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)

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. Time Report Regsted: 09:53:34

Date Report Regsted: 07/28/2005

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

Lab: BNW

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

B6C3F1 MICE MALE	CONTROL	100 PPM	300 PPM	600 PPM
Disposition 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 50	32 50	40 50	36 50
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Gallbladder	(42)	(41)	(45)	(39)
Degeneration, Hyaline	1 [2.0]			4 50 01
Infiltration Cellular, Polymorphonuclear Intestine Large, Cecum	1 [3.0] (43)	(42)	(47)	1 [2.0] (45)
Hemorrhage	(43)	1 [4.0]	1 [3.0]	(40)
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 Infarct	6 2 [2.5]	5	7 1 [3.0]	3 2 [2.0]
Necrosis	2 [2.5] 3 [3.7]	4 [2.3]	1 [3.0] 1 [2.0]	2 [2.0] 4 [2.8]
Vacuolization Cytoplasmic, Focal	1 [3.0]	1 [3.0]	. [=:0]	. [=.0]
Mixed Cell Focus	1	3	1	2
Inflammation, Granulomatous		1 [2.0]		
Mineralization		1 [1.0]		
Hematopoietic Cell Proliferation Fatty Change		1 [1.0]	1 [2.0]	
Bile Duct, Cyst			ر د. ۱	1
Bile Duct, Degeneration, Hyaline			1 [3.0]	
Hepatocyte, Erythrophagocytosis	1 [2.0]			
Portal, Infiltration Cellular, Mononuclear Cell			1 [2.0]	
Mesentery	(5)	(3)	(2)	(5)
Artery, Inflammation	(0)	(0)	1 [2.0]	(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

Pathologist: GRUMBEIN, S.

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

Date Report Regsted: 07/28/2005

Time Report Regsted: 09:53:34

Lab: BNW

Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: MICE/B6C3F1

B6C3F1 MICE MALE	CONTROL	100 PPM	300 PPM	600 PPM	
Fat, Necrosis	5 [2.0]	2 [2.0]	1 [3.0]	5 [2.0]	
Pancreas	(50)	(48)	(49)	(49)	
Atrophy	1 [2.0]	, ,	1 [2.0]	, ,	
Basophilic Focus			1 [2.0]		
Necrosis			1 [2.0]		
Duct, Cyst		1			
Salivary Glands	(50)	(50)	(50)	(50)	
Inflammation, Suppurative	()	()	1 [3.0]	()	
Stomach, Forestomach	(50)	(49)	(49)	(48)	
Ulcer	3 [2.3]	3 [2.3]	(/	1 [2.0]	
Inflammation	2 ()	2 [2.0]	1 [2.0]	5 [2.0]	
Ulcer, Focal		_ [=.0]	. [=.0]	1 [2.0]	
Infiltration Cellular, Mast Cell				1 [4.0]	
Epithelium, Hyperplasia	1 [2.0]	4 [2.5]	7 [2.3]	11 [2.0]	
Stomach, Glandular	(48)	(47)	(49)	(47)	
Necrosis	1 [2.0]	1 [2.0]	(10)	(17)	
Hyperplasia	1 [3.0]	1 [2.0]	2 [2.0]		
Mineralization	1 [0.0]	1 [1.0]	2 [2.0]		
Metaplasia, Hepatocyte		1 [3.0]			
Epithelium, Hyperplasia, Focal		1 [3.0]			
Tooth	(0)	(1)	(2)	(1)	
Malformation	(0)	1 [4.0]	2 [4.0]	1 [4.0]	
CARDIOVASCULAR SYSTEM					
Heart	(50)	(50)	(50)	(50)	
Metaplasia, Osseous	1 [1.0]	()	(= -/	()	
Mineralization	,	1 [2.0]			
Thrombosis		1 [3.0]	3 [4.0]		
Inflammation, Suppurative		. [0.0]	1 [3.0]		
Artery, Inflammation, Chronic Active	1 [3.0]	1 [2.0]	. [6.0]	1 [2.0]	
ENDOCRINE SYSTEM					
Adrenal Cortex	(50)	(49)	(49)	(50)	
Hypertrophy	25 [2.0]	13 [2.0]	14 [1.7]	13 [2.0]	
Hyperplasia	8 [2.0]	12 [2.0]	4 [2.0]	2 [2.0]	
	012.01	16 16.01	7 14.01	£ 1£.UI	
Inflammation, Chronic Active	- 1	[]	1 [4.0]	,	

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)

Test Type: CHRONIC

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

Route: RESPIRATORY EXPOSURE WHOLE BOI	ر
Species/Strain: MICE/B6C3F1	

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]	(45)	
Pituitary Gland Hemorrhage	(48)	(47)	(49) 1 [2.0]	(45)	
Pars Distalis, Hyperplasia		1 [2.0]	1 [2.0]		
Thyroid Gland	(50)	(50)	(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		1 [4.0]		1 [3.0]	
Preputial Gland	(50)	(50)	(50)	(50)	
Inflammation, Chronic Active 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	. [=.0]	1 [2.0]	_ [=.0]	. [6.6]	
Seminal Vesicle	(49)	(49)	(49)	(45)	
Inflammation, Chronic	1 [3.0]	1 [3.0]			
Inflammation, Suppurative	1 [3.0]		1 [4.0]		
Testes	(50)	(50)	(50)	(50)	
Atrophy	4 [2.5]	1 [2.0]	1 [2.0]	2 [2.5]	
EMATOPOIETIC SYSTEM					
Bone Marrow	(50)	(49)	(50)	(49)	
Angiectasis	1 [3.0]	, ,	,		
Hyperplasia, Mast Cell				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)

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, 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)	

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

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

Time Report Regsted: 09:53:34

Species/Strain: MICE/B6C3F1

Route: RESPIRATORY EXPOSURE WHOLE BODY

B6C3F1 MICE MALE	CONTROL	100 PPM	300 PPM	600 PPM	
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	6 [4 2]	47 [2 7]	40 [2 0]	40 [2 0]	
Olfactory Epithelium, Metaplasia Olfactory Epithelium, Necrosis	6 [1.2]	47 [2.7] 1 [2.0]	49 [3.0] 1 [1.0]	49 [3.0]	
Respiratory Epithelium, Degeneration,		1 [2.0]	1 [1.0]		
Hyaline		. [2.0]			
Respiratory Epithelium, Hyperplasia				1 [4.0]	
Trachea	(49)	(50)	(50)	(50)	
Necrosis			1 [3.0]		
PECIAL SENSES SYSTEM					
Eye	(48)	(44)	(47)	(46)	
Degeneration	1 [4.0]	(44)	(47)	(40)	
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]	
IRINARY SYSTEM					
Kidney	(50)	(49)	(50)	(49)	
Nephropathy	43 [1.2]	37 [1.8]	40 [1.6]	38 [1.5]	
Cyst	3	1			
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 Capsule, Fibrosis		2 [2.0]	1 [2.0]	2 [1.5]	
Capsule, Fibrosis Capsule, Hemorrhage		ک زک.۵		2 [1.5] 1 [4.0]	
Papilla, Inflammation, Suppurative				1 [2.0]	
Pelvis, Dilatation	3 [2.3]		3 [2.3]	2 [2.5]	
Renal Tubule, Accumulation, Hyaline	r -1		r -1	1 [3.0]	
Droplet					
Renal Tubule, Necrosis	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)

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

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

Date Report Regsted: 07/28/2005

Time Report Reqsted: 09:53:34

Pathologist: GRUMBEIN, S. Lab: BNW

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

B6C3F1 MICE FEMALE	CONTROL	100 PPM	300 PPM	600 PPM
Disposition Summary				
Animals Initially in Study	50	50	50	50
Early Deaths			4	
Accidently Killed Moribund Sacrifice	8	9	1 8	11
Natural Death	3	3	4	2
Survivors				
Terminal Sacrifice	39	38	37	37
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Esophagus	(50)	(50)	(50)	(50)
Inflammation, Suppurative	. ,		()	1 [2.0]
Gallbladder	(47)	(43)	(41)	(43)
Necrosis	(40)	1 [4.0]	(40)	(40)
Intestine Small, Jejunum Peyer's Patch, Hyperplasia	(49) 1 [4.0]	(47)	(46) 1 [2.0]	(48) 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	1	3	5
Eosinophilic Focus Infarct	2	5 1 [4.0]	7 1 [3.0]	12
Angiectasis		ı [4 .0]	1 [3.0]	
Hematopoietic Cell Proliferation			1 [4.0]	
Mixed Cell Focus			1	
Mitotic Alteration	(2)	(=)	(-)	1 [4.0]
Mesentery Fot Negrosia	(8)	(5) 5 [3 3]	(5)	(6)
Fat, Necrosis Pancreas	7 [2.3] (49)	5 [2.2] (50)	5 [2.0] (49)	6 [2.0] (50)
Basophilic Focus	(4 3)	1 [2.0]	(43)	(30)
Atrophy		. [=.0]	1 [2.0]	
Artery, Inflammation, Chronic Active		1 [3.0]		
Duct, Cyst	1 (50)	/ >	()	(==)
Salivary Glands	(50)	(50)	(50)	(50)

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.

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

Date Report Regsted: 07/28/2005

Lab: BNW

Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: MICE/B6C3F1

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	(12)	(4.5)	(42)	1 [3.0]	
Stomach, Glandular	(49)	(48)	(49)	(50)	
Metaplasia, Hepatocyte	1 [3.0]		1 [4.0]		
Necrosis	2 [2.0]	4 [0 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]			
ENDOCRINE 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]	4.5	
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)

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]

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 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		1 [2.0]			
Pars Intermedia, Hypertrophy	1 [2.0]	(50)	(50)	(50)	
Thyroid Gland Inflammation, Chronic Active	(50)	(50) 1 [3.0]	(50) 1 [3.0]	(50)	
C-cell, Hyperplasia		1 [2.0]	1 [1.0]		
Follicular Cell, Hyperplasia	15 [2.1]	11 [1.8]	10 [1.6]	15 [1.8]	
ENERAL BODY SYSTEM					
None					
ENITAL SYSTEM					
Ovary	(48)	(50)	(49)	(50)	
Cyst	15	8	12	8	
Angiectasis		3 [3.7]	1 [3.0]		
Thrombosis	(5)	2 [4.0]	(2)	400	
Oviduct	(0)	(0)	(0)	(1) 1 [3.0]	
Hyperplasia Uterus	(50)	(50)	(49)	(50)	
Inflammation, Suppurative	1 [4.0]	(30)	(43)	(30)	
Fibrosis	1 [2.0]				
Angiectasis	2 [4.0]	1 [3.0]		2 [3.5]	
Cyst		1			
Thrombosis				1 [4.0]	
Necrosis	E [4 O]	0 [4 0]	0.14.01	1 [4.0]	
Endometrium, Hyperplasia, Cystic Lymphatic, Cyst	5 [4.0] 1	8 [4.0]	9 [4.0]	9 [3.8]	
IEMATOPOIETIC SYSTEM	·				
Bone Marrow	(50)	(49)	(48)	(50)	
Hyperplasia, Reticulum Cell	(00)	1 [2.0]	(/	(00)	
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	(41)	1 [3.0]	(55)	(37)	
Lymph Node, Mandibular	(40)	(39)	(37)	(36)	
Hyperplasia, Lymphoid				1 [4.0]	
Lymph Node, Mediastinal	(34)	(40)	(34)	(36)	
Hyperplasia, Lymphoid Lymph Node, Mesenteric	1 [2.0] (48)	(48)	(47)	(50)	
Infiltration Cellular, Plasma Cell	(40)	1 [3.0]	1 [3.0]	(50)	
Hyperplasia, Lymphoid		1 [2.0]	1 [0.0]		
Spleen	(50)	(50)	(49)	(50)	
Hematopoietic Cell Proliferation	6 [2.3]	5 [2.8]	3 [3.7]	5 [2.8]	
Necrosis	1 [2.0]				
Hyperplasia, Lymphoid		4 [2.8]	1 [4.0]		
ITEGUMENTARY SYSTEM					
Skin	(50)	(50)	(50)	(50)	
Inflammation, Acute	, ,	1 [3.0]	()	,	
Cyst Epithelial Inclusion		1 [3.0]			
Necrosis			1 [2.0]		
Infiltration Cellular, Mixed Cell Epidermis, Hyperplasia		1 [2.0]	1 [2.0]		
Epideimis, myperpiasia		1 [2.0]			
IUSCULOSKELETAL SYSTEM					
Bone	(50)	(50)	(50)	(50)	
Maxilla, Necrosis			1 [4.0]		
ERVOUS SYSTEM					
Brain	(50)	(50)	(50)	(50)	
Necrosis	2 [2.0]	(50)	(50)	(30)	
Inflammation, Suppurative	1 [2.0]				
Gliosis	r -1		1 [2.0]		
Infiltration Cellular, Mononuclear Cell				1 [1.0]	
Artery, Meninges, Inflammation, Chronic		1 [3.0]			
Active					

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

Date Report Regsted: 07/28/2005

B6C3F1 MICE FEMALE	CONTROL	100 PPM	300 PPM	600 PPM	
RESPIRATORY SYSTEM					
Larynx	(49)	(50)	(49)	(50)	
Inflammation, Suppurative				1 [4.0]	
Artery, Inflammation, Chronic Active	(50)	1 [4.0]	(50)	(50)	
Lung	(50)	(50)	(50)	(50)	
Thrombosis Hemorrhage		1 [2.0]	1 [4.0]		
Inflammation, Granulomatous			1 [4.0]	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	0 [0]	. []	2 [1.5]	2 [1.0]	
Perivascular, Inflammation, Chronic		1 [3.0]			
Active					
Nose	(49)	(49)	(50)	(50)	
Inflammation, Suppurative				1 [4.0]	
Thrombosis				1 [4.0]	
Glands, Inflammation, Acute	4.54.01	0.14.01	1 [4.0]	0.14.01	
Olfactory Epithelium, Atrophy	1 [1.0]	6 [1.2]	4 [1.5]	3 [1.0]	
Olfactory Epithelium, Degeneration, Hyaline	3 [1.7]	2 [1.0]		1 [1.0]	
Olfactory Epithelium, Glands,	3 [1.0]	49 [2.9]	50 [2.9]	50 [3.0]	
Hyperplasia	3 [1.0]	49 [2.9]	50 [2.9]	50 [5.0]	
Olfactory Epithelium, Metaplasia	2 [1.0]	49 [2.7]	47 [3.0]	50 [3.0]	
Respiratory Epithelium, Necrosis	1 [1.0]	40 [Z.7]	47 [0.0]	00 [0.0]	
Trachea	(49)	(50)	(50)	(50)	
Inflammation, Suppurative	(13)	()	()	1 [4.0]	
SPECIAL SENSES SYSTEM					
Eye	(50)	(47)	(46)	(49)	
Cataract	(00)	(11)	(10)	1 [2.0]	
Cornea, Inflammation, Chronic Active			1 [1.0]	. []	
Cornea, Necrosis	1 [1.0]	1 [2.0]	1		
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)

Test Type: CHRONIC

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

Date Report Regsted: 07/28/2005

Time Report Regsted: 09:53:34

Lab: BNW

Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: MICE/B6C3F1

B6C3F1 MICE FEMALE	CONTROL	100 PPM	300 PPM	600 PPM	
URINARY SYSTEM					
Kidney	(50)	(49)	(50)	(50)	
Nephropathy	16 [1.1]	21 [1.3]	12 [1.0 <u>]</u>	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]			

*** 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)