



Test Type: CHRONIC

ISOEUGENOL

Time Report Requested: 13:43:51

Route: GAVAGE

CAS Number: 97-54-1

First Dose M/F: 05/09/02 / 05/08/02

Species/Strain: MICE/B6C3F1

Pathologist: Blackshear, P. - GRUMBEIN, S.

Lab: BNW

B6C3F1 MICE MALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
<b>Disposition Summary</b>				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	7	10	5	7
Natural Death	4	2	9	16
Survivors				
Terminal Sacrifice	39	38	36	27
Animals Examined Microscopically	50	50	50	50
<b>ALIMENTARY SYSTEM</b>				
Gallbladder	(44)	(47)	(46)	(38)
Hyperplasia				1 [1.0]
Intestine Large, Colon	(48)	(49)	(46)	(46)
Intestine Small, Jejunum	(47)	(48)	(46)	(42)
Necrosis		1 [3.0]		
Ulcer				1 [2.0]
Liver	(50)	(50)	(50)	(50)
Angiectasis			1 [2.0]	
Basophilic Focus	5	5	3	7
Clear Cell Focus	16	26	29	13
Eosinophilic Focus	8	13	11	5
Hepatodiaphragmatic Nodule			2	
Infarct	2 [4.0]	1 [4.0]		
Necrosis	1 [3.0]		2 [4.0]	5 [2.8]
Mesentery	(5)	(4)	(4)	(1)
Fat, Necrosis	5 [2.0]	3 [2.0]	4 [2.0]	
Pancreas	(50)	(50)	(50)	(49)
Atrophy	2 [1.5]	1 [3.0]	2 [2.0]	
Hemorrhage		1 [4.0]		
Hyperplasia				1 [2.0]
Necrosis, Fatty			1 [3.0]	
Duct, Cyst			1 [3.0]	
Salivary Glands	(50)	(50)	(50)	(50)
Stomach, Forestomach	(50)	(49)	(50)	(49)
Hyperplasia, Squamous	7 [1.1]	8 [2.8]	8 [2.6]	14 [2.2]
Inflammation	5 [1.4]	8 [2.5]	9 [2.3]	14 [2.4]

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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B6C3F1 MICE MALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
Metaplasia, Hepatocyte Ulcer	1 [3.0] (50)	1 [1.0] 4 [2.5] (49)	4 [2.8] (49)	9 [2.7] (44)
Stomach, Glandular Atrophy				1 [2.0]
Hyperplasia			1 [2.0]	
Inflammation		1 [2.0]	3 [1.0]	3 [2.0]
Inflammation, Acute			1 [2.0]	2 [3.0]
Metaplasia, Hepatocyte Mineralization	1 [2.0]	1 [1.0]		
Ulcer		1 [2.0]	4 [1.5]	5 [2.6]
<b>CARDIOVASCULAR SYSTEM</b>				
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	9 [1.1]	11 [1.1]	14 [1.0]	12 [1.0]
Inflammation, Suppurative	1 [2.0]		1 [2.0]	
Mineralization	1 [2.0]			2 [1.5]
Thrombosis	1 [2.0]	1 [2.0]	1 [2.0]	
Artery, Inflammation, Chronic Active	1 [2.0]	2 [2.5]		1 [2.0]
<b>ENDOCRINE SYSTEM</b>				
Adrenal Cortex	(50)	(50)	(50)	(49)
Hyperplasia	13 [2.1]	16 [2.0]	12 [2.0]	7 [2.0]
Hypertrophy	13 [2.0]	13 [1.8]	14 [2.0]	6 [2.5]
Adrenal Medulla	(50)	(50)	(50)	(49)
Hyperplasia		1 [1.0]	2 [2.0]	
Islets, Pancreatic	(50)	(50)	(50)	(49)
Hyperplasia	3 [2.3]		1 [3.0]	
Pituitary Gland	(50)	(48)	(50)	(48)
Pars Distalis, Hyperplasia	1 [2.0]	3 [2.0]	3 [2.7]	
Thyroid Gland	(50)	(49)	(50)	(49)
Follicular Cell, Hyperplasia		2 [2.5]		1 [4.0]
<b>GENERAL BODY SYSTEM</b>				
None				

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B6C3F1 MICE MALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
<b>GENITAL SYSTEM</b>				
Coagulating Gland	(0)	(1)	(0)	(0)
Epididymis	(50)	(50)	(50)	(50)
Granuloma Sperm		1 [2.0]		1 [2.0]
Inflammation, Acute		1 [3.0]	1 [2.0]	
Necrosis			1 [2.0]	
Preputial Gland	(50)	(50)	(50)	(50)
Ectasia	5 [2.2]	4 [2.8]	5 [2.4]	6 [2.3]
Inflammation, Granulomatous		1 [3.0]		
Prostate	(50)	(50)	(50)	(50)
Inflammation, Chronic Active		1 [2.0]		1 [2.0]
Seminal Vesicle	(49)	(50)	(50)	(48)
Dilatation		1 [3.0]		
Testes	(50)	(50)	(50)	(50)
Atrophy	1 [2.0]	1 [3.0]		4 [2.3]
Inflammation, Suppurative		1 [3.0]		
<b>HEMATOPOIETIC SYSTEM</b>				
Bone Marrow	(50)	(50)	(50)	(50)
Atrophy			1 [2.0]	
Hyperplasia, Reticulum Cell				1 [2.0]
Necrosis		1 [3.0]		
Lymph Node	(1)	(0)	(2)	(2)
Lymph Node, Mandibular	(49)	(49)	(50)	(47)
Lymph Node, Mesenteric	(48)	(50)	(50)	(48)
Spleen	(50)	(50)	(50)	(49)
Depletion Cellular				2 [2.0]
Hematopoietic Cell Proliferation			1 [4.0]	1 [4.0]
Thymus	(48)	(48)	(48)	(42)
<b>INTEGUMENTARY SYSTEM</b>				
Skin	(50)	(50)	(50)	(50)
Inflammation, Acute	1 [4.0]			
Inflammation, Chronic Active		3 [4.0]	1 [4.0]	2 [3.5]

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Lab: BNW

B6C3F1 MICE MALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone	(50)	(50)	(50)	(50)
Arthrosis	1 [4.0]			
Skeletal Muscle	(1)	(0)	(0)	(0)
<b>NERVOUS SYSTEM</b>				
Brain	(50)	(50)	(50)	(50)
Inflammation, Granulomatous Necrosis		2 [2.0]		1 [2.0]
<b>RESPIRATORY SYSTEM</b>				
Lung	(50)	(49)	(50)	(50)
Thrombosis	1 [1.0]		1 [2.0]	
Alveolar Epithelium, Hyperplasia	3 [3.0]	4 [2.0]	4 [2.3]	2 [2.5]
Alveolus, Infiltration Cellular, Histiocyte		1 [2.0]		
Bronchiole, Hyperplasia	1 [2.0]		1 [3.0]	
Nose	(50)	(50)	(50)	(50)
Polyp, Inflammatory		1 [2.0]		
Glands, Hyperplasia	3 [1.3]	34 [1.5]	49 [2.7]	48 [2.7]
Olfactory Epithelium, Accumulation, Hyaline Droplet		6 [1.2]	26 [1.4]	19 [1.3]
Olfactory Epithelium, Atrophy	5 [1.2]	13 [1.1]	36 [1.1]	41 [1.3]
Olfactory Epithelium, Degeneration	1 [1.0]	1 [1.0]	7 [1.1]	6 [1.0]
Olfactory Epithelium, Inflammation, Granulomatous				1 [3.0]
Olfactory Epithelium, Metaplasia, Squamous			2 [1.0]	1 [1.0]
Olfactory Epithelium, Respiratory Metaplasia	4 [1.0]	31 [1.3]	47 [2.5]	49 [2.1]
Pleura	(0)	(1)	(0)	(0)
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(48)	(48)	(46)	(43)
Inflammation, Acute		1 [2.0]		

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B6C3F1 MICE MALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
Cornea, Inflammation, Chronic Active		1 [4.0]	1 [2.0]	
Harderian Gland	(49)	(50)	(50)	(49)
Hyperplasia	3 [2.3]	4 [2.3]	4 [2.5]	4 [1.8]
<b>URINARY SYSTEM</b>				
Kidney	(50)	(50)	(50)	(49)
Infarct	1 [2.0]	1 [4.0]	2 [2.5]	1 [2.0]
Inflammation, Suppurative		2 [2.0]		2 [2.0]
Metaplasia, Osseous			1 [1.0]	
Nephropathy	47 [1.7]	48 [1.6]	47 [1.6]	47 [1.8]
Renal Tubule, Hyperplasia	2 [2.0]	2 [1.0]	1 [1.0]	2 [1.5]
Urinary Bladder	(49)	(50)	(50)	(45)
Inflammation, Chronic Active		1 [3.0]		

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

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Lab: BNW

B6C3F1 MICE FEMALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
<b>Disposition Summary</b>				
Animals Initially in Study	50	50	50	50
Early Deaths				
Accidentally Killed	2			1
Moribund Sacrifice	5	7	5	5
Natural Death	8	4	7	11
Survivors				
Terminal Sacrifice	34	39	38	33
Animals Examined Microscopically	49	50	50	50

**ALIMENTARY SYSTEM**

Gallbladder	(42)	(47)	(47)	(40)
Degeneration, Hyaline			1 [4.0]	
Intestine Large, Cecum	(46)	(47)	(45)	(42)
Inflammation, Acute				1 [3.0]
Necrosis				1 [2.0]
Intestine Large, Colon	(47)	(47)	(47)	(47)
Intestine Large, Rectum	(47)	(48)	(45)	(46)
Necrosis				1 [2.0]
Intestine Small, Duodenum	(42)	(47)	(45)	(40)
Intestine Small, Ileum	(45)	(47)	(46)	(44)
Intestine Small, Jejunum	(44)	(48)	(45)	(45)
Liver	(49)	(50)	(49)	(50)
Amyloid Deposition			1 [3.0]	
Angiectasis	2 [3.0]	2 [2.5]	2 [2.0]	
Basophilic Focus	5	4	8	4
Clear Cell Focus	1	1	2	
Eosinophilic Focus	5	5	4	1
Fatty Change	3 [3.0]	1 [3.0]	1 [2.0]	
Hematopoietic Cell Proliferation	1 [3.0]	1 [2.0]		
Inflammation, Chronic				1 [2.0]
Mineralization				2 [2.5]
Mixed Cell Focus	1			
Necrosis	3 [3.7]		1 [3.0]	8 [3.4]
Hepatocyte, Mitotic Alteration			1 [2.0]	
Mesentery	(15)	(14)	(14)	(6)

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B6C3F1 MICE FEMALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
Fat, Hemorrhage			1 [2.0]	
Fat, Necrosis	14 [2.0]	14 [2.0]	13 [2.0]	6 [2.0]
Pancreas	(47)	(50)	(47)	(49)
Amyloid Deposition		2 [2.5]		
Atrophy		1 [3.0]	1 [3.0]	
Basophilic Focus	1 [1.0]	2 [1.0]	1 [2.0]	1 [2.0]
Hyperplasia				1 [2.0]
Duct, Cyst	1 [4.0]	1 [4.0]		
Salivary Glands	(49)	(50)	(50)	(50)
Necrosis		1 [2.0]		
Stomach, Forestomach	(48)	(50)	(49)	(50)
Hyperplasia, Squamous	2 [1.5]	8 [2.5]	5 [1.4]	8 [2.0]
Inflammation	2 [1.5]	8 [2.0]	5 [1.6]	8 [1.4]
Ulcer	2 [2.5]	4 [2.5]	3 [2.7]	4 [3.0]
Stomach, Glandular	(46)	(48)	(47)	(48)
Amyloid Deposition		1 [2.0]		
Inflammation		1 [1.0]	1 [1.0]	6 [1.7]
Mineralization	1 [2.0]			
Ulcer		1 [1.0]	1 [2.0]	7 [2.1]
<b>CARDIOVASCULAR SYSTEM</b>				
Blood Vessel	(2)	(1)	(1)	(2)
Mineralization	1 [3.0]			1 [3.0]
Heart	(49)	(50)	(50)	(50)
Cardiomyopathy	2 [1.0]	2 [1.0]		3 [1.3]
Inflammation, Suppurative		1 [4.0]		2 [3.0]
Mineralization	3 [2.0]	2 [2.0]	2 [1.5]	5 [2.0]
Thrombosis		1 [3.0]		2 [2.5]
<b>ENDOCRINE SYSTEM</b>				
Adrenal Cortex	(48)	(50)	(49)	(50)
Amyloid Deposition		1 [2.0]	1 [2.0]	
Hyperplasia	4 [1.8]	2 [1.5]	4 [2.3]	2 [1.5]
Hypertrophy		1 [2.0]	3 [2.0]	1 [2.0]
Necrosis				1 [2.0]
Vacuolization Cytoplasmic	1 [3.0]			
Adrenal Medulla	(48)	(50)	(49)	(50)

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B6C3F1 MICE FEMALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
Hyperplasia Islets, Pancreatic	1 [2.0] (47)	(50)	1 [2.0] (48)	2 [2.0] (49)
Hyperplasia Pituitary Gland	1 [2.0] (47)	1 [2.0] (48)	1 [3.0] (50)	2 [2.5] (50)
Pars Distalis, Hyperplasia Thyroid Gland	9 [2.0] (48)	17 [2.3] (50)	6 [2.0] (49)	9 [1.8] (50)
Follicular Cell, Hyperplasia	1 [1.0]			1 [2.0]
<b>GENERAL BODY SYSTEM</b>				
None				
<b>GENITAL SYSTEM</b>				
Clitoral Gland	(47)	(49)	(49)	(48)
Ovary	(48)	(50)	(50)	(50)
Angiectasis	2 [2.5]			1 [2.0]
Cyst	5 [3.0]	12 [2.5]	5 [3.0]	4 [3.0]
Thrombosis		1 [3.0]		
Uterus	(48)	(50)	(50)	(50)
Angiectasis	2 [2.0]	3 [2.7]	2 [2.5]	
Inflammation, Suppurative		1 [3.0]		
Thrombosis			1 [3.0]	
Endometrium, Hyperplasia, Cystic	24 [3.0]	32 [2.9]	19 [3.2]	21 [3.2]
<b>HEMATOPOIETIC SYSTEM</b>				
Bone Marrow	(48)	(49)	(50)	(50)
Necrosis		1 [3.0]		
Lymph Node	(4)	(5)	(3)	(2)
Lymph Node, Mandibular	(49)	(50)	(50)	(50)
Lymph Node, Mesenteric	(47)	(49)	(47)	(50)
Hyperplasia, Lymphoid		1 [4.0]		
Inflammation, Acute				1 [4.0]
Spleen	(48)	(50)	(49)	(50)
Amyloid Deposition			1 [2.0]	
Depletion Cellular				9 [2.4]
Hematopoietic Cell Proliferation	1 [3.0]	5 [3.4]	2 [3.0]	

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B6C3F1 MICE FEMALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
Hyperplasia, Lymphoid Necrosis Thymus	1 [2.0] (47)	1 [3.0] (50)	(49)	(47)
<b>INTEGUMENTARY SYSTEM</b>				
Mammary Gland Hyperplasia	(48) 1 [4.0]	(50)	(50)	(50)
Skin Hemorrhage Inflammation, Chronic Active Necrosis	(49) 1 [3.0]  1 [2.0]	(50)   1 [2.0]	(50)   1 [4.0]	(50)    
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone Skeletal Muscle	(49) (0)	(50) (1)	(50) (0)	(50) (0)
<b>NERVOUS SYSTEM</b>				
Brain Demyelination Gliosis Necrosis	(49)  1 [1.0]  	(50) 2 [1.0]  1 [2.0]	(50)	(50)
Peripheral Nerve Radicular Neuropathy	(2) 1 [3.0]	(2) 1 [3.0]	(1) 1 [2.0]	1 [2.0] (0)
<b>RESPIRATORY SYSTEM</b>				
Lung Hemorrhage Inflammation, Suppurative Mineralization Thrombosis Alveolar Epithelium, Hyperplasia Bronchiole, Hyperplasia Bronchiole, Necrosis Nose	(48)   1 [3.0]  2 [1.0]   (48)	(50) 1 [4.0] 1 [2.0]   1 [1.0]   (50)	(50)     4 [1.0]   (50)	(50)     1 [1.0] 1 [2.0] 1 [2.0] (50)

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B6C3F1 MICE FEMALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
Thrombosis				1 [2.0]
Glands, Hyperplasia	6 [1.0]	38 [1.3]	49 [2.4]	49 [3.3]
Olfactory Epithelium, Accumulation, Hyaline Droplet		4 [1.0]	18 [1.1]	12 [1.3]
Olfactory Epithelium, Atrophy	3 [1.3]	8 [1.0]	36 [1.2]	43 [1.3]
Olfactory Epithelium, Degeneration			1 [1.0]	2 [1.0]
Olfactory Epithelium, Respiratory Metaplasia	6 [1.0]	37 [1.2]	49 [2.0]	50 [2.6]
Respiratory Epithelium, Necrosis				1 [2.0]
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(44)	(47)	(46)	(42)
Cataract			1 [3.0]	1 [2.0]
Degeneration			1 [4.0]	1 [4.0]
Harderian Gland	(46)	(50)	(49)	(48)
Hyperplasia	5 [2.8]	5 [2.2]	6 [2.7]	2 [1.5]
<b>URINARY SYSTEM</b>				
Kidney	(47)	(50)	(49)	(49)
Amyloid Deposition	1 [4.0]	1 [3.0]	1 [2.0]	
Inflammation, Suppurative				1 [3.0]
Nephropathy	23 [1.2]	30 [1.6]	22 [1.5]	33 [1.4]
Bilateral, Papilla, Necrosis		1 [3.0]		4 [2.8]
Papilla, Mineralization				1 [1.0]
Papilla, Necrosis			1 [2.0]	14 [1.4]
Renal Tubule, Necrosis		1 [2.0]		6 [2.7]
Urinary Bladder	(47)	(49)	(47)	(46)

\*\*\* END OF REPORT \*\*\*

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