

TDMS No. 20523 - 02

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

Date Report Requested: 03/24/2011

Test Type: 90-DAY

Metal working fluids (Trim VX)

Time Report Requested: 15:32:43

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: TRIMVX

First Dose M/F: 07/14/08 / 07/14/08

Species/Strain: MICE/B6C3F1

Lab: BNW

F1_M3

C Number: C20523
Lock Date: 02/24/2009
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 2.3.1
PWG Approval Date: NONE

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CAS Number: TRIMVX

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Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE MALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
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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

Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Gallbladder	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(9)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(0)	(10)
Liver	(10)	(0)	(0)	(0)	(0)	(10)
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)

CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(0)	(0)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(0)	(0)	(10)

ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Accessory Adrenal Cortical Nodule	1					1
Subcapsular, Hyperplasia	2 [1.5]					1 [1.0]
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)

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

B6C3F1 MICE MALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(5)	(0)	(0)	(0)	(0)	(7)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(9)
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(10)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Epididymis	(10)	(0)	(0)	(0)	(0)	(10)
Preputial Gland	(10)	(0)	(0)	(0)	(0)	(10)
Prostate	(10)	(0)	(0)	(0)	(0)	(10)
Seminal Vesicle	(10)	(0)	(0)	(0)	(0)	(10)
Testes	(10)	(0)	(0)	(0)	(0)	(10)
Germinal Epithelium, Degeneration	1 [3.0]					

HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Lymph Node, Bronchial	(8)	(0)	(0)	(0)	(0)	(7)
Lymph Node, Mandibular	(8)	(0)	(0)	(0)	(0)	(8)
Lymph Node, Mediastinal	(3)	(0)	(0)	(0)	(0)	(6)
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(0)	(0)	(10)
Thymus	(10)	(0)	(0)	(0)	(0)	(10)

INTEGUMENTARY SYSTEM

Skin	(10)	(0)	(0)	(0)	(0)	(10)
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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

B6C3F1 MICE MALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
NERVOUS SYSTEM						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
RESPIRATORY SYSTEM						
Larynx	(10)	(10)	(10)	(10)	(10)	(10)
Hyperplasia, Squamous			2 [1.5]	9 [1.7]	8 [1.5]	9 [1.9]
Inflammation, Chronic		4 [1.0]		3 [1.0]	1 [1.0]	
Metaplasia, Squamous		10 [2.2]	10 [4.0]	10 [4.0]	10 [4.0]	10 [4.0]
Lung	(10)	(10)	(10)	(10)	(10)	(10)
Fibrosis			1 [1.0]	8 [1.0]	10 [1.1]	10 [3.0]
Infiltration Cellular, Histiocyte			2 [1.0]	9 [1.2]	10 [1.2]	10 [1.5]
Inflammation, Chronic Active			4 [1.0]	10 [1.2]	10 [2.0]	10 [3.0]
Bronchiole, Hyperplasia			9 [1.0]	10 [1.1]	10 [2.1]	10 [2.8]
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Inflammation, Suppurative		7 [1.0]	8 [1.0]	8 [1.0]	8 [1.0]	10 [1.0]
Olfactory Epithelium, Accumulation, Hyaline Droplet		10 [1.3]	10 [1.6]	10 [2.0]	10 [2.0]	10 [2.0]
Respiratory Epithelium, Accumulation, Hyaline Droplet		10 [1.1]	10 [1.0]	10 [1.0]	10 [1.4]	10 [1.3]
Trachea	(10)	(10)	(10)	(10)	(10)	(10)
SPECIAL SENSES SYSTEM						
Eye	(10)	(0)	(0)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
URINARY SYSTEM						

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)

Test Type: 90-DAY

Metal working fluids (Trim VX)

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Route: RESPIRATORY EXPOSURE WHOLE BODY

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Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE MALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
Kidney	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic	2 [1.0]					1 [1.0]
Nephropathy	1 [1.0]					
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(9)

*** END OF MALE ***

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Lab: BNW

B6C3F1 MICE FEMALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
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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

Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Gallbladder	(9)	(0)	(0)	(0)	(0)	(8)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(0)	(10)
Liver	(10)	(0)	(0)	(0)	(0)	(10)
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)

CARDIOVASCULAR SYSTEM

Blood Vessel	(9)	(0)	(0)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(0)	(0)	(10)

ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(1)	(1)	(0)	(10)
Vacuolization Cytoplasmic	6 [1.8]					4 [1.8]
Subcapsular, Accessory Adrenal Cortical Nodule	1					1

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B6C3F1 MICE FEMALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
Subcapsular, Hyperplasia	5 [1.6]					5 [1.6]
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(5)	(0)	(0)	(0)	(0)	(3)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(10)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Clitoral Gland	(8)	(0)	(0)	(0)	(0)	(9)
Ovary	(10)	(0)	(0)	(0)	(0)	(10)
Uterus	(10)	(0)	(0)	(0)	(0)	(10)

HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Lymph Node, Bronchial	(6)	(0)	(0)	(0)	(0)	(9)
Lymph Node, Mandibular	(8)	(0)	(0)	(0)	(0)	(7)
Lymph Node, Mediastinal	(6)	(0)	(0)	(0)	(1)	(6)
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(0)	(0)	(10)
Thymus	(10)	(0)	(0)	(0)	(0)	(10)

INTEGUMENTARY SYSTEM

Mammary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Skin	(10)	(0)	(0)	(0)	(0)	(10)

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MUSCULOSKELETAL SYSTEM						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
NERVOUS SYSTEM						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
RESPIRATORY SYSTEM						
Larynx	(10)	(10)	(10)	(10)	(10)	(10)
Hyperplasia, Squamous			1 [2.0]	7 [1.9]	7 [2.0]	8 [2.0]
Inflammation, Chronic		4 [1.0]	5 [1.0]	8 [1.0]	9 [1.0]	5 [1.0]
Metaplasia, Squamous		10 [2.2]	10 [2.6]	10 [3.4]	10 [4.0]	10 [4.0]
Lung	(10)	(10)	(10)	(10)	(10)	(10)
Fibrosis				10 [1.0]	10 [1.7]	10 [2.9]
Infiltration Cellular, Histiocyte			1 [1.0]	5 [1.4]	9 [1.1]	10 [1.8]
Inflammation, Chronic Active	1 [1.0]		2 [1.0]	10 [1.4]	10 [2.2]	10 [3.0]
Bronchiole, Hyperplasia			4 [1.0]	10 [1.4]	10 [2.0]	10 [2.9]
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Inflammation, Suppurative		1 [1.0]	6 [1.0]	5 [1.0]	10 [1.0]	7 [1.0]
Olfactory Epithelium, Accumulation, Hyaline Droplet		10 [1.5]	10 [2.0]	10 [2.0]	10 [2.0]	10 [2.0]
Respiratory Epithelium, Accumulation, Hyaline Droplet		10 [1.3]	10 [1.7]	10 [2.1]	10 [2.1]	10 [2.1]
Respiratory Epithelium, Hyperplasia					1 [1.0]	
Trachea	(10)	(10)	(10)	(10)	(10)	(9)
SPECIAL SENSES SYSTEM						
Eye	(10)	(0)	(0)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)

a - Number of animals examined microscopically at site and number of animals with lesion

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Lab: BNW

B6C3F1 MICE FEMALE	0 mg/m3	25 mg/m3	50 mg/m3	100 mg/m3	200 mg/m3	400 mg/m3
URINARY SYSTEM						
Kidney	(10)	(0)	(0)	(0)	(0)	(10)
Cyst	1					
Nephropathy	1 [1.0]					1 [1.0]
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)

*** END OF REPORT ***

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)