

Experiment Number: 20523 - 04

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS
ABRIDGED) (a)**

Date Report Requested: 02/02/2015

Test Type: CHRONIC

Metal Working Fluids: Trim VX

Time Report Requested: 13:50:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: TRIMVX

First Dose M/F: 08/03/09 / 08/03/09

Species/Strain: MICE/B6C3F1

Lab: BNW

F1_M3

NTP Study Number: C20523
Lock Date: 06/04/2012
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 3.0.2.2_002
PWG Approval Date: NONE

Test Type: CHRONIC

Metal Working Fluids: Trim VX

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Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: TRIMVX

First Dose M/F: 08/03/09 / 08/03/09

Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE MALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
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Disposition Summary

Animals Initially In Study	50	50	50	50
Early Deaths				
Accidentally Killed			1	
Moribund Sacrifice	4	9	6	5
Natural Death	8	2	6	8
Survivors				
Natural Death			1	
Terminal Sacrifice	38	39	36	37
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(50)	(50)	(50)	(50)
Gallbladder	(43)	(46)	(39)	(42)
Intestine Large, Cecum	(45)	(49)	(47)	(46)
Intestine Large, Colon	(48)	(50)	(48)	(48)
Intestine Large, Rectum	(46)	(48)	(46)	(45)
Intestine Small, Duodenum	(44)	(48)	(45)	(44)
Adenoma	2 (5%)			
Intestine Small, Ileum	(45)	(49)	(46)	(43)
Intestine Small, Jejunum	(45)	(48)	(45)	(44)
Liver	(50)	(50)	(50)	(50)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung	1 (2%)			
Fibrous Histiocytoma				1 (2%)
Hemangiosarcoma, Multiple			1 (2%)	
Hepatoblastoma			4 (8%)	2 (4%)
Hepatocellular Adenoma	13 (26%)	11 (22%)	12 (24%)	12 (24%)
Hepatocellular Adenoma, Multiple	10 (20%)	18 (36%)	14 (28%)	24 (48%)
Hepatocellular Carcinoma	10 (20%)	13 (26%)	11 (22%)	8 (16%)
Hepatocellular Carcinoma, Multiple	11 (22%)	5 (10%)	3 (6%)	13 (26%)
Hepatocholangiocarcinoma			1 (2%)	
Sarcoma, Metastatic, Mesentery			1 (2%)	
Mesentery	(5)	(7)	(4)	(2)

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

Test Type: CHRONIC

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Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: TRIMVX

First Dose M/F: 08/03/09 / 08/03/09

Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE MALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
Hemangiosarcoma		1 (14%)	1 (25%)	
Hepatocellular Carcinoma, Metastatic, Liver		2 (29%)		
Sarcoma			1 (25%)	
Pancreas	(50)	(50)	(49)	(50)
Fibrous Histiocytoma				1 (2%)
Hepatocellular Carcinoma, Metastatic, Liver		1 (2%)		
Salivary Glands	(50)	(50)	(49)	(50)
Stomach, Forestomach	(50)	(50)	(49)	(50)
Mast Cell Tumor Malignant, Metastatic, Bone Marrow	1 (2%)			
Squamous Cell Papilloma	1 (2%)	1 (2%)	1 (2%)	1 (2%)
Stomach, Glandular	(48)	(50)	(49)	(50)
Sarcoma, Metastatic, Mesentery			1 (2%)	
Tooth	(5)	(10)	(8)	(5)

CARDIOVASCULAR SYSTEM

Blood Vessel	(50)	(50)	(50)	(50)
Heart	(50)	(50)	(50)	(50)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung			3 (6%)	
Endocardium, Schwannoma Benign		1 (2%)		

ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(50)	(49)	(49)
Adenoma	2 (4%)	1 (2%)	1 (2%)	1 (2%)
Adenoma, Multiple	1 (2%)			
Mast Cell Tumor Malignant, Metastatic, Bone Marrow	1 (2%)			
Subcapsular, Adenoma		3 (6%)	1 (2%)	6 (12%)
Adrenal Medulla	(50)	(50)	(48)	(49)
Islets, Pancreatic	(50)	(50)	(48)	(50)
Parathyroid Gland	(28)	(28)	(36)	(34)
Carcinoma				1 (3%)

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

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CAS Number: TRIMVX

First Dose M/F: 08/03/09 / 08/03/09

Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE MALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
Pituitary Gland	(50)	(49)	(48)	(48)
Pars Distalis, Adenoma	1 (2%)			
Thyroid Gland	(50)	(49)	(47)	(49)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Epididymis	(50)	(50)	(49)	(50)
Preputial Gland	(49)	(50)	(48)	(49)
Prostate	(50)	(49)	(50)	(50)
Seminal Vesicle	(50)	(50)	(50)	(50)
Testes	(50)	(50)	(49)	(50)
Interstitial Cell, Adenoma		1 (2%)		

HEMATOPOIETIC SYSTEM

Bone Marrow	(50)	(50)	(49)	(50)
Mast Cell Tumor Malignant	1 (2%)			
Schwannoma Malignant, Metastatic, Peripheral Nerve			1 (2%)	
Lymph Node	(3)	(0)	(3)	(1)
Pancreatic, Sarcoma, Metastatic, Mesentery			1 (33%)	
Renal, Fibrous Histiocytoma				1 (100%)
Renal, Sarcoma, Metastatic, Mesentery			1 (33%)	
Lymph Node, Bronchial	(38)	(37)	(39)	(39)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung	1 (3%)		2 (5%)	
Hepatoblastoma, Metastatic, Liver				1 (3%)
Hepatocellular Carcinoma, Metastatic, Liver	1 (3%)			1 (3%)
Lymph Node, Mandibular	(20)	(27)	(25)	(27)
Lymph Node, Mediastinal	(35)	(35)	(41)	(40)

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CAS Number: TRIMVX

First Dose M/F: 08/03/09 / 08/03/09

Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE MALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung	1 (3%)		1 (2%)	
Hepatoblastoma, Metastatic, Liver				1 (3%)
Mast Cell Tumor Malignant, Metastatic, Bone Marrow	1 (3%)			
Lymph Node, Mesenteric	(48)	(49)	(47)	(48)
Fibrous Histiocytoma				1 (2%)
Hemangioma			1 (2%)	1 (2%)
Hemangiosarcoma				2 (4%)
Hepatoblastoma, Metastatic, Liver				1 (2%)
Sarcoma, Metastatic, Mesentery			1 (2%)	
Spleen	(49)	(50)	(49)	(50)
Thymus	(44)	(44)	(47)	(46)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung			2 (4%)	1 (2%)
Hepatocellular Carcinoma, Metastatic, Liver	1 (2%)			
Mast Cell Tumor Malignant, Metastatic, Bone Marrow	1 (2%)			
INTEGUMENTARY SYSTEM				
Mammary Gland	(3)	(3)	(0)	(0)
Skin	(50)	(50)	(50)	(50)
Fibrosarcoma	1 (2%)			
Fibrous Histiocytoma				1 (2%)
Subcutaneous Tissue, Hemangiosarcoma			1 (2%)	
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Osteoma		1 (2%)		
Skeletal Muscle	(0)	(1)	(2)	(1)
Sarcoma, Metastatic, Mesentery			1 (50%)	
Schwannoma Malignant, Metastatic, Peripheral Nerve			1 (50%)	

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B6C3F1 MICE MALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
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NERVOUS SYSTEM

Brain	(50)	(50)	(49)	(50)
Peripheral Nerve	(0)	(1)	(1)	(2)
Schwannoma Malignant			1 (100%)	
Spinal Cord	(0)	(1)	(1)	(2)

RESPIRATORY SYSTEM

Larynx	(48)	(49)	(49)	(49)
Lung	(50)	(50)	(49)	(50)
Alveolar/Bronchiolar Adenoma	5 (10%)	7 (14%)	5 (10%)	6 (12%)
Alveolar/Bronchiolar Adenoma, Multiple	1 (2%)	1 (2%)		3 (6%)
Alveolar/Bronchiolar Carcinoma	8 (16%)	8 (16%)	7 (14%)	9 (18%)
Alveolar/Bronchiolar Carcinoma, Multiple	2 (4%)		2 (4%)	8 (16%)
Carcinoma, Metastatic, Harderian Gland				1 (2%)
Hepatoblastoma, Metastatic, Liver			1 (2%)	1 (2%)
Hepatocellular Carcinoma, Metastatic, Liver	8 (16%)	5 (10%)	4 (8%)	6 (12%)
Hepatocholangiocarcinoma, Metastatic, Liver			1 (2%)	
Schwannoma Malignant, Metastatic, Peripheral Nerve			1 (2%)	
Bronchiole, Epithelium, Adenoma			1 (2%)	
Mediastinum, Hepatocellular Carcinoma, Metastatic, Liver		1 (2%)		
Nose	(49)	(50)	(49)	(50)
Carcinoma, Metastatic, Harderian Gland				1 (2%)
Pleura	(0)	(1)	(0)	(1)
Trachea	(46)	(50)	(47)	(48)

SPECIAL SENSES SYSTEM

Eye	(50)	(50)	(49)	(49)
Carcinoma, Metastatic, Harderian Gland				1 (2%)
Harderian Gland	(50)	(50)	(49)	(50)

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Lab: BNW

B6C3F1 MICE MALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
Adenoma	4 (8%)	5 (10%)	3 (6%)	6 (12%)
Adenoma, Multiple				1 (2%)
Carcinoma	2 (4%)	3 (6%)	2 (4%)	1 (2%)
URINARY SYSTEM				
Kidney	(50)	(50)	(49)	(50)
Hepatoblastoma, Metastatic, Liver				1 (2%)
Mast Cell Tumor Malignant, Metastatic, Bone Marrow	1 (2%)			
Urethra	(0)	(0)	(1)	(0)
Urinary Bladder	(50)	(50)	(49)	(50)
SYSTEMIC LESIONS				
Multiple Organ	*(50)	*(50)	*(50)	*(50)
Histiocytic Sarcoma		1 (2%)	1 (2%)	1 (2%)
Lymphoma Malignant	6 (12%)	2 (4%)	3 (6%)	2 (4%)

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

* Number of animals with any tissue examined microscopically

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First Dose M/F: 08/03/09 / 08/03/09

Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE MALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
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Tumor Summary for Males

Total Animals with Primary Neoplasms (b)	42	42	42	48
Total Primary Neoplasms	81	83	78	113
Total Animals with Benign Neoplasms	32	34	31	41
Total Benign Neoplasms	40	50	39	61
Total Animals with Malignant Neoplasms	32	32	30	36
Total Malignant Neoplasms	41	33	39	52
Total Animals with Metastatic Neoplasms	10	7	11	9
Total Metastatic Neoplasms	18	9	25	16
Total Animals with Malignant Neoplasms Uncertain Primary Site				
Total Animals with Neoplasms Uncertain- Benign or Malignant				
Total Uncertain Neoplasms				

*** END OF MALE ***

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b - Primary tumors: all tumors except metastatic tumors

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Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE FEMALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
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Disposition Summary

Animals Initially In Study	50	50	50	50
Early Deaths				
Accidentally Killed	1			
Moribund Sacrifice	10	9	4	13
Natural Death	4	5	10	7
Survivors				
Moribund Sacrifice	1			
Natural Death				1
Terminal Sacrifice	34	36	36	29
Animals Examined Microscopically	50	50	50	50

ALIMENTARY SYSTEM

Esophagus	(50)	(50)	(50)	(49)
Gallbladder	(46)	(46)	(44)	(44)
Intestine Large, Cecum	(50)	(49)	(46)	(45)
Intestine Large, Colon	(50)	(50)	(47)	(50)
Intestine Large, Rectum	(48)	(48)	(46)	(45)
Intestine Small, Duodenum	(48)	(46)	(43)	(45)
Intestine Small, Ileum	(48)	(47)	(44)	(46)
Intestine Small, Jejunum	(48)	(45)	(45)	(46)
Liver	(50)	(50)	(50)	(50)
Carcinoma, Metastatic, Islets, Pancreatic				1 (2%)
Hepatoblastoma	1 (2%)			
Hepatocellular Adenoma	7 (14%)	11 (22%)	7 (14%)	9 (18%)
Hepatocellular Adenoma, Multiple	2 (4%)	4 (8%)	3 (6%)	6 (12%)
Hepatocellular Carcinoma	7 (14%)	2 (4%)	5 (10%)	9 (18%)
Hepatocellular Carcinoma, Multiple		3 (6%)	2 (4%)	3 (6%)
Ito Cell Tumor Benign		1 (2%)		
Mesentery	(10)	(10)	(5)	(11)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				1 (9%)
Hemangioma				1 (9%)
Schwannoma Malignant, Metastatic, Heart				1 (9%)

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Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE FEMALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
Pancreas	(50)	(50)	(49)	(50)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				1 (2%)
Sarcoma, Metastatic, Skin				1 (2%)
Salivary Glands	(50)	(50)	(50)	(50)
Mast Cell Tumor Benign			1 (2%)	
Stomach, Forestomach	(50)	(50)	(50)	(50)
Squamous Cell Papilloma	1 (2%)			
Stomach, Glandular	(49)	(50)	(49)	(50)
Tooth	(0)	(1)	(0)	(0)

CARDIOVASCULAR SYSTEM

Blood Vessel	(50)	(50)	(50)	(50)
Aorta, Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				1 (2%)
Aorta, Hemangiosarcoma	1 (2%)			
Heart	(50)	(50)	(49)	(50)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				2 (4%)
Endocardium, Schwannoma Malignant				1 (2%)

ENDOCRINE SYSTEM

Adrenal Cortex	(50)	(50)	(50)	(50)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				1 (2%)
Subcapsular, Adenoma				1 (2%)
Adrenal Medulla	(50)	(50)	(50)	(50)
Pheochromocytoma Benign	2 (4%)	1 (2%)	1 (2%)	
Pheochromocytoma Malignant		1 (2%)		
Islets, Pancreatic	(50)	(49)	(49)	(50)
Adenoma			1 (2%)	
Carcinoma				1 (2%)
Parathyroid Gland	(35)	(30)	(36)	(28)
Adenoma	1 (3%)			

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Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE FEMALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
Pituitary Gland	(48)	(49)	(49)	(49)
Pars Distalis, Adenoma	8 (17%)	6 (12%)	7 (14%)	6 (12%)
Pars Distalis, Carcinoma	3 (6%)			2 (4%)
Thyroid Gland	(50)	(50)	(50)	(49)
C-cell, Carcinoma	1 (2%)			
Follicular Cell, Adenoma			1 (2%)	
Follicular Cell, Carcinoma, Multiple				1 (2%)

GENERAL BODY SYSTEM

Tissue NOS	(1)	(0)	(0)	(0)
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GENITAL SYSTEM

Clitoral Gland	(46)	(48)	(45)	(46)
Ovary	(50)	(49)	(49)	(50)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				1 (2%)
Cystadenoma	1 (2%)	4 (8%)	2 (4%)	3 (6%)
Granulosa Cell Tumor Benign	1 (2%)			1 (2%)
Periovarian Tissue, Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				1 (2%)
Periovarian Tissue, Sarcoma, Metastatic, Skin				1 (2%)
Uterus	(50)	(50)	(50)	(50)
Carcinoma				1 (2%)
Hemangioma		1 (2%)		1 (2%)
Hemangiosarcoma	1 (2%)	2 (4%)		
Polyp Stromal	1 (2%)	3 (6%)	5 (10%)	1 (2%)
Endometrium, Adenoma			1 (2%)	

HEMATOPOIETIC SYSTEM

Bone Marrow	(49)	(50)	(50)	(50)
Hemangiosarcoma, Metastatic, Spleen			1 (2%)	
Lymph Node	(11)	(11)	(11)	(10)

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Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE FEMALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
Axillary, Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				1 (10%)
Axillary, Schwannoma Malignant, Metastatic, Skin		1 (9%)		
Lumbar, Hemangiosarcoma	1 (9%)			
Pancreatic, Hemangiosarcoma				1 (10%)
Renal, Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				1 (10%)
Lymph Node, Bronchial	(44)	(44)	(44)	(43)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				4 (9%)
Carcinoma, Metastatic, Harderian Gland				1 (2%)
Carcinoma, Metastatic, Mammary Gland		1 (2%)		
Lymph Node, Mandibular	(35)	(42)	(37)	(39)
Lymph Node, Mediastinal	(40)	(44)	(45)	(45)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				3 (7%)
Schwannoma Malignant, Metastatic, Skin		1 (2%)		
Lymph Node, Mesenteric	(49)	(49)	(47)	(48)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				1 (2%)
Hemangioma	1 (2%)			
Sarcoma, Metastatic, Skin				1 (2%)
Spleen	(50)	(49)	(48)	(49)
Hemangiosarcoma		1 (2%)	2 (4%)	
Thymus	(48)	(48)	(47)	(49)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				2 (4%)
Sarcoma, Metastatic, Skin				1 (2%)

INTEGUMENTARY SYSTEM

Mammary Gland	(50)	(50)	(50)	(50)
Adenoma		1 (2%)	1 (2%)	
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				1 (2%)
Carcinoma		1 (2%)	1 (2%)	

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

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Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE FEMALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
Skin	(50)	(50)	(50)	(50)
Schwannoma Benign				1 (2%)
Schwannoma Malignant			1 (2%)	
Subcutaneous Tissue, Fibrous Histiocytoma		1 (2%)		1 (2%)
Subcutaneous Tissue, Hemangiosarcoma			1 (2%)	
Subcutaneous Tissue, Sarcoma				1 (2%)
Subcutaneous Tissue, Schwannoma Malignant		3 (6%)		

MUSCULOSKELETAL SYSTEM

Bone	(50)	(50)	(50)	(50)
Hemangiosarcoma, Metastatic, Spleen			1 (2%)	
Mandible, Fibrosarcoma				1 (2%)
Skeletal Muscle	(3)	(4)	(2)	(4)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				1 (25%)
Sarcoma				1 (25%)

NERVOUS SYSTEM

Brain	(50)	(50)	(50)	(50)
Carcinoma, Metastatic, Mammary Gland		1 (2%)		
Peripheral Nerve	(3)	(3)	(1)	(2)
Spinal Cord	(2)	(3)	(1)	(2)

RESPIRATORY SYSTEM

Larynx	(50)	(50)	(50)	(50)
Lung	(50)	(50)	(50)	(50)
Alveolar/Bronchiolar Adenoma	4 (8%)	5 (10%)	3 (6%)	6 (12%)
Alveolar/Bronchiolar Adenoma, Multiple				2 (4%)
Alveolar/Bronchiolar Carcinoma	3 (6%)	3 (6%)	5 (10%)	9 (18%)
Alveolar/Bronchiolar Carcinoma, Multiple	2 (4%)		1 (2%)	5 (10%)
Carcinoma, Metastatic, Harderian Gland				1 (2%)

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

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Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE FEMALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
Carcinoma, Metastatic, Mammary Gland		1 (2%)		
Carcinoma, Metastatic, Thyroid Gland	1 (2%)			
Hepatocellular Carcinoma, Metastatic, Liver		2 (4%)	2 (4%)	3 (6%)
Pheochromocytoma Malignant, Metastatic, Adrenal Medulla		1 (2%)		
Sarcoma, Metastatic, Skin				1 (2%)
Nose	(50)	(50)	(50)	(50)
Carcinoma, Metastatic, Harderian Gland				1 (2%)
Trachea	(49)	(50)	(50)	(49)
SPECIAL SENSES SYSTEM				
Ear	(0)	(0)	(0)	(1)
Eye	(49)	(50)	(50)	(50)
Harderian Gland	(50)	(49)	(49)	(49)
Adenoma	1 (2%)	1 (2%)	5 (10%)	4 (8%)
Carcinoma	3 (6%)	2 (4%)	2 (4%)	5 (10%)
URINARY SYSTEM				
Kidney	(49)	(50)	(49)	(50)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				2 (4%)
Carcinoma, Metastatic, Mammary Gland		1 (2%)		
Pheochromocytoma Malignant, Metastatic, Adrenal Medulla		1 (2%)		
Sarcoma, Metastatic, Skin				1 (2%)
Schwannoma Malignant, Metastatic, Heart				1 (2%)
Urethra	(0)	(1)	(0)	(0)
Urinary Bladder	(50)	(50)	(50)	(50)

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

* Number of animals with any tissue examined microscopically

Experiment Number: 20523 - 04

P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)

Date Report Requested: 02/02/2015

Test Type: CHRONIC

Metal Working Fluids: Trim VX

Time Report Requested: 13:50:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: TRIMVX

First Dose M/F: 08/03/09 / 08/03/09

Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE FEMALE

Control

10 mg/m3

30 mg/m3

100 mg/m3

SYSTEMIC LESIONS

Multiple Organ

*(50)

*(50)

*(50)

*(50)

Histiocytic Sarcoma

4 (8%)

5 (10%)

3 (6%)

3 (6%)

Lymphoma Malignant

10 (20%)

8 (16%)

14 (28%)

12 (24%)

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

* Number of animals with any tissue examined microscopically

Test Type: CHRONIC

Metal Working Fluids: Trim VX

Time Report Requested: 13:50:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: TRIMVX

First Dose M/F: 08/03/09 / 08/03/09

Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE FEMALE	Control	10 mg/m3	30 mg/m3	100 mg/m3
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Tumor Summary for Females

Total Animals with Primary Neoplasms (b)	38	41	42	46
Total Primary Neoplasms	67	70	75	99
Total Animals with Benign Neoplasms	23	22	28	30
Total Benign Neoplasms	30	38	38	42
Total Animals with Malignant Neoplasms	27	29	32	37
Total Malignant Neoplasms	37	32	37	57
Total Animals with Metastatic Neoplasms	7	8	5	11
Total Metastatic Neoplasms	9	15	7	42
Total Animals with Malignant Neoplasms Uncertain Primary Site				
Total Animals with Neoplasms Uncertain- Benign or Malignant				
Total Uncertain Neoplasms				

*** END OF REPORT ***

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

b - Primary tumors: all tumors except metastatic tumors