |   |   |   |   | 2 |   | 2 |   |   |   |   |   |   |   |   | 2 |   |   |                      |   |
| Respiratory Epithelium, Metaplasia, Squamous        |           |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| Pleura  |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| Inflammation, Suppurative                           |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| Trachea   | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |                      |   |
| Inflammation, Suppurative                           |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |

**SPECIAL SENSES SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 x .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked  
 Page 103

TDMS No. 88105 - 03  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 ISOEUGENOL  
 CAS Number: 97-54-1  
 Pathologist: Blackshear, P. - GRUMBEIN, S.

Date Report Reqsted: 09/28/2006  
 Time Report Reqsted: 17:46:24  
 First Dose M/F: 04/22/02 / 04/23/02  
 Lab: BNW

| DAY ON TEST                                 |                  | 0 | 6 | 7 | 7 | 0 | 6 | 7 | 7 | 7 | 6 | 7 | 4 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 |   |
|---|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   |                  | 2 | 0 | 3 | 3 | 2 | 9 | 3 | 3 | 3 | 5 | 3 | 9 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | 4 |
|   |                  | 4 | 6 | 2 | 1 | 3 | 5 | 2 | 0 | 2 | 1 | 1 | 6 | 0 | 0 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 9 | 1 | 2 | 7 |
| <b>FISCHER 344 RATS FEMALE</b><br>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 |   |
|   | <b>300 MG/KG</b> | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |   |
|   |                  | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |   |
|   | 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...)

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ear             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Eye             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Retina, Atrophy |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Zymbal's Gland  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |

**URINARY SYSTEM**

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Infarct                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nephropathy                          |   |   | 1 | 1 |   | 1 |   | 1 | 1 |   | 1 |   | 1 | 1 |   | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| Transitional Epithelium, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Urinary Bladder                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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



TDMS No. 88105 - 03  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 ISOEUGENOL  
 CAS Number: 97-54-1  
 Pathologist: Blackshear, P. - GRUMBEIN, S.

Date Report Reqsted: 09/28/2006  
 Time Report Reqsted: 17:46:24  
 First Dose M/F: 04/22/02 / 04/23/02  
 Lab: BNW

|                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
|                                | 6 | 7 | 7 | 7 | 5 | 7 | 7 | 3 | 7 | 6 | 7 | 7 | 0 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 4 |   |                 |
| DAY ON TEST                    | 2 | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 7 |   |                 |
|                                | 7 | 2 | 1 | 1 | 7 | 1 | 2 | 6 | 0 | 0 | 2 | 2 | 8 | 0 | 2 | 1 | 1 | 1 | 2 | 0 | 1 | 2 | 2 | 1 | 9 |                 |
| .....                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |
| <b>FISCHER 344 RATS FEMALE</b> | 0 | 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 |                 |
| <b>300 MG/KG</b>               | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |   |                 |
|                                | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |                 |
|                                | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |                 |
|                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>* TOTALS</b> |

**ALIMENTARY SYSTEM**

|                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Esophagus                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50    |
| Intestine Large, Cecum         | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | A | 44    |
| Intestine Large, Colon         | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | 48    |
| Intestine Large, Rectum        | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | 48    |
| Parasite Metazoan              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | 2     |
| Intestine Small, Duodenum      | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | 48    |
| Intestine Small, Ileum         | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | 45    |
| Intestine Small, Jejunum       | + | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | 46    |
| Liver                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50    |
| Angiectasis                    |   |   |   |   |   | 2 | 2 |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   | 3 2.3 |
| Basophilic Focus               | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 46    |
| Clear Cell Focus               |   |   |   | X |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   | X |   | 10    |
| Eosinophilic Focus             |   |   | X |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   | X |   |   |   | 5     |
| Hepatodiaphragmatic Nodule     |   |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   | X |   |   |   |   |   |   | 4     |
| Mixed Cell Focus               |   |   |   | X |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3     |
| Bile Duct, Hyperplasia         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 2 |   |   |   |   | 4 1.5 |
| Hepatocyte, Mitotic Alteration |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0 |

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

Page 105

TDMS No. 88105 - 03  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 ISOEUGENOL  
 CAS Number: 97-54-1  
 Pathologist: Blackshear, P. - GRUMBEIN, S.

Date Report Reqsted: 09/28/2006  
 Time Report Reqsted: 17:46:24  
 First Dose M/F: 04/22/02 / 04/23/02  
 Lab: BNW

| DAY ON TEST                    |           | 6 | 7 | 7 | 7 | 5 | 7 | 7 | 3 | 7 | 6 | 7 | 7 | 0 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 4               |   |
|--------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
|                                |           | 2 | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 7               |   |
|                                |           | 7 | 2 | 1 | 1 | 7 | 1 | 2 | 6 | 0 | 0 | 2 | 2 | 8 | 0 | 2 | 1 | 1 | 1 | 2 | 0 | 1 | 2 | 2 | 1               | 9 |
| <b>FISCHER 344 RATS FEMALE</b> | 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               |   |
| <b>300 MG/KG</b>               |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               |   |
|                                |           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4               |   |
|                                |           | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0               |   |
|                                |           | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9               | 0 |
|                                |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>* TOTALS</b> |   |

|                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |               |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---------------|
| Mesentery             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>14</b> |               |
| Fat, Necrosis         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>13 2.0</b> |
| .....                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |               |
| Oral Mucosa           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  |               |
| .....                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |               |
| Pancreas              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +         | <b>50</b>     |
| Acinus, Atrophy       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>4 1.3</b>  |
| Acinus, Hyperplasia   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>5 2.6</b>  |
| .....                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |               |
| Salivary Glands       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +         | <b>50</b>     |
| .....                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |               |
| Stomach, Forestomach  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +         | <b>50</b>     |
| Hyperplasia, Squamous |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2 2.0</b>  |
| Inflammation          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b>  |
| Ulcer                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2 1.5</b>  |
| .....                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |               |
| Stomach, Glandular    | + | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | +         | <b>47</b>     |
| Atrophy               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>3 2.0</b>  |
| Mineralization        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 2.0</b>  |

**CARDIOVASCULAR SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |                |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|----------------|
| Blood Vessel                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b> |                |
| .....                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |                |
| Heart                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | <b>50</b>      |
| Cardiomyopathy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | <b>39 1.2</b>  |
| Pericardium, Inflammation, Granulomatous |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | <b>1 4.0</b>   |
| Pericardium, Inflammation, Acute         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | <b>2 1 2.0</b> |

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

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

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



TDMS No. 88105 - 03  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 ISOEUGENOL  
 CAS Number: 97-54-1  
 Pathologist: Blackshear, P. - GRUMBEIN, S.

Date Report Requested: 09/28/2006  
 Time Report Requested: 17:46:24  
 First Dose M/F: 04/22/02 / 04/23/02  
 Lab: BNW

| DAY ON TEST                                 |   | 6 | 7 | 7 | 7 | 5 | 7 | 7 | 3 | 7 | 6 | 7 | 7 | 0 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 4               |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
|   |   | 2 | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4               | 7 |
|   |   | 7 | 2 | 1 | 1 | 7 | 1 | 2 | 6 | 0 | 0 | 2 | 2 | 8 | 0 | 2 | 1 | 1 | 1 | 2 | 0 | 1 | 2 | 2 | 1               | 9 |
| <b>FISCHER 344 RATS FEMALE</b><br>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               |   |
|   | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4               |   |
|   | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0               |   |
|   | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0               |   |
| <b>300 MG/KG</b>                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>* TOTALS</b> |   |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia                  | 2 |   | 2 |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Ovary                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cyst                         |   |   |   |   |   |   | 3 | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   | 4  |
| Oviduct                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Uterus                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

**HEMATOPOIETIC SYSTEM**

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow                      | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Lymph Node                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   | 3  |
| Deep Cervical, Ectasia           |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 1  |
| Deep Cervical, Hemorrhage        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 1  |
| Lymph Node, Mandibular           | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 0  |
| Lymph Node, Mesenteric           | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Spleen                           | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Hematopoietic Cell Proliferation |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |
| Inflammation, Granulomatous      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

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

TDMS No. 88105 - 03  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 ISOEUGENOL  
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 Pathologist: Blackshear, P. - GRUMBEIN, S.

Date Report Reqsted: 09/28/2006  
 Time Report Reqsted: 17:46:24  
 First Dose M/F: 04/22/02 / 04/23/02  
 Lab: BNW

| DAY ON TEST  |           | 6               | 7 | 7 | 7 | 5 | 7 | 7 | 3 | 7 | 6 | 7 | 7 | 0 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 4 |   |
|--|-----------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |           | 2               | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 7 |   |
|  |           | 7               | 2 | 1 | 1 | 7 | 1 | 2 | 6 | 0 | 0 | 2 | 2 | 8 | 0 | 2 | 1 | 1 | 1 | 2 | 0 | 1 | 2 | 2 | 1 | 9 |
| <b>FISCHER 344 RATS FEMALE</b><br><b>300 MG/KG</b> | 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 |   |
|  |           | 3               | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |   |
|  |           | 7               | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |   |
|  | 6         | 7               | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |   |
|  |           | <b>* TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Necrosis **1 3.0**

Thymus Inflammation, Acute **49 1 3.0**

**INTEGUMENTARY SYSTEM**

Mammary Gland Galactocoele **49 1**

Skin **50**

**MUSCULOSKELETAL SYSTEM**

Bone **50**

**NERVOUS SYSTEM**

Brain **50**

Peripheral Nerve **1**

**RESPIRATORY SYSTEM**

Lung **50**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
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 I .. Insufficient tissue  
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TDMS No. 88105 - 03  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
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Date Report Requested: 09/28/2006  
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 First Dose M/F: 04/22/02 / 04/23/02  
 Lab: BNW

| DAY ON TEST   |           | 6               | 7 | 7 | 7 | 5 | 7 | 7 | 3 | 7 | 6 | 7 | 7 | 0 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 4 |           |            |            |
|---|-----------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|------------|
|   |           | 2               | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 7 |           |            |            |
|   |           | 7               | 2 | 1 | 1 | 7 | 1 | 2 | 6 | 0 | 0 | 2 | 2 | 8 | 0 | 2 | 1 | 1 | 1 | 2 | 0 | 1 | 2 | 2 | 1 | 9         |            |            |
| <b>FISCHER 344 RATS FEMALE</b><br><b>300 MG/KG</b>  | 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 |           |            |            |
|   |           | 3               | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |           |            |            |
|   |           | 7               | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |           |            |            |
|   | 6         | 7               | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |           |            |            |
|   |           | <b>* TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |            |            |
| Cyst  |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>4.0</b> |            |
| Inflammation, Acute                                 |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>3</b>   | <b>1.7</b> |
| Inflammation, Chronic Active                        |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2</b>   | <b>1.5</b> |
| Alveolar Epithelium, Hyperplasia                    |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>14</b>  | <b>1.0</b> |
| Alveolus, Infiltration Cellular, Histiocyte         |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>   | <b>3.0</b> |
| Bronchiole, Hyperplasia                             |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>   | <b>1.0</b> |
| Nose  |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>49</b> |            |            |
| Inflammation, Suppurative                           |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>3</b>   | <b>1.3</b> |
| Inflammation, Chronic                               |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2</b>   | <b>2.0</b> |
| Glands, Dilatation                                  |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2</b>   | <b>2.0</b> |
| Glands, Hyperplasia                                 |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>   | <b>2.0</b> |
| Olfactory Epithelium, Accumulation, Hyaline Droplet |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>33</b>  | <b>1.2</b> |
| Olfactory Epithelium, Atrophy                       |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>4</b>   | <b>1.0</b> |
| Olfactory Epithelium, Metaplasia, Respiratory       |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>12</b>  | <b>1.3</b> |
| Olfactory Epithelium, Metaplasia, Squamous          |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>   | <b>2.0</b> |
| Respiratory Epithelium, Hyperplasia                 |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>6</b>   | <b>2.0</b> |
| Respiratory Epithelium, Metaplasia, Squamous        |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2</b>   | <b>1.5</b> |
| Pleura  |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>   |            |
| Inflammation, Suppurative                           |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3</b>  | <b>1</b>   | <b>3.0</b> |
| Trachea   |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>49</b> |            |            |
| Inflammation, Suppurative                           |           |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  | <b>1</b>   | <b>2.0</b> |

**SPECIAL SENSES SYSTEM**

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

TDMS No. 88105 - 03  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 ISOEUGENOL  
 CAS Number: 97-54-1  
 Pathologist: Blackshear, P. - GRUMBEIN, S.

Date Report Reqsted: 09/28/2006  
 Time Report Reqsted: 17:46:24  
 First Dose M/F: 04/22/02 / 04/23/02  
 Lab: BNW

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

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Ear             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |       |
| Eye             | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | 48 | 1 2.0 |
| Retina, Atrophy |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |       |
| Harderian Gland | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | 48 |       |
| Zymbal's Gland  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |       |

**URINARY SYSTEM**

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |       |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|-------|
| Kidney                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50     |       |
| Infarct                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4      | 1 4.0 |
| Inflammation, Suppurative            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4      | 2 3.5 |
| Nephropathy                          | 2 | 1 | 1 | 1 | 2 | 1 | 1 |   | 1 | 1 | 1 | 1 |   | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 40 1.2 |       |
| Transitional Epithelium, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4      | 2 3.5 |
| Urinary Bladder                      | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | 49     |       |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2      | 1 2.0 |

\*\*\* END OF REPORT \*\*\*

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