TDMS No. 88006 - 04
Test Type: CHRONIC

Species/Strain: MICE/B6C3F1

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

ALPHA-METHYLSTYRENE
CAS Number: 98-83-9
Pathologist: GRUMBEIN, S.

Final 1 Mice

C Number: C88006B

Route: RESPIRATORY EXPOSURE WHOLE BODY

**Lock Date:** 03/08/2004

Cage Range: ALL

Date Range: ALL

**Reasons For Removal:** ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Date Report Reqsted: 07/28/2005

Time Report Reqsted: 09:53:34
First Dose M/F: 07/30/01 / 07/30/01

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)

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

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

ALPHA-METHYLSTYRENE CAS Number: 98-83-9

Pathologist: GRUMBEIN, S.

Date Report Reqsted: 07/28/2005

Time Report Reqsted: 09:53:34 First Dose M/F: 07/30/01 / 07/30/01

B6C3F1 MICE MALE	CONTROL	100 PPM	300 PPM	600 PPM	
isposition Summary					
Animals Initially in Study	50	50	50	50	
Early Deaths					
Moribund Sacrifice	5	8	7	9	
Natural Death	10	10	3	5	
Survivors					
Terminal Sacrifice	35	32	40	36	
Animals Examined Microscopically	50	50	50	50	
LIMENTARY SYSTEM					
Gallbladder	(42)	(41)	(45)	(39)	
Degeneration, Hyaline	1 [2.0]	` '	,	,	
Infiltration Cellular, Polymorphonuclear	1 [3.0]			1 [2.0]	
Intestine Large, Cecum	(43)	(42)	(47)	(45)	
Hemorrhage	,	1 [4.0]	1 [3.0]	,	
Liver	(50)	(50)	(50)	(50)	
Clear Cell Focus	`13´	`8 ´	13	14	
Tension Lipidosis	3 [2.0]	3 [1.3]	3 [1.0]		
Eosinophilic Focus	9	5	10	6	
Basophilic Focus	6	5	7	3	
Infarct	2 [2.5]		1 [3.0]	2 [2.0]	
Necrosis	3 [3.7]	4 [2.3]	1 [2.0]	4 [2.8]	
Vacuolization Cytoplasmic, Focal	1 [3.0]	1 [3.0]			
Mixed Cell Focus	1	3	1	2	
Inflammation, Granulomatous		1 [2.0]			
Mineralization		1 [1.0]			
Hematopoietic Cell Proliferation		1 [1.0]			
Fatty Change			1 [2.0]		
Bile Duct, Cyst				1	
Bile Duct, Degeneration, Hyaline			1 [3.0]		
Hepatocyte, Erythrophagocytosis	1 [2.0]				
Portal, Infiltration Cellular, Mononuclear			1 [2.0]		
Cell					
Mesentery	(5)	(3)	(2)	(5)	
Artery, Inflammation			1 [2.0]		
Fat, Inflammation, Chronic Active			1 [3.0]		

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)

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

ALPHA-METHYLSTYRENE **CAS Number:** 98-83-9

Date Report Regsted: 07/28/2005

Time Report Reqsted: 09:53:34

Lab: BNW

First Dose M/F: 07/30/01 / 07/30/01

Route: RESPIRATORY EXPOSURE WHOLE BODY Pathologist: GRUMBEIN, S. Species/Strain: MICE/B6C3F1

B6C3F1 MICE MALE	CONTROL	100 PPM	300 PPM	600 PPM	
Fat, Necrosis Pancreas Atrophy Basophilic Focus Necrosis	5 [2.0] (50) 1 [2.0]	2 [2.0] (48)	1 [3.0] (49) 1 [2.0] 1 [2.0] 1 [2.0]	5 [2.0] (49)	
Duct, Cyst Salivary Glands Inflammation, Suppurative	(50)	1 (50)	(50) 1 [3.0]	(50)	
Stomach, Forestomach Ulcer Inflammation Ulcer, Focal	(50) 3 [2.3]	(49) 3 [2.3] 2 [2.0]	(49) 1 [2.0]	(48) 1 [2.0] 5 [2.0] 1 [2.0]	
Infiltration Cellular, Mast Cell Epithelium, Hyperplasia Stomach, Glandular Necrosis Hyperplasia	1 [2.0] (48) 1 [2.0] 1 [3.0]	4 [2.5] (47) 1 [2.0]	7 [2.3] (49)	1 [4.0] 11 [2.0] (47)	
Mineralization Metaplasia, Hepatocyte Epithelium, Hyperplasia, Focal		1 [1.0] 1 [3.0] 1 [3.0]	2 [2.0]	40	
Tooth Malformation	(0)	(1) 1 [4.0]	(2) 2 [4.0]	(1) 1 [4.0]	
CARDIOVASCULAR SYSTEM					
Heart Metaplasia, Osseous	(50) 1 [1.0]	(50)	(50)	(50)	
Mineralization Thrombosis Inflammation, Suppurative		1 [2.0] 1 [3.0]	3 [4.0] 1 [3.0]		
Artery, Inflammation, Chronic Active	1 [3.0]	1 [2.0]		1 [2.0]	
ENDOCRINE SYSTEM					
Adrenal Cortex Hypertrophy Hyperplasia Inflammation, Chronic Active Adrenal Medulla	(50) 25 [2.0] 8 [2.0] (50)	(49) 13 [2.0] 12 [2.0] (49)	(49) 14 [1.7] 4 [2.0] 1 [4.0] (49)	(50) 13 [2.0] 2 [2.0] (49)	
	(/	( /	( /	\ - /	

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)

**TDMS No.** 88006 - 04 Test Type: CHRONIC

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

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

ALPHA-METHYLSTYRENE **CAS Number:** 98-83-9

Pathologist: GRUMBEIN, S.

Date Report Regsted: 07/28/2005

Time Report Regsted: 09:53:34 First Dose M/F: 07/30/01 / 07/30/01

B6C3F1 MICE MALE	CONTROL	100 PPM	300 PPM	600 PPM	
Hyperplasia	2 [2.0]	3 [1.7]	1 [2.0]	2 [2.5]	
Islets, Pancreatic	(50)	(48)	(49)	(49)	
Hyperplasia	1 [2.0]	1 [3.0]	1 [2.0]		
Pituitary Gland	(48)	(47)	(49)	(45)	
Hemorrhage Pars Distalis, Hyperplasia		4 [0 0]	1 [2.0]		
Thyroid Gland	(50)	1 [2.0] (50)	1 [2.0] (50)	(50)	
Follicular Cell, Hyperplasia	14 [1.9]	11 [1.4]	22 [1.7]	16 [1.5]	
ENERAL BODY SYSTEM					
None					
ENITAL SYSTEM					
Epididymis	(50)	(50)	(50)	(50)	
Granuloma Sperm	1 [4.0]	1 [3.0]	3 [2.3]	1 [3.0]	
Hemorrhage			1 [2.0]		
Penis	(1)	(1)	(0)	(1)	
Inflammation, Suppurative	(50)	1 [4.0]	(50)	1 [3.0]	
Preputial Gland Inflammation, Chronic Active	(50)	(50)	(50) 2 [2.5]	(50) 1 [1.0]	
Necrosis			2 [2.5] 1 [3.0]	1 [1.0]	
Prostate	(50)	(49)	(49)	(49)	
Inflammation, Suppurative	4 [2.8]	1 [4.0]	2 [2.0]	1 [3.0]	
Hyperplasia		1 [2.0]			
Seminal Vesicle	(49)	(49)	(49)	(45)	
Inflammation, Chronic	1 [3.0]	1 [3.0]	4 [4 0]		
Inflammation, Suppurative Testes	1 [3.0] (50)	(50)	1 [4.0] (50)	(50)	
Atrophy	4 [2.5]	1 [2.0]	1 [2.0]	2 [2.5]	
лиорпу	+ [2.0]	1 [2.0]	1 [2.0]	2 [2.0]	
EMATOPOIETIC SYSTEM					
Bone Marrow	(50)	(49)	(50)	(49)	
Angiectasis	1 [3.0]				
Hyperplasia, Mast Cell	(40)	/ 4 <b>-</b> 3	(40)	1 [2.0]	
Lymph Node, Mesenteric	(48)	(47)	(48)	(47)	

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)

**TDMS No.** 88006 - 04

Test Type: CHRONIC

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

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

ALPHA-METHYLSTYRENE

**CAS Number:** 98-83-9 Pathologist: GRUMBEIN, S. Date Report Regsted: 07/28/2005

Time Report Reqsted: 09:53:34 First Dose M/F: 07/30/01 / 07/30/01

B6C3F1 MICE MALE	CONTROL	100 PPM	300 PPM	600 PPM	
Hyperplasia, Lymphoid Angiectasis	1 [3.0]	1 [3.0]	1 [4.0]		
Spleen Hematopoietic Cell Proliferation Hyperplasia, Lymphoid	(50) 2 [2.5]	(49) 2 [3.0]	(49) 3 [2.7] 1 [3.0]	(47) 1 [3.0]	
INTEGUMENTARY SYSTEM					
Skin Inflammation, Chronic Active Cyst Epithelial Inclusion	(50) 9 [3.6] 1	(50) 2 [4.0]	(50) 4 [4.0]	(50) 3 [3.0]	
Inflammation, Acute	1 [4.0]		1 [3.0]		
MUSCULOSKELETAL SYSTEM					
None					
NERVOUS SYSTEM					
Brain Necrosis	(50)	(50)	(50) 1 [2.0]	(50)	
Gliosis Meninges, Infiltration Cellular, Polymorphonuclear			1 [2.0]	1 [3.0]	
RESPIRATORY SYSTEM					
Lung Thrombosis Inflammation, Chronic Active Congestion, Chronic	(50) 1 [2.0]	(50) 1 [3.0]	(50) 1 [1.0] 1 [3.0] 1 [4.0]	(50) 1 [1.0]	
Alveolar Epithelium, Hyperplasia Alveolus, Infiltration Cellular, Histiocyte Bronchiole, Hyperplasia Perivascular, Infiltration Cellular, Mononuclear Cell	6 [1.8] 1 [1.0] 1 [3.0]	5 [1.2] 1 [3.0]	2 [1.5] 1 [2.0] 1 [1.0] 1 [2.0]	4 [1.3] 1 [3.0] 2 [1.0]	
Perivascular, Inflammation, Suppurative Nose	(50)	1 [2.0] (50)	(50)	(50)	

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

ALPHA-METHYLSTYRENE CAS Number: 98-83-9

Pathologist: GRUMBEIN, S.

First Dose M/F: 07/30/01 / 07/30/01 Lab: BNW

Date Report Regsted: 07/28/2005

Time Report Regsted: 09:53:34

Species/Strain: MICE/B6C3F1

Droplet

Renal Tubule, Necrosis

Route: RESPIRATORY EXPOSURE WHOLE BODY

CONTROL 100 PPM 300 PPM 600 PPM **B6C3F1 MICE MALE** Inflammation, Suppurative 1 [3.0] Olfactory Epithelium, Atrophy 2 [2.5] 8 [1.8] 12 [1.7] Olfactory Epithelium, Degeneration, 1 [2.0] 1 [1.0] Hyaline Olfactory Epithelium, Glands, 4 [1.0] 50 [2.8] 50 [3.0] 50 [3.1] Hyperplasia Olfactory Epithelium, Metaplasia 6 [1.2] 47 [2.7] 49 [3.0] 49 [3.0] Olfactory Epithelium, Necrosis 1 [2.0] 1 [1.0] Respiratory Epithelium, Degeneration, 1 [2.0] Hyaline Respiratory Epithelium, Hyperplasia 1 [4.0] Trachea (49)(50)(50)(50)Necrosis 1 [3.0] SPECIAL SENSES SYSTEM Eye (48)(47)(46)(44)Degeneration 1 [4.0] Cornea, Hyperplasia, Squamous 1 [1.0] Cornea, Inflammation, Chronic Active 1 [2.0] 1 [3.0] Harderian Gland (50)(49)(50)(47)Hyperplasia 3 [1.7] 6 [2.0] 2 [2.5] 2 [2.0] URINARY SYSTEM Kidney (50)(49)(50)(49)Nephropathy 43 [1.2] 37 [1.8] 40 [1.6] 38 [1.5] Cyst 3 Infarct 2 [1.5] 3 [1.7] 5 [1.8] 7 [2.3] Metaplasia, Osseous 4 [1.5] 1 [1.0] 1 [1.0] 1 [2.0] Inflammation, Suppurative 4 [2.5] Artery, Inflammation, Chronic Active 1 [2.0] Capsule, Fibrosis 2 [2.0] 2 [1.5] Capsule, Hemorrhage 1 [4.0] Papilla, Inflammation, Suppurative 1 [2.0] Pelvis, Dilatation 3 [2.3] 3 [2.3] 2 [2.5] Renal Tubule, Accumulation, Hvaline 1 [3.0]

1 [1.0]

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**TDMS No.** 88006 - 04 Test Type: CHRONIC

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

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

ALPHA-METHYLSTYRENE **CAS Number:** 98-83-9 Pathologist: GRUMBEIN, S. Date Report Regsted: 07/28/2005

Time Report Regsted: 09:53:34 First Dose M/F: 07/30/01 / 07/30/01

Lab: BNW

B6C3F1 MICE MALE	CONTROL	100 PPM	300 PPM	600 PPM
Urethra	(0)	(1)	(0)	(1)
Bulbourethral Gland, Hyperplasia Bulbourethral Gland, Inflammation, Suppurative		1 [3.0] 1 [2.0]		1 [3.0]
Urinary Bladder Inflammation, Chronic Active	(50) 1 [2.0]	(48) 1 [2.0]	(50) 1 [3.0]	(48)
Infiltration Cellular, Polymorphonuclear Transitional Epithelium, Hyperplasia		1 [2.0]	2 [2.0]	1 [2.0]

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

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)

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

ALPHA-METHYLSTYRENE CAS Number: 98-83-9

Pathologist: GRUMBEIN, S.

Lab: BNW

Date Report Regsted: 07/28/2005

Time Report Regsted: 09:53:34

First Dose M/F: 07/30/01 / 07/30/01

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

CONTROL 100 PPM 300 PPM 600 PPM **B6C3F1 MICE FEMALE Disposition Summary Animals Initially in Study** 50 50 50 50 **Early Deaths Accidently Killed** 1 **Moribund Sacrifice** 8 9 8 11 **Natural Death** 3 3 4 2 **Survivors Terminal Sacrifice** 39 37 37 38 **Animals Examined Microscopically** 50 50 50 50 **ALIMENTARY SYSTEM** Esophagus (50)(50)(50)(50)Inflammation, Suppurative 1 [2.0] Gallbladder (43)(47)(41)(43)Necrosis 1 [4.0] Intestine Small, Jejunum (49)(47)(46)(48)Peyer's Patch, Hyperplasia 1 [4.0] 1 [2.0] 1 [4.0] Liver (50)(50)(50)(50)Basophilic Focus 5 2 3 3 Necrosis 1 [1.0] 3 [3.3] 1 [2.0] 2 [2.5] **Tension Lipidosis** 3 [1.7] 1 [2.0] 2 [1.5] 3 [1.7] Clear Cell Focus 5 3 5 1 Eosinophilic Focus 2 5 7 12 Infarct 1 [3.0] 1 [4.0] Angiectasis 1 [3.0] Hematopoietic Cell Proliferation 1 [4.0] Mixed Cell Focus Mitotic Alteration 1 [4.0] Mesentery (6)Fat, Necrosis 7 [2.3] 5 [2.2] 5 [2.0] 6 [2.0] **Pancreas** (49)(50)(49)(50)Basophilic Focus 1 [2.0] Atrophy 1 [2.0] Artery, Inflammation, Chronic Active 1 [3.0] Duct, Cyst 1 Salivary Glands (50)(50)(50)(50)

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

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Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

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

Pathologist: GRUMBEIN, S.

ALPHA-METHYLSTYRENE CAS Number: 98-83-9

Date Report Reqsted: 07/28/2005

Time Report Reqsted: 09:53:34 First Dose M/F: 07/30/01 / 07/30/01

B6C3F1 MICE FEMALE	CONTROL	100 PPM	300 PPM	600 PPM	
Inflammation, Suppurative	1 [2.0]				
Atrophy	. []		1 [2.0]		
Necrosis			1 [2.0]		
Stomach, Forestomach	(50)	(50)	(49)	(50)	
Inflammation	1 [2.0]	, ,	,	1 [2.0]	
Angiectasis		1 [1.0]		• •	
Mineralization			1 [1.0]		
Ulcer				1 [1.0]	
Epithelium, Hyperplasia	3 [2.7]		2 [1.5]	1 [2.0]	
Epithelium, Hyperplasia, Basal Cell				1 [3.0]	
Stomach, Glandular	(49)	(48)	(49)	(50)	
Metaplasia, Hepatocyte	1 [3.0]		1 [4.0]		
Necrosis	2 [2.0]				
Artery, Inflammation, Chronic Active		1 [3.0]			
CARDIOVASCULAR SYSTEM					
Heart	(50)	(50)	(50)	(50)	
Inflammation, Suppurative	1 [4.0]				
Thrombosis	1 [3.0]	1 [3.0]		2 [2.5]	
Mineralization	2 [1.0]		1 [1.0]		
Hemorrhage		1 [3.0]			
Cardiomyopathy				1 [2.0]	
Necrosis				1 [3.0]	
Artery, Inflammation, Chronic Active	1 [3.0]	1 [4.0]			
NDOCRINE SYSTEM					
Adrenal Cortex	(50)	(50)	(50)	(50)	
Hyperplasia	2 [2.0]	2 [2.0]	3 [2.0]	1 [2.0]	
Hypertrophy	1 [2.0]	1 [2.0]	1 [2.0]	2 [2.0]	
Necrosis			1 [4.0]		
Adrenal Medulla	(50)	(50)	(49)	(49)	
Hyperplasia	4 [1.0]	3 [1.7]	5 [1.4]	4 [1.5]	
Necrosis	(40)	(=0)	1 [4.0]	(50)	
Islets, Pancreatic	(49)	(50)	(50)	(50)	
Hyperplasia	(50)	1 [2.0]	1 [2.0]	(47)	
Pituitary Gland	(50)	(48)	(50)	(47)	
Pars Distalis, Angiectasis			2 [1.5]		

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)

**TDMS No.** 88006 - 04

Test Type: CHRONIC

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

Pathologist: GRUMBEIN, S.

ALPHA-METHYLSTYRENE
CAS Number: 98-83-9

First Dose M/F: 07/30/01 / 07/30/01 Lab: BNW

Date Report Regsted: 07/28/2005

Time Report Reqsted: 09:53:34

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

B6C3F1 MICE FEMALE	CONTROL	100 PPM	300 PPM	600 PPM	
Pars Distalis, Hyperplasia	9 [1.9]	8 [1.9]	4 [2.5]	7 [2.4]	
Pars Intermedia, Hyperplasia	4 [0.0]	1 [2.0]			
Pars Intermedia, Hypertrophy Thyroid Gland	1 [2.0] (50)	(50)	(50)	(50)	
Inflammation, Chronic Active	(00)	1 [3.0]	1 [3.0]	(00)	
C-cell, Hyperplasia		1 [2.0]	1 [1.0]		
Follicular Cell, Hyperplasia	15 [2.1]	11 [1.8]	10 [1.6]	15 [1.8]	
GENERAL BODY SYSTEM					
None					
GENITAL SYSTEM					
Ovary	(48)	(50)	(49)	(50)	
Cyst	`15´	8	12	`8 ´	
Angiectasis		3 [3.7]	1 [3.0]		
Thrombosis	4-1	2 [4.0]	4-1		
Oviduct	(0)	(0)	(0)	(1)	
Hyperplasia	(50)	(50)	(40)	1 [3.0]	
Uterus Inflammation, Suppurative	(50) 1 [4.0]	(50)	(49)	(50)	
Fibrosis	1 [4.0] 1 [2.0]				
Angiectasis	2 [4.0]	1 [3.0]		2 [3.5]	
Cyst	_[]	1		_ [6.0]	
Thrombosis				1 [4.0]	
Necrosis				1 [4.0]	
Endometrium, Hyperplasia, Cystic	5 [4.0]	8 [4.0]	9 [4.0]	9 [3.8]	
Lymphatic, Cyst	1				
IEMATOPOIETIC SYSTEM					
Bone Marrow	(50)	(49)	(48)	(50)	
Hyperplasia, Reticulum Cell	ζ/	1 [2.0]		()	
Inflammation, Granulomatous			1 [4.0]		
Lymph Node	(4)	(5)	(2)	(1)	
Lumbar, Angiectasis	1 [4.0]	4 [0.0]			
Renal, Hyperplasia, Lymphoid		1 [3.0]			

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)

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

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

ALPHA-METHYLSTYRENE **CAS Number:** 98-83-9 Pathologist: GRUMBEIN, S. Date Report Regsted: 07/28/2005

Time Report Reqsted: 09:53:34 First Dose M/F: 07/30/01 / 07/30/01

B6C3F1 MICE FEMALE	CONTROL	100 PPM	300 PPM	600 PPM	
Lymph Node, Bronchial	(41)	(41)	(39)	(37)	
Hyperplasia, Lymphoid Lymph Node, Mandibular	(40)	1 [3.0] (39)	(37)	(36)	
Hyperplasia, Lymphoid Lymph Node, Mediastinal	(34)	(40)	(34)	1 [4.0] (36)	
Hyperplasia, Lymphoid	1 [2.0]	(40)	(34)	(30)	
Lymph Node, Mesenteric Infiltration Cellular, Plasma Cell Hyperplasia, Lymphoid	(48)	(48) 1 [3.0] 1 [2.0]	(47) 1 [3.0]	(50)	
Spleen Hematopoietic Cell Proliferation Necrosis	(50) 6 [2.3]	(50) 5 [2.8]	(49) 3 [3.7]	(50) 5 [2.8]	
Hyperplasia, Lymphoid	1 [2.0]	4 [2.8]	1 [4.0]		
NTEGUMENTARY SYSTEM					
Skin Inflammation, Acute Cyst Epithelial Inclusion	(50)	(50) 1 [3.0] 1 [3.0]	(50)	(50)	
Necrosis Infiltration Cellular, Mixed Cell			1 [2.0] 1 [2.0]		
Epidermis, Hyperplasia		1 [2.0]			
USCULOSKELETAL SYSTEM					
Bone Maxilla, Necrosis	(50)	(50)	(50) 1 [4.0]	(50)	
IERVOUS SYSTEM					
Brain Necrosis Inflammation, Suppurative	(50) 2 [2.0] 1 [2.0]	(50)	(50)	(50)	
Gliosis	۱ [۷.۷]		1 [2.0]		
Infiltration Cellular, Mononuclear Cell Artery, Meninges, Inflammation, Chronic Active		1 [3.0]		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)

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

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

ALPHA-METHYLSTYRENE **CAS Number:** 98-83-9 Pathologist: GRUMBEIN, S. Date Report Regsted: 07/28/2005

Time Report Reqsted: 09:53:34 First Dose M/F: 07/30/01 / 07/30/01

B6C3F1 MICE FEMALE	CONTROL	100 PPM	300 PPM	600 PPM	
RESPIRATORY SYSTEM					
Larynx Inflammation, Suppurative	(49)	(50)	(49)	(50) 1 [4.0]	
Artery, Inflammation, Chronic Active		1 [4.0]		1 [4.0]	
Lung	(50)	(50)	(50)	(50)	
Thrombosis	,	1 [2.0]	( )	,	
Hemorrhage			1 [4.0]		
Inflammation, Granulomatous				1 [2.0]	
Alveolar Epithelium, Hyperplasia	6 [1.5]	2 [1.0]	2 [2.5]	5 [2.4]	
Alveolus, Infiltration Cellular, Histiocyte	3 [2.0]	1 [4.0]	2 [2.5]	1 [1.0]	
Bronchiole, Hyperplasia		4 [0 0]	2 [1.5]	2 [1.0]	
Perivascular, Inflammation, Chronic Active		1 [3.0]			
Nose	(49)	(49)	(50)	(50)	
Inflammation, Suppurative	(43)	(43)	(50)	1 [4.0]	
Thrombosis				1 [4.0]	
Glands, Inflammation, Acute			1 [4.0]	. []	
Olfactory Epithelium, Atrophy	1 [1.0]	6 [1.2]	4 [1.5]	3 [1.0]	
Olfactory Epithelium, Degeneration,	3 [1.7]	2 [1.0]		1 [1.0]	
Hyaline					
Olfactory Epithelium, Glands,	3 [1.0]	49 [2.9]	50 [2.9]	50 [3.0]	
Hyperplasia	0.54.03	10.50 =1	47.10.01	50 to 01	
Olfactory Epithelium, Metaplasia	2 [1.0]	49 [2.7]	47 [3.0]	50 [3.0]	
Respiratory Epithelium, Necrosis Trachea	1 [1.0] (49)	(50)	(50)	(50)	
Inflammation, Suppurative	(49)	(50)	(50)	1 [4.0]	
				1 [4.0]	
SPECIAL SENSES SYSTEM					
Eye	(50)	(47)	(46)	(49)	
Cataract	\/	` '	\ -/	1 [2.0]	
Cornea, Inflammation, Chronic Active			1 [1.0]		
Cornea, Necrosis	1 [1.0]	1 [2.0]			
Harderian Gland	(50)	(48)	(48)	(50)	
Hyperplasia	1 [1.0]	2 [1.5]	3 [2.3]	5 [1.6]	
Necrosis			1 [2.0]		

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)

**TDMS No.** 88006 - 04

Test Type: CHRONIC

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

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Pathologist: GRUMBEIN, S.

Time Report Reqsted: 09:53:34

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B6C3F1 MICE FEMALE	CONTROL	100 PPM	300 PPM	600 PPM	
JRINARY SYSTEM					
Kidney	(50)	(49)	(50)	(50)	
Nephropathy	16 [1.1]	21 [1.3]	12 [1.0]	26 [1.6]	
Metaplasia, Osseous	3 [1.0]	1 [1.0]	1 [1.0]	2 [1.0]	
Inflammation, Suppurative	2 [2.0]				
Infarct	2 [2.0]	3 [2.7]	6 [1.5]	2 [1.5]	
Amyloid Deposition			1 [4.0]		
Urinary Bladder	(49)	(48)	(48)	(50)	
Inflammation, Chronic Active	, ,	1 [1.0]	,	,	
Artery, Inflammation, Chronic Active		1 [3.0]			

<sup>\*\*\*</sup> 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)