

TDMS No. 99017 - 06

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

Date Report Requested: 10/23/2008

Test Type: CHRONIC

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

F1_M3

C Number: C99017

Lock Date: 08/01/2006

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Study Gender: Both

TDMSE Version: 2.0.0

Test Type: CHRONIC

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE MALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|--------------------------------------|---------|---------|---------|----------|
| Disposition Summary | | | | |
| Animals Initially in Study | 50 | 50 | 50 | 50 |
| Early Deaths | | | | |
| Moribund Sacrifice | 15 | 10 | 12 | 11 |
| Natural Death | 4 | 2 | 6 | 2 |
| Survivors | | | | |
| Terminal Sacrifice | 31 | 38 | 32 | 37 |
| Animals Examined Microscopically | 50 | 50 | 50 | 50 |
| ALIMENTARY SYSTEM | | | | |
| Gallbladder | (36) | (42) | (41) | (38) |
| Degeneration, Hyaline | | 1 [2.0] | 1 [2.0] | |
| Inflammation, Suppurative | | 1 [1.0] | | |
| Intestine Large, Cecum | (50) | (50) | (50) | (50) |
| Hemorrhage | | | 1 [3.0] | |
| Inflammation, Chronic Active | 1 [2.0] | | | |
| Intestine Large, Colon | (50) | (50) | (50) | (50) |
| Inflammation, Chronic Active | | | 1 [2.0] | |
| Intestine Large, Rectum | (50) | (50) | (50) | (50) |
| Inflammation, Chronic Active | | | | 1 [1.0] |
| Serosa, Fibrosis | 1 [3.0] | | | |
| Intestine Small, Duodenum | (49) | (50) | (50) | (50) |
| Inflammation, Chronic Active | 1 [1.0] | 1 [1.0] | | |
| Intestine Small, Ileum | (50) | (50) | (50) | (50) |
| Inflammation, Chronic Active | 1 [2.0] | 2 [1.0] | 1 [3.0] | |
| Peyer's Patch, Hyperplasia, Lymphoid | | | 1 [4.0] | |
| Intestine Small, Jejunum | (50) | (50) | (50) | (50) |
| Inflammation, Chronic Active | | | 1 [2.0] | |
| Peyer's Patch, Hyperplasia, Lymphoid | | 1 [3.0] | 1 [3.0] | |
| Liver | (50) | (50) | (50) | (50) |
| Angiectasis | 1 [3.0] | | | |
| Basophilic Focus | 5 | 13 | 10 | 8 |
| Clear Cell Focus | 5 | 5 | 7 | 2 |
| Congestion | 2 [2.0] | | | |
| Degeneration, Fatty | 2 [1.5] | | | |
| Eosinophilic Focus | 2 | 8 | 6 | 7 |

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

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE MALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|-------------------------------|---------|---------|---------|----------|
| Fibrosis | | | 1 [1.0] | |
| Hemorrhage | 1 [3.0] | | 1 [4.0] | |
| Inflammation, Chronic Active | | | 1 [2.0] | |
| Mixed Cell Focus | | 4 | 1 | 5 |
| Necrosis | 4 [2.0] | 1 [2.0] | 4 [2.0] | 3 [2.3] |
| Tension Lipidosis | 1 [1.0] | 6 [1.0] | 2 [1.0] | 3 [1.0] |
| Thrombosis | 1 [2.0] | | 1 [3.0] | |
| Mesentery | (10) | (6) | (4) | (8) |
| Inflammation, Chronic Active | 2 [2.5] | 1 [1.0] | 1 [2.0] | 1 [3.0] |
| Fat, Fibrosis | | | 1 [1.0] | |
| Fat, Necrosis | 5 [1.8] | 4 [1.0] | 1 [1.0] | 4 [1.0] |
| Pancreas | (50) | (50) | (49) | (50) |
| Atrophy | 1 [2.0] | 1 [2.0] | 1 [2.0] | |
| Cyst | 1 [1.0] | 1 [2.0] | | |
| Cytoplasmic Alteration | | | | 1 [1.0] |
| Salivary Glands | (50) | (50) | (50) | (50) |
| Artery, Inflammation, Chronic | | | | 1 [3.0] |
| Stomach, Forestomach | (50) | (50) | (50) | (50) |
| Hyperplasia, Squamous | 3 [1.7] | 4 [2.0] | 6 [2.7] | 4 [2.5] |
| Inflammation | 2 [1.5] | 2 [2.0] | | |
| Ulcer | | | 1 [2.0] | 1 [1.0] |
| Stomach, Glandular | (50) | (50) | (50) | (50) |
| Hyperplasia | | | 3 [1.3] | |
| Inflammation | | | 1 [1.0] | |
| Mineralization | | | 1 [1.0] | |
| Necrosis | | 1 [1.0] | | |
| Glands, Ectasia | 1 [1.0] | | | |
| Tooth | (6) | (6) | (8) | (5) |
| Dentine, Malformation | 4 [3.0] | 2 [3.0] | 5 [3.0] | 5 [3.0] |
| CARDIOVASCULAR SYSTEM | | | | |
| Blood Vessel | (0) | (1) | (0) | (1) |
| Media, Hypertrophy | | | | 1 [3.0] |
| Heart | (50) | (50) | (50) | (50) |
| Angiectasis | | | 1 [2.0] | |
| Cardiomyopathy | | 1 [2.0] | 8 [2.0] | 1 [2.0] |
| Artery, Inflammation | | | | 4 [1.5] |
| Atrium, Thrombosis | | 2 [2.5] | 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

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE MALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|-----------------------------------|----------|----------|----------|----------|
| ENDOCRINE SYSTEM | | | | |
| Adrenal Cortex | (50) | (50) | (50) | (50) |
| Accessory Adrenal Cortical Nodule | | | 3 [1.3] | |
| Hyperplasia | 10 [1.3] | 12 [1.3] | 4 [1.0] | 5 [1.2] |
| Hypertrophy | 37 [1.2] | 31 [1.0] | 26 [1.2] | 26 [1.3] |
| Mineralization | | | 1 [1.0] | |
| Vacuolization Cytoplasmic | | 1 [1.0] | 1 [2.0] | |
| Subcapsular, Hyperplasia | | 1 [3.0] | | |
| Adrenal Medulla | (50) | (50) | (50) | (50) |
| Hyperplasia | | 1 [1.0] | | |
| Hypertrophy | | | 1 [1.0] | 1 [1.0] |
| Islets, Pancreatic | (50) | (50) | (49) | (50) |
| Hyperplasia | 2 [2.5] | 1 [2.0] | 1 [1.0] | |
| Parathyroid Gland | (28) | (32) | (25) | (21) |
| Cyst | | 1 [1.0] | 1 [1.0] | |
| Hypertrophy | | | 1 [1.0] | |
| Pituitary Gland | (50) | (50) | (49) | (50) |
| Pars Distalis, Cyst | 1 [1.0] | 2 [1.0] | 3 [1.0] | 2 [1.5] |
| Pars Distalis, Hyperplasia | | 7 [1.0] | 2 [1.5] | 6 [1.0] |
| Thyroid Gland | (50) | (50) | (48) | (49) |
| Cyst | | 1 [2.0] | 2 [1.5] | 1 [1.0] |
| GENERAL BODY SYSTEM | | | | |
| Peritoneum | (1) | (0) | (0) | (0) |
| GENITAL SYSTEM | | | | |
| Coagulating Gland | (0) | (1) | (0) | (0) |
| Epididymis | (49) | (50) | (50) | (50) |
| Granuloma Sperm | | 1 [2.0] | | 2 [2.5] |
| Penis | (0) | (0) | (0) | (2) |
| Inflammation, Suppurative | | | | 2 [3.0] |
| Preputial Gland | (50) | (50) | (50) | (50) |
| Cyst | 1 [2.0] | | | |
| Ectasia | | | | 2 [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

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE MALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|-----------------------------------|---------|---------|---------|----------|
| Inflammation | 2 [2.5] | 1 [3.0] | 1 [2.0] | |
| Prostate | (50) | (50) | (50) | (49) |
| Inflammation | | | | 1 [2.0] |
| Arteriole, Inflammation, Chronic | | | | 1 [3.0] |
| Seminal Vesicle | (50) | (50) | (50) | (50) |
| Dilatation | 1 [2.0] | 2 [2.0] | 1 [2.0] | |
| Inflammation, Chronic Active | 1 [2.0] | 1 [2.0] | | 1 [3.0] |
| Testes | (50) | (50) | (50) | (50) |
| Degeneration | | 2 [2.0] | 1 [3.0] | |
| Hyperplasia, Atypical | 1 [3.0] | | | |
| Mineralization | | 1 [2.0] | 1 [2.0] | |
| HEMATOPOIETIC SYSTEM | | | | |
| Bone Marrow | (50) | (50) | (50) | (50) |
| Angiectasis | | | 1 [2.0] | 1 [2.0] |
| Lymph Node | (0) | (5) | (5) | (0) |
| Renal, Hyperplasia, Lymphoid | | | 1 [3.0] | |
| Lymph Node, Bronchial | | (29) | (25) | (25) |
| Congestion | 1 [2.0] | | | |
| Lymph Node, Mandibular | (16) | (20) | (18) | (20) |
| Lymph Node, Mediastinal | (33) | (35) | (36) | (38) |
| Hematopoietic Cell Proliferation | 1 [3.0] | | | 1 [2.0] |
| Hyperplasia, Lymphoid | | | | 1 [2.0] |
| Infiltration Cellular, Mixed Cell | 1 [2.0] | | | |
| Lymph Node, Mesenteric | (49) | (47) | (48) | (50) |
| Hematopoietic Cell Proliferation | 1 [2.0] | | 1 [3.0] | 1 [3.0] |
| Hyperplasia, Lymphoid | | | 1 [3.0] | |
| Hyperplasia, Plasma Cell | 1 [3.0] | 1 [4.0] | 1 [3.0] | |
| Infiltration Cellular | 2 [1.0] | 3 [1.7] | 1 [3.0] | |
| Spleen | (50) | (50) | (49) | (50) |
| Angiectasis | 1 [2.0] | | | |
| Hematopoietic Cell Proliferation | | 2 [1.5] | 3 [2.0] | 2 [2.5] |
| Infiltration Cellular, Histiocyte | 1 [2.0] | | | |
| Necrosis | | | 1 [4.0] | |
| Thymus | (38) | (36) | (36) | (37) |
| Cyst | 1 [2.0] | | 2 [1.0] | 2 [2.0] |
| 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)

Test Type: CHRONIC

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE MALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|----------------------------------------------|----------|---------|---------|----------|
| INTEGUMENTARY SYSTEM | | | | |
| Skin | (50) | (50) | (49) | (50) |
| Inflammation | | 1 [2.0] | | 3 [2.7] |
| Ulcer | 1 [3.0] | 3 [2.7] | 5 [2.4] | 3 [3.0] |
| Epidermis, Hyperplasia | | | 1 [1.0] | |
| Hair Follicle, Congestion | | 1 [2.0] | | |
| Sebaceous Gland, Hyperplasia | | | 1 [3.0] | |
| Subcutaneous Tissue, Fibrosis | | | 1 [2.0] | |
| MUSCULOSKELETAL SYSTEM | | | | |
| Bone | (50) | (50) | (49) | (50) |
| Joint, Inflammation, Chronic | | 1 [2.0] | | |
| Skeletal Muscle | (2) | (3) | (3) | (1) |
| NERVOUS SYSTEM | | | | |
| Brain | (50) | (50) | (50) | (50) |
| Atrophy | 1 [2.0] | | | |
| Hydrocephalus | | | 1 [1.0] | |
| Meninges, Infiltration Cellular | 1 [1.0] | | | 1 [1.0] |
| Meninges, Infiltration Cellular, Mixed Cell | | | | 1 [1.0] |
| Peripheral Nerve | (0) | (1) | (1) | (0) |
| RESPIRATORY SYSTEM | | | | |
| Larynx | (50) | (50) | (50) | (50) |
| Arteriole, Infiltration Cellular, Mixed Cell | | | | 1 [3.0] |
| Squamous Epithelium, Hyperplasia | | | | 1 [1.0] |
| Lung | (50) | (50) | (50) | (50) |
| Hemorrhage | 3 [1.0] | | 2 [1.5] | 1 [1.0] |
| Infiltration Cellular, Histiocyte | 12 [2.3] | 1 [3.0] | 7 [2.6] | 3 [2.3] |
| Thrombosis | | | | 1 [2.0] |
| Alveolar Epithelium, Hyperplasia | 3 [2.3] | 2 [1.5] | 5 [2.6] | 2 [1.0] |
| Arteriole, Inflammation, Chronic Active | | 2 [3.0] | 1 [3.0] | |
| Nose | (50) | (50) | (50) | (50) |
| Inflammation, Suppurative | 6 [1.7] | 5 [1.6] | 6 [1.7] | 14 [1.1] |

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

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE MALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|------------------------------------------------------------------|----------|----------|----------|----------|
| Glands, Respiratory Epithelium, Accumulation, Hyaline Droplet | 5 [1.0] | 5 [1.0] | 16 [1.3] | 33 [1.5] |
| Glands, Respiratory Epithelium, Hyperplasia | 42 [1.1] | 41 [1.2] | 44 [1.1] | 50 [1.6] |
| Glands, Respiratory Epithelium, Inflammation, Chronic Active | 6 [1.0] | 9 [1.1] | 8 [1.3] | 11 [1.1] |
| Olfactory Epithelium, Accumulation, Hyaline Droplet | 7 [1.0] | 2 [1.0] | 4 [1.0] | 6 [1.0] |
| Olfactory Epithelium, Atrophy | 9 [1.0] | 19 [1.3] | 50 [2.0] | 50 [2.5] |
| Olfactory Epithelium, Necrosis | | 2 [1.5] | | |
| Olfactory Epithelium, Respiratory Metaplasia | 14 [1.0] | 15 [1.7] | 44 [2.3] | 50 [3.0] |
| Olfactory Epithelium, Ulcer | | 1 [2.0] | | |
| Olfactory Epithelium, Vacuolization Cytoplasmic | | 5 [1.0] | 3 [2.0] | |
| Respiratory Epithelium, Accumulation, Hyaline Droplet | 11 [1.0] | 6 [1.3] | 19 [1.5] | 30 [1.1] |
| Respiratory Epithelium, Inflammation, Suppurative | 1 [1.0] | | | |
| Respiratory Epithelium, Metaplasia, Squamous | 4 [1.0] | 7 [1.0] | 16 [1.0] | 34 [1.4] |
| Respiratory Epithelium, Necrosis | 2 [1.5] | 3 [1.3] | 3 [1.3] | 8 [1.4] |
| Respiratory Epithelium, Ulcer | 1 [1.0] | 1 [2.0] | 2 [1.0] | 4 [1.3] |
| Respiratory Epithelium, Vacuolization Cytoplasmic | | 1 [1.0] | 3 [2.0] | |
| Turbinate, Hyperostosis | 5 [1.2] | 23 [1.1] | 50 [2.0] | 50 [3.5] |
| Turbinate, Necrosis | 1 [1.0] | | | 3 [1.0] |
| Pleura | (1) | (0) | (0) | (0) |
| Trachea | (50) | (50) | (50) | (50) |

SPECIAL SENSES SYSTEM

| | | | | |
|--------------------------------------|---------|---------|---------|---------|
| Eye | (50) | (50) | (50) | (50) |
| Atrophy | | 1 [4.0] | 1 [4.0] | 1 [4.0] |
| Cataract | | | 2 [2.0] | |
| Cornea, Hyperplasia, Squamous | | | 1 [1.0] | 1 [3.0] |
| Cornea, Inflammation, Chronic Active | | 2 [2.0] | | 2 [2.5] |
| Harderian Gland | (50) | (50) | (50) | (50) |
| Atrophy | 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

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE MALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|--------------------------------------|----------|----------|----------|----------|
| Hyperplasia | | 1 [2.0] | 1 [2.0] | |
| URINARY SYSTEM | | | | |
| Kidney | (50) | (50) | (49) | (50) |
| Casts Granular | 1 [3.0] | | | |
| Cyst | 4 [1.3] | 6 [1.0] | 6 [1.3] | 5 [1.8] |
| Hydronephrosis | 1 [3.0] | | 1 [2.0] | |
| Infarct | 1 [1.0] | 4 [1.3] | 4 [1.3] | 2 [2.5] |
| Metaplasia, Osseous | 1 [1.0] | 2 [1.0] | 1 [1.0] | 2 [1.5] |
| Nephropathy | 44 [2.1] | 47 [1.3] | 44 [1.8] | 45 [2.0] |
| Thrombosis | | | 1 [2.0] | |
| Artery, Inflammation, Chronic Active | 1 [3.0] | | | 1 [3.0] |
| Vein, Dilatation | 1 [1.0] | | | |
| Urethra | (0) | (0) | (1) | (0) |
| Urinary Bladder | (50) | (50) | (49) | (50) |
| Inflammation | | | 1 [3.0] | 1 [4.0] |

*** END OF MALE ***

Test Type: CHRONIC

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE FEMALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|-----------------------------------------|---------|---------|---------|----------|
| Disposition Summary | | | | |
| Animals Initially in Study | 50 | 50 | 50 | 50 |
| Early Deaths | | | | |
| Moribund Sacrifice | 13 | 11 | 7 | 10 |
| Natural Death | 5 | 4 | 7 | 1 |
| Survivors | | | | |
| Terminal Sacrifice | 32 | 35 | 36 | 39 |
| Animals Examined Microscopically | 50 | 50 | 50 | 50 |
| ALIMENTARY SYSTEM | | | | |
| Esophagus | (50) | (50) | (50) | (50) |
| Gallbladder | (38) | (45) | (44) | (42) |
| Cyst | | | | 1 [3.0] |
| Hyperplasia | | 1 [2.0] | | |
| Mineralization | | 1 [1.0] | | |
| Intestine Large, Cecum | (50) | (50) | (50) | (50) |
| Amyloid Deposition | | 1 [1.0] | | |
| Hemorrhage | | 1 [3.0] | | |
| Intestine Large, Rectum | (50) | (50) | (50) | (50) |
| Polyp, Inflammatory | 1 [2.0] | | | |
| Arteriole, Inflammation, Chronic Active | | | 1 [2.0] | |
| Intestine Small, Duodenum | (50) | (50) | (49) | (50) |
| Necrosis | | | | 1 [3.0] |
| Intestine Small, Ileum | (50) | (50) | (50) | (50) |
| Inflammation, Chronic Active | | | 1 [1.0] | |
| Intestine Small, Jejunum | (50) | (50) | (50) | (50) |
| Liver | (50) | (50) | (50) | (50) |
| Angiectasis | | 1 [2.0] | 1 [2.0] | |
| Basophilic Focus | 1 | 3 | 6 | 1 |
| Clear Cell Focus | 1 | | 2 | |
| Cyst | 1 [2.0] | 2 [1.5] | | |
| Degeneration, Fatty | 1 [2.0] | 1 [2.0] | | |
| Eosinophilic Focus | 4 | 7 | 8 | 2 |
| Hematopoietic Cell Proliferation | 2 [2.0] | 2 [2.0] | | 1 [3.0] |
| Infiltration Cellular, Lymphoid | 1 [2.0] | | | |
| Inflammation, Chronic Active | 1 [2.0] | | | 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

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE FEMALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|-----------------------------------------|----------|----------|----------|----------|
| Mixed Cell Focus | | | 2 | 2 |
| Necrosis | 1 [2.0] | 2 [3.0] | 3 [2.3] | 3 [2.3] |
| Pigmentation | | | | 1 [2.0] |
| Tension Lipidosis | 5 [1.3] | 8 [1.1] | 3 [1.0] | 9 [1.0] |
| Thrombosis | 1 [2.0] | | | |
| Vacuolization Cytoplasmic | | 1 [4.0] | | |
| Bile Duct, Hyperplasia | | | | 1 [2.0] |
| Mesentery | (12) | (16) | (15) | (10) |
| Inflammation, Chronic Active | | 1 [2.0] | | |
| Fat, Necrosis | 10 [1.6] | 12 [1.3] | 11 [1.4] | 6 [1.5] |
| Oral Mucosa | (1) | (0) | (0) | (0) |
| Gingival, Inflammation, Suppurative | 1 [2.0] | | | |
| Pancreas | (50) | (50) | (50) | (50) |
| Atrophy | 1 [3.0] | 3 [2.0] | 1 [3.0] | 1 [4.0] |
| Cyst | 1 [3.0] | 2 [2.5] | 2 [2.5] | 1 [2.0] |
| Cytoplasmic Alteration | 1 [1.0] | | | |
| Salivary Glands | (49) | (50) | (50) | (50) |
| Necrosis | | 1 [2.0] | | |
| Arteriole, Inflammation, Chronic Active | | | 1 [2.0] | |
| Stomach, Forestomach | (50) | (50) | (50) | (50) |
| Hyperplasia, Squamous | | | 4 [1.8] | 1 [1.0] |
| Inflammation | 2 [1.5] | | | |
| Mineralization | | | 1 [1.0] | 1 [1.0] |
| Ulcer | | 1 [2.0] | | |
| Stomach, Glandular | (50) | (50) | (50) | (50) |
| Fibrosis | | | 1 [1.0] | |
| Mineralization | | 1 [1.0] | | |
| Epithelium, Degeneration, Hyaline | 1 [1.0] | | | |
| Tooth | (0) | (0) | (0) | (1) |
| CARDIOVASCULAR SYSTEM | | | | |
| Blood Vessel | (2) | (0) | (1) | (0) |
| Aorta, Mineralization | | | 1 [1.0] | |
| Heart | (50) | (50) | (50) | (50) |
| Cardiomyopathy | 5 [1.8] | 2 [2.0] | 3 [2.0] | 1 [2.0] |
| Congestion | | | 1 [1.0] | |
| Mineralization | | 1 [1.0] | | |
| Artery, Inflammation | | 2 [1.5] | | 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)

Test Type: CHRONIC

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE FEMALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|-----------------------------------|----------|----------|----------|----------|
| Capillary, Hyperplasia | 2 [3.0] | | | |
| ENDOCRINE SYSTEM | | | | |
| Adrenal Cortex | (50) | (50) | (50) | (50) |
| Accessory Adrenal Cortical Nodule | 2 [1.0] | | 3 [1.0] | 1 [1.0] |
| Angiectasis | 1 [1.0] | | | 1 [2.0] |
| Atrophy | | 1 [4.0] | 1 [2.0] | |
| Hematopoietic Cell Proliferation | | 2 [2.0] | 1 [1.0] | |
| Hemorrhage | 1 [2.0] | | | |
| Hyperplasia | 5 [1.2] | 3 [1.0] | 8 [1.1] | 7 [1.1] |
| Hypertrophy | 10 [1.0] | 13 [1.0] | 7 [1.3] | 8 [1.4] |
| Vacuolization Cytoplasmic | | | 3 [1.3] | |
| Adrenal Medulla | (50) | (50) | (50) | (49) |
| Hyperplasia | | | | 3 [2.0] |
| Hypertrophy | 1 [1.0] | | | 1 [1.0] |
| Vacuolization Cytoplasmic | | | 1 [2.0] | |
| Islets, Pancreatic | (50) | (50) | (50) | (50) |
| Hyperplasia | | | | 1 [1.0] |
| Parathyroid Gland | (23) | (32) | (33) | (33) |
| Cyst | | 1 [2.0] | 2 [1.0] | |
| Pituitary Gland | (50) | (50) | (50) | (49) |
| Pars Distalis, Angiectasis | 1 [2.0] | | 4 [1.0] | 2 [1.5] |
| Pars Distalis, Cyst | | | 3 [1.0] | 2 [1.0] |
| Pars Distalis, Hyperplasia | 8 [1.5] | 15 [1.6] | 16 [1.4] | 10 [1.7] |
| Pars Intermedia, Hemorrhage | 1 [2.0] | | | |
| Thyroid Gland | (50) | (50) | (50) | (50) |
| Cyst | | 2 [1.0] | 7 [1.1] | 3 [1.3] |
| Follicular Cell, Hyperplasia | 2 [2.5] | | 1 [3.0] | |
| GENERAL BODY SYSTEM | | | | |
| Peritoneum | (0) | (0) | (0) | (1) |
| GENITAL SYSTEM | | | | |
| Clitoral Gland | (46) | (43) | (43) | (46) |
| Ovary | (49) | (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)

Test Type: CHRONIC

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE FEMALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|-----------------------------------------|----------|----------|----------|----------|
| Cyst | 8 [2.3] | 11 [1.5] | 7 [2.4] | 9 [1.9] |
| Hemorrhage | 2 [4.0] | | | 2 [1.5] |
| Infiltration Cellular, Histiocyte | 1 [3.0] | | | |
| Mineralization | | 1 [2.0] | | |
| Thrombosis | | 1 [3.0] | | 1 [4.0] |
| Uterus | (50) | (50) | (50) | (50) |
| Angiectasis | 1 [3.0] | 1 [3.0] | 1 [1.0] | 4 [2.3] |
| Fibrosis | 1 [3.0] | | | |
| Inflammation, Chronic Active | 1 [1.0] | | 2 [1.0] | |
| Thrombosis | 2 [2.5] | | | 3 [3.3] |
| Arteriole, Inflammation, Chronic Active | | 1 [2.0] | | |
| Endometrium, Hyperplasia, Cystic | 26 [2.0] | 18 [2.3] | 21 [2.1] | 27 [2.4] |
| Vagina | (0) | (0) | (1) | (0) |
| Arteriole, Inflammation, Chronic Active | | | 1 [2.0] | |

HEMATOPOIETIC SYSTEM

| | | | | |
|----------------------------------|---------|---------|---------|---------|
| Bone Marrow | (50) | (50) | (50) | (50) |
| Angiectasis | | | 1 [2.0] | |
| Myelofibrosis | | 1 [2.0] | | |
| Lymph Node | (5) | (6) | (11) | (5) |
| Iliac, Ectasia | 1 [3.0] | | | |
| Lumbar, Ectasia | | | 1 [2.0] | |
| Lumbar, Hemorrhage | 1 [3.0] | 1 [3.0] | | |
| Lumbar, Hyperplasia, Lymphoid | | | | 1 [2.0] |
| Renal, Hemorrhage | | | 1 [3.0] | |
| Lymph Node, Bronchial | (29) | (32) | (31) | (38) |
| Lymph Node, Mandibular | (23) | (40) | (30) | (33) |
| Ectasia | | 1 [4.0] | | 1 [3.0] |
| Hyperplasia, Lymphoid | 2 [3.0] | | | 1 [2.0] |
| Lymph Node, Mediastinal | (34) | (33) | (44) | (40) |
| Hyperplasia, Lymphoid | 1 [2.0] | | 1 [3.0] | |
| Lymph Node, Mesenteric | (50) | (46) | (46) | (49) |
| Angiectasis | | | | 1 [4.0] |
| Ectasia | | | 1 [4.0] | |
| Spleen | (50) | (50) | (50) | (50) |
| Hematopoietic Cell Proliferation | 2 [2.0] | 4 [2.0] | 4 [2.3] | 2 [3.0] |
| Hemorrhage | | | 1 [3.0] | |
| Hyperplasia, Lymphoid | 2 [2.0] | | 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)

Test Type: CHRONIC

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE FEMALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|------------------------------------------------------|---------|---------|---------|----------|
| Necrosis | | | 1 [4.0] | |
| Thymus | (47) | (47) | (45) | (47) |
| Cyst | 1 [1.0] | | | |
| Hyperplasia, Lymphoid | 1 [2.0] | 1 [3.0] | 1 [2.0] | |
| INTEGUMENTARY SYSTEM | | | | |
| Mammary Gland | (50) | (50) | (50) | (49) |
| Hyperplasia | 1 [1.0] | 1 [1.0] | | 1 [3.0] |
| Skin | (50) | (50) | (50) | (50) |
| Inflammation | 1 [2.0] | | 3 [1.7] | |
| Ulcer | 1 [3.0] | 2 [3.0] | | |
| Sebaceous Gland, Hyperplasia | | | | 1 [3.0] |
| Subcutaneous Tissue, Metaplasia, Osseous | | | | 1 [3.0] |
| MUSCULOSKELETAL SYSTEM | | | | |
| Bone | (49) | (50) | (50) | (49) |
| Cranium, Hyperostosis | | 1 [1.0] | 1 [1.0] | |
| Joint, Hyperostosis | 1 [2.0] | | | |
| Skeletal Muscle | (1) | (2) | (2) | (3) |
| NERVOUS SYSTEM | | | | |
| Brain | (50) | (50) | (50) | (50) |
| Atrophy | 2 [3.0] | 1 [2.0] | 1 [2.0] | |
| Hydrocephalus | | | 1 [2.0] | |
| Hippocampus, Necrosis, Acute | | 1 [3.0] | | |
| Meninges, Infiltration Cellular | 1 [1.0] | 1 [1.0] | | |
| Meninges, Infiltration Cellular, Mononuclear Cell | | | | 1 [2.0] |
| Peripheral Nerve | (0) | (2) | (0) | (1) |
| Infiltration Cellular, Lymphocyte | | | | 1 [3.0] |
| Spinal Cord | (1) | (1) | (0) | (1) |
| Meninges, Infiltration Cellular, Mononuclear Cell | | | | 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

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE FEMALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|------------------------------------------------------------------|----------|----------|----------|----------|
| RESPIRATORY SYSTEM | | | | |
| Larynx | (50) | (50) | (50) | (50) |
| Atypia Cellular | | | 1 [1.0] | |
| Hyperplasia, Squamous | 1 [4.0] | 2 [2.0] | 1 [2.0] | 3 [2.7] |
| Lung | (50) | (50) | (50) | (50) |
| Fibrosis | 1 [2.0] | | | |
| Hemorrhage | | 1 [2.0] | | 1 [1.0] |
| Hyperplasia, Lymphoid | | | 1 [2.0] | |
| Infiltration Cellular, Histiocyte | 1 [2.0] | 2 [2.0] | 3 [1.7] | 1 [1.0] |
| Inflammation, Suppurative | 1 [1.0] | | | |
| Metaplasia, Osseous | 1 [1.0] | | | |
| Thrombosis | 1 [1.0] | 1 [1.0] | 1 [2.0] | |
| Alveolar Epithelium, Hyperplasia | | 1 [3.0] | 3 [1.3] | 1 [3.0] |
| Arteriole, Inflammation, Chronic Active | | | | 1 [3.0] |
| Bronchiole, Degeneration, Hyaline | 1 [2.0] | | | |
| Nose | (50) | (49) | (50) | (50) |
| Inflammation, Suppurative | 2 [1.0] | 1 [1.0] | 3 [1.0] | 9 [1.1] |
| Glands, Respiratory Epithelium, Accumulation, Hyaline Droplet | 16 [1.3] | 28 [1.4] | 45 [1.9] | 42 [1.8] |
| Glands, Respiratory Epithelium, Hyperplasia | 43 [1.2] | 45 [1.2] | 47 [1.4] | 50 [2.0] |
| Glands, Respiratory Epithelium, Inflammation, Chronic Active | 8 [1.0] | 11 [1.0] | 16 [1.1] | 22 [1.1] |
| Olfactory Epithelium, Accumulation, Hyaline Droplet | 11 [1.2] | 19 [1.1] | 8 [1.0] | 17 [1.1] |
| Olfactory Epithelium, Atrophy | 8 [1.0] | 29 [1.4] | 49 [2.1] | 50 [2.6] |
| Olfactory Epithelium, Necrosis | | | 2 [1.0] | 1 [1.0] |
| Olfactory Epithelium, Respiratory Metaplasia | 4 [1.0] | 15 [1.6] | 48 [2.8] | 50 [3.0] |
| Olfactory Epithelium, Vacuolization Cytoplasmic | | 5 [1.6] | 1 [2.0] | 1 [2.0] |
| Respiratory Epithelium, Accumulation, Hyaline Droplet | 20 [1.7] | 33 [1.3] | 47 [2.2] | 29 [1.1] |
| Respiratory Epithelium, Metaplasia, Squamous | | | 13 [1.1] | 35 [1.3] |
| Respiratory Epithelium, Necrosis | 1 [1.0] | | 6 [1.5] | 16 [1.6] |
| Respiratory Epithelium, Ulcer | | | | 2 [1.0] |
| Respiratory Epithelium, Vacuolization Cytoplasmic | | 2 [2.0] | 2 [2.5] | 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)

Test Type: CHRONIC

Diethylamine

Time Report Requested: 13:20:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/18/03 / 08/18/03

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE FEMALE | CONTROL | 16 PPM | 31 PPM | 62.5 PPM |
|--------------------------------------|----------|----------|----------|----------|
| Turbinate, Hyperostosis | 4 [1.0] | 23 [1.1] | 49 [1.8] | 50 [2.9] |
| Turbinate, Necrosis | | | | 1 [1.0] |
| Trachea | (50) | (50) | (50) | (50) |
| Metaplasia, Osseous | | 1 [1.0] | 1 [1.0] | |
| SPECIAL SENSES SYSTEM | | | | |
| Eye | (50) | (50) | (50) | (50) |
| Atrophy | | | | 1 [4.0] |
| Cataract | | | 1 [3.0] | |
| Arteriole, Thrombosis | 1 [2.0] | | | |
| Cornea, Hyperplasia, Squamous | | | 1 [2.0] | |
| Cornea, Inflammation, Chronic Active | 2 [1.5] | | | 1 [3.0] |
| Cornea, Mineralization | 1 [2.0] | | | |
| Harderian Gland | (50) | (50) | (50) | (50) |
| Hyperplasia | | 1 [2.0] | 2 [2.0] | |
| URINARY SYSTEM | | | | |
| Kidney | (50) | (50) | (50) | (50) |
| Amyloid Deposition | 1 [2.0] | | | |
| Cyst | | 1 [1.0] | 1 [1.0] | |
| Hydronephrosis | | | | 1 [3.0] |
| Infarct | 2 [1.5] | 2 [1.0] | 4 [1.5] | 6 [2.0] |
| Metaplasia, Osseous | 8 [1.3] | 3 [1.0] | 1 [1.0] | 4 [1.3] |
| Nephropathy | 39 [1.6] | 40 [1.2] | 43 [1.2] | 46 [1.5] |
| Renal Tubule, Necrosis | | 1 [3.0] | | |
| Renal Tubule, Pigmentation, Bile | | | | 1 [1.0] |
| Urinary Bladder | (50) | (50) | (49) | (50) |
| Inflammation | | 1 [2.0] | | |

*** 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)