

**TDMS No.** 20515 - 01

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH  
AVERAGE SEVERITY GRADES[b]**

**Date Report Requested:** 10/21/2008

**Test Type:** 90-DAY

Metal working fluids (CIMSTAR 3800)

**Time Report Requested:** 07:18:15

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**CAS Number:** CIMSTAR3800

**First Dose M/F:** 06/12/06 / 06/12/06

**Species/Strain:** RATS/F344/N Tac

**Lab:** BNW

F1\_RD

**C Number:** C20515

**Lock Date:** 04/04/2007

**Cage Range:** ALL

**Date Range:** ALL

**Reasons For Removal:** ALL

**Removal Date Range:** ALL

**Treatment Groups:** Include ALL

**Study Gender:** Both

**TDMSE Version:** 2.0.0

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**First Dose M/F: 06/12/06 / 06/12/06**

**Species/Strain: RATS/F344/N Tac**

**Lab: BNW**

Fischer 344-Taconic RATS MALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
<b>Disposition Summary</b>						
Animals Initially in Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	10	10	10	10	10
<b>ALIMENTARY SYSTEM</b>						
Liver	(10)	(2)	(1)	(0)	(1)	(10)
Hepatodiaphragmatic Nodule	1	2	1		1	
Mesentery	(1)	(0)	(0)	(0)	(1)	(0)
Fat, Necrosis	1 [2.0]				1 [2.0]	
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Atrophy	1 [1.0]					
<b>CARDIOVASCULAR SYSTEM</b>						
Heart	(10)	(0)	(0)	(0)	(0)	(10)
Cardiomyopathy	6 [1.0]					6 [1.0]
<b>ENDOCRINE SYSTEM</b>						
None						
<b>GENERAL BODY SYSTEM</b>						
None						
<b>GENITAL SYSTEM</b>						
Preputial Gland	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active	1 [1.0]					2 [1.0]

a - Number of animals examined microscopically at site and number of animals with lesion  
b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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Lab: BNW

Fischer 344-Taconic RATS MALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
HEMATOPOIETIC SYSTEM						
None						
INTEGUMENTARY SYSTEM						
None						
MUSCULOSKELETAL SYSTEM						
None						
NERVOUS SYSTEM						
None						
RESPIRATORY SYSTEM						
Larynx	(10)	(10)	(10)	(10)	(10)	(10)
Inflammation, Chronic Active	1 [1.0]	9 [1.1]	10 [1.3]	10 [1.5]	10 [2.0]	10 [2.5]
Metaplasia, Squamous		10 [3.1]	10 [3.9]	10 [4.0]	10 [4.0]	10 [4.0]
Squamous Epithelium, Hyperplasia		6 [1.0]	5 [1.0]	10 [1.3]	10 [1.6]	10 [1.7]
Lung	(10)	(10)	(10)	(10)	(10)	(10)
Inflammation, Chronic Active	10 [1.7]	9 [1.1]	10 [1.6]	10 [1.3]	10 [1.3]	10 [1.3]
Metaplasia, Osseous				1 [1.0]	1 [1.0]	
Alveolus, Infiltration Cellular, Histiocyte					7 [1.0]	10 [1.0]
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Foreign Body		1				1
Goblet Cell, Hyperplasia		10 [1.3]	10 [1.6]	10 [1.7]	10 [1.8]	10 [1.9]
Olfactory Epithelium, Accumulation, Hyaline Droplet	1 [1.0]	10 [3.0]	10 [3.0]	10 [3.0]	10 [3.0]	10 [3.0]
Olfactory Epithelium, Inflammation, Suppurative		10 [1.2]	10 [1.3]	10 [1.3]	10 [1.6]	10 [1.7]
Olfactory Epithelium, Necrosis						1 [1.0]
Respiratory Epithelium, Accumulation, Hyaline Droplet		10 [2.6]	10 [1.8]	10 [2.4]	10 [2.8]	10 [2.8]
Respiratory Epithelium, Hyperplasia						1 [1.0]
Respiratory Epithelium, Inflammation,		10 [1.2]	10 [1.3]	10 [1.3]	10 [1.6]	10 [1.7]

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Lab: BNW

Fischer 344-Taconic RATS MALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
Suppurative Trachea Metaplasia, Squamous	(10)	(10)	(10)	(10)	(10)	(10) 1 [1.0]
SPECIAL SENSES SYSTEM						
None						
URINARY SYSTEM						
Kidney Nephropathy	(10) 9 [1.0]	(0)	(0)	(0)	(0)	(10) 7 [1.0]

\*\*\* END OF MALE \*\*\*

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**Lab: BNW**

Fischer 344-Taconic RATS FEMALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
<b>Disposition Summary</b>						
Animals Initially in Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	10	10	10	10	10
<b>ALIMENTARY SYSTEM</b>						
Liver	(10)	(4)	(0)	(3)	(1)	(10)
Hepatodiaphragmatic Nodule		4		3	1	1
Inflammation, Granulomatous	3 [1.0]					6 [1.2]
Mesentery	(0)	(0)	(0)	(1)	(0)	(0)
Fat, Hemorrhage				1 [2.0]		
Oral Mucosa	(1)	(0)	(0)	(0)	(0)	(0)
Inflammation, Acute	1 [2.0]					
<b>CARDIOVASCULAR SYSTEM</b>						
Heart	(10)	(0)	(0)	(0)	(0)	(10)
Cardiomyopathy	1 [1.0]					2 [1.0]
<b>ENDOCRINE SYSTEM</b>						
None						
<b>GENERAL BODY SYSTEM</b>						
None						
<b>GENITAL SYSTEM</b>						
Ovary	(10)	(0)	(0)	(0)	(2)	(10)
Cyst	2 [2.0]				2 [2.0]	

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<b>HEMATOPOIETIC SYSTEM</b>						
None						
<b>INTEGUMENTARY SYSTEM</b>						
None						
<b>MUSCULOSKELETAL SYSTEM</b>						
None						
<b>NERVOUS SYSTEM</b>						
None						
<b>RESPIRATORY SYSTEM</b>						
Larynx	(10)	(10)	(10)	(10)	(10)	(10)
Inflammation, Chronic Active		10 [1.0]	10 [1.1]	10 [1.6]	10 [1.7]	10 [2.2]
Metaplasia, Squamous		10 [2.9]	10 [3.4]	10 [4.0]	10 [4.0]	10 [4.0]
Squamous Epithelium, Hyperplasia		9 [1.1]	7 [1.0]	10 [1.4]	9 [1.3]	10 [1.7]
Lung	(10)	(10)	(10)	(10)	(10)	(10)
Inflammation, Chronic Active	10 [1.6]	10 [1.1]	10 [1.5]	9 [1.2]	10 [1.3]	10 [1.3]
Metaplasia, Osseous		1 [1.0]				
Alveolus, Infiltration Cellular, Histiocyte					10 [1.0]	10 [1.0]
Arteriole, Inflammation, Chronic Active				1 [1.0]		
Bronchiole, Hyperplasia				1 [2.0]		
Perivascular, Inflammation, Chronic Active				1 [1.0]		
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Goblet Cell, Hyperplasia		8 [1.5]	10 [1.5]	9 [1.6]	10 [1.7]	10 [1.8]
Olfactory Epithelium, Accumulation, Hyaline Droplet		10 [2.8]	10 [3.0]	10 [2.9]	10 [3.0]	10 [3.0]
Olfactory Epithelium, Inflammation, Suppurative		9 [1.0]	10 [1.1]	10 [1.3]	10 [1.6]	10 [1.4]

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Fischer 344-Taconic RATS FEMALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
Respiratory Epithelium, Accumulation, Hyaline Droplet		10 [2.6]	10 [2.8]	10 [2.6]	10 [2.8]	10 [2.7]
Respiratory Epithelium, Inflammation, Suppurative		9 [1.0]	10 [1.1]	10 [1.3]	10 [1.6]	10 [1.4]
Respiratory Epithelium, Metaplasia, Squamous						1 [1.0]
<b>SPECIAL SENSES SYSTEM</b>						
None						
<b>URINARY SYSTEM</b>						
Kidney	(10)	(0)	(0)	(0)	(0)	(10)
Pelvis, Inflammation, Acute						1 [1.0]
Transitional Epithelium, Hyperplasia						1 [2.0]

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