

TDMS No. 20516 - 01

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

Date Report Requested: 08/25/2008

Test Type: 90-DAY

Metal working fluids (Trim SC210)

Time Report Requested: 10:19:53

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: TRIMSC210

First Dose M/F: 08/14/06 / 08/14/06

Species/Strain: RATS/F344/N Tac

Lab: BNW

F1_RD

C Number: C20516

Lock Date: 05/16/2007

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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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
Disposition Summary						
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
ALIMENTARY SYSTEM						
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(10)
Arteriole, Inflammation, Chronic Active	2 [1.0]					2 [1.0]
Liver	(10)	(1)	(0)	(1)	(0)	(10)
Hepatodiaphragmatic Nodule		1 [2.0]		1 [1.0]		1 [1.0]
Inflammation, Chronic Active	7 [1.0]					4 [1.0]
CARDIOVASCULAR SYSTEM						
Heart	(10)	(0)	(0)	(0)	(0)	(10)
Cardiomyopathy	9 [1.4]					8 [1.9]
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Hyperplasia						1 [1.0]
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Epididymis	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active	1 [2.0]					
Preputial Gland	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active						1 [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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Fischer 344-Taconic RATS MALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
Prostate Hyperplasia, Focal	(10) 1 [1.0]	(0)	(0)	(0)	(0)	(10)
HEMATOPOIETIC SYSTEM						
Lymph Node, Mandibular Ectasia Hyperplasia	(9) 1 [2.0]	(0)	(0)	(0)	(0)	(9) 1 [3.0]
Lymph Node, Mediastinal Congestion	(10)	(0)	(0)	(0)	(1) 1 [2.0]	(10)
INTEGUMENTARY SYSTEM						
None						
MUSCULOSKELETAL SYSTEM						
None						
NERVOUS SYSTEM						
Brain Meninges, Inflammation, Focal, Chronic Active	(10) 1 [1.0]	(0)	(0)	(0)	(0)	(10) 1 [1.0]
RESPIRATORY SYSTEM						
Larynx Erosion Inflammation, Acute	(10) 2 [1.0] 4 [1.3]	(10)	(10)	(10) 2 [1.5]	(10) 1 [1.0]	(10)
Inflammation, Chronic Active Metaplasia, Squamous Mineralization		6 [1.0] 10 [2.0]	10 [1.0] 10 [2.4]	10 [1.0] 10 [3.2]	10 [1.9] 10 [3.7]	10 [1.9] 10 [3.8]
Ulcer Squamous Epithelium, Hyperplasia	2 [1.5]		4 [1.0]	10 [2.1] (10)	10 [2.0] (10)	10 [3.4] (10)
Lung Cyst	(10) 1 [2.0]	(10)	(10)	(10)	(10)	(10)

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Fischer 344-Taconic RATS MALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
Inflammation, Granulomatous	1 [1.0]					
Inflammation, Chronic Active	9 [1.3]	10 [1.0]	10 [1.0]	10 [1.1]	10 [1.0]	10 [1.3]
Metaplasia, Osseous				1 [1.0]		2 [1.0]
Alveolus, Infiltration Cellular, Histiocyte		2 [1.0]			10 [1.0]	10 [1.1]
Arteriole, Mineralization	2 [1.0]					2 [1.0]
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Goblet Cell, Hyperplasia		10 [2.0]	10 [1.9]	10 [2.0]	10 [2.0]	10 [2.0]
Olfactory Epithelium, Accumulation, Hyaline Droplet		10 [2.0]	10 [2.0]	10 [2.0]	10 [2.0]	10 [2.1]
Olfactory Epithelium, Inflammation, Suppurative		10 [1.0]	10 [1.0]	10 [1.0]	10 [1.0]	10 [1.0]
Respiratory Epithelium, Accumulation, Hyaline Droplet		10 [2.0]	10 [2.0]	10 [2.0]	10 [2.0]	10 [2.0]
Respiratory Epithelium, Inflammation, Suppurative		10 [1.0]	10 [1.0]	10 [1.0]	10 [1.0]	10 [1.0]
Trachea	(10)	(10)	(10)	(10)	(10)	(10)
Inflammation, Chronic Active	1 [1.0]					1 [1.0]
SPECIAL SENSES SYSTEM						
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active	2 [1.0]					1 [1.0]
URINARY SYSTEM						
Kidney	(10)	(0)	(0)	(0)	(0)	(10)
Nephropathy	7 [1.1]					6 [1.0]

*** END OF MALE ***

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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
Disposition Summary						
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
ALIMENTARY SYSTEM						
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(10)
Arteriole, Inflammation, Chronic Active						1 [1.0]
Liver	(10)	(5)	(2)	(1)	(1)	(10)
Basophilic Focus						1 [3.0]
Hepatodiaphragmatic Nodule		5 [1.6]	2 [1.5]	1 [1.0]	1 [2.0]	2 [2.0]
Inflammation, Chronic Active	8 [1.3]					8 [1.4]
Necrosis, Focal, Chronic						1 [2.0]
Mesentery	(1)	(0)	(0)	(0)	(0)	(0)
Fat, Necrosis	1 [1.0]					
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Atrophy	2 [1.0]					
CARDIOVASCULAR SYSTEM						
Heart	(10)	(0)	(0)	(0)	(0)	(10)
Cardiomyopathy	2 [1.0]					1 [1.0]
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(0)	(1)	(0)	(1)	(10)
Accessory Adrenal Cortical Nodule						1 [2.0]
GENERAL BODY SYSTEM						
None						

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GENITAL SYSTEM						
Ovary	(10)	(1)	(0)	(1)	(1)	(10)
Cyst		1 [1.0]		1 [2.0]	1 [1.0]	2 [1.5]
Uterus	(10)	(0)	(0)	(0)	(0)	(10)
Endometrium, Hyperplasia						1 [1.0]
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]	9 [1.0]	10 [1.3]	10 [2.0]	10 [2.0]
Metaplasia, Squamous		10 [1.6]	10 [2.1]	10 [2.8]	10 [3.1]	10 [3.8]
Squamous Epithelium, Hyperplasia		6 [1.0]	4 [1.0]	10 [2.1]	10 [2.4]	10 [3.3]
Lung	(10)	(10)	(10)	(10)	(10)	(10)
Inflammation, Chronic Active	10 [1.2]	10 [1.3]	10 [1.0]	10 [1.2]	10 [1.3]	9 [1.7]
Metaplasia, Osseous				2 [1.0]	1 [1.0]	
Alveolus, Infiltration Cellular, Histiocyte			1 [1.0]		8 [1.0]	10 [1.0]
Arteriole, Mineralization						1 [1.0]
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Inflammation, Chronic Active	1 [1.0]					
Goblet Cell, Hyperplasia		10 [2.0]	10 [2.0]	10 [2.0]	10 [2.0]	10 [2.0]

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Olfactory Epithelium, Accumulation, Hyaline Droplet		10 [2.0]	10 [2.0]	10 [2.0]	10 [2.0]	10 [2.0]
Olfactory Epithelium, Inflammation, Suppurative		10 [1.0]	10 [1.0]	10 [1.0]	10 [1.0]	10 [1.1]
Respiratory Epithelium, Accumulation, Hyaline Droplet		10 [2.0]	10 [2.0]	10 [2.0]	10 [2.0]	10 [2.0]
Respiratory Epithelium, Inflammation, Suppurative		10 [1.0]	10 [1.0]	10 [1.0]	10 [1.0]	10 [1.1]
Trachea Inflammation, Chronic Active	(10)	(10)	(10)	(10)	(10) 2 [1.0]	(10) 1 [1.0]
SPECIAL SENSES SYSTEM						
Harderian Gland Inflammation, Chronic Active	(10) 1 [1.0]	(0)	(0)	(0)	(0)	(10) 2 [1.0]
URINARY SYSTEM						
Kidney Nephropathy	(10)	(0)	(0)	(0)	(0)	(10) 1 [1.0]

*** END OF REPORT ***