

TDMs No. 99007 - 06

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

Date Report Requested: 08/14/2008

Test Type: CHRONIC

Goldenseal root powder

Time Report Requested: 12:25:59

Route: DOSED FEED

CAS Number: GOLDENSEALRT

First Dose M/F: 05/12/03 / 05/12/03

Species/Strain: MICE/B6C3F1

Lab: SRI

F1_Rev.1_M3

C Number: C99007B
Lock Date: 08/29/2006
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

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Lab: SRI

| B6C3F1 MICE MALE | 0 PPM | 3000 PPM | 9000 PPM | 25000 PPM |
|--|---------|----------|----------|-----------|
| Disposition Summary | | | | |
| Animals Initially in Study | 50 | 50 | 50 | 50 |
| Early Deaths | | | | |
| Moribund Sacrifice | | 3 | 2 | 3 |
| Natural Death | 7 | 9 | 3 | 2 |
| Survivors | | | | |
| Natural Death | | 1 | | |
| Terminal Sacrifice | 43 | 37 | 45 | 45 |
| Animals Examined Microscopically | 50 | 50 | 50 | 50 |
| ALIMENTARY SYSTEM | | | | |
| Intestine Large, Cecum | (47) | (46) | (48) | (50) |
| Intestine Small, Duodenum | (44) | (43) | (47) | (50) |
| Intestine Small, Jejunum | (46) | (43) | (47) | (48) |
| Hyperplasia, Lymphoid | 1 [2.0] | 1 [2.0] | 3 [2.0] | 2 [3.0] |
| Epithelium, Hyperplasia | | | | 1 [2.0] |
| Liver | (50) | (50) | (50) | (50) |
| Angiectasis | | | | 1 [1.0] |
| Basophilic Focus | 1 | 3 | 3 | 3 |
| Clear Cell Focus | 10 | 10 | 11 | 12 |
| Cyst | | 1 | | 1 |
| Eosinophilic Focus | 7 | 14 | 14 | 24 |
| Fibrosis | | | 1 [2.0] | |
| Hematopoietic Cell Proliferation | | 1 [2.0] | 1 [2.0] | |
| Hemorrhage | | 1 [4.0] | | |
| Hepatodiaphragmatic Nodule | 1 | 1 | | |
| Infiltration Cellular, Lymphocyte | 1 [1.0] | 1 [2.0] | 4 [1.5] | 3 [1.0] |
| Infiltration Cellular, Mixed Cell | 3 [1.0] | 6 [1.2] | 3 [1.0] | 4 [1.0] |
| Mixed Cell Focus | 1 | 7 | 9 | 6 |
| Necrosis, Focal | 2 [2.5] | 3 [2.0] | 5 [1.8] | 6 [2.0] |
| Tension Lipidosis | | 1 | | |
| Bile Duct, Hyperplasia | | 1 [1.0] | | |
| Hepatocyte, Hyperplasia, Focal | | | 1 [4.0] | |
| Hepatocyte, Hypertrophy | | | 1 [3.0] | |
| Hepatocyte, Vacuolization Cytoplasmic | 6 [1.7] | 11 [1.7] | 15 [1.6] | 7 [1.4] |
| Hepatocyte, Vacuolization Cytoplasmic, | | | 1 [2.0] | |

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b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

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Lab: SRI

| B6C3F1 MICE MALE | 0 PPM | 3000 PPM | 9000 PPM | 25000 PPM |
|-----------------------------------|----------|----------|----------|-----------|
| Focal | | | | |
| Kupffer Cell, Pigmentation | 1 [1.0] | 1 [1.0] | 2 [2.0] | 1 [2.0] |
| Mesentery | (6) | (3) | (12) | (1) |
| Fibrosis | 1 [2.0] | | 1 [3.0] | 1 [3.0] |
| Inflammation, Suppurative | | 1 [4.0] | 1 [2.0] | |
| Fat, Necrosis | 5 [2.4] | 1 [2.0] | 6 [2.7] | |
| Pancreas | (49) | (50) | (50) | (50) |
| Atrophy | | | 1 [1.0] | |
| Cyst | | | 1 | |
| Infiltration Cellular, Lymphocyte | | | | 1 [2.0] |
| Acinus, Cytoplasmic Alteration | 2 [2.5] | 5 [2.8] | | 2 [3.0] |
| Acinus, Hyperplasia, Focal | 1 [2.0] | | | |
| Salivary Glands | (50) | (50) | (50) | (50) |
| Infiltration Cellular, Lymphocyte | 1 [2.0] | 1 [1.0] | 2 [1.0] | 1 [2.0] |
| Stomach, Forestomach | (50) | (50) | (50) | (50) |
| Inflammation, Chronic | 1 [3.0] | | | |
| Ulcer | 1 [2.0] | 2 [2.0] | | |
| Epithelium, Hyperplasia | 3 [2.3] | 5 [2.2] | 3 [2.3] | 2 [2.0] |
| Stomach, Glandular | (50) | (50) | (50) | (50) |
| Cyst | | 5 | 3 | 1 |
| Edema | | 1 [3.0] | | |
| Erosion | 1 [3.0] | | | 4 [1.3] |
| Epithelium, Hyperplasia | | | | 1 [2.0] |
| Glands, Cyst | 1 | | | |
| CARDIOVASCULAR SYSTEM | | | | |
| Heart | (50) | (50) | (50) | (50) |
| Cardiomyopathy | 45 [1.4] | 42 [1.3] | 44 [1.5] | 44 [1.4] |
| Thrombosis | 1 [4.0] | | | |
| Artery, Inflammation, Chronic | 1 [2.0] | | | |
| ENDOCRINE SYSTEM | | | | |
| Adrenal Cortex | (50) | (50) | (50) | (50) |
| Accessory Adrenal Cortical Nodule | | 1 [2.0] | 1 [2.0] | |
| Hypertrophy | | | 3 [3.0] | |
| Hypertrophy, Focal | 13 [1.3] | 18 [1.6] | 10 [1.6] | 5 [1.8] |
| Capsule, Hyperplasia | 39 [1.5] | 37 [1.2] | 41 [1.1] | 37 [1.2] |

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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Goldenseal root powder

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Lab: SRI

| B6C3F1 MICE MALE | 0 PPM | 3000 PPM | 9000 PPM | 25000 PPM |
|-----------------------------------|---------|----------|----------|-----------|
| Adrenal Medulla | (50) | (50) | (50) | (49) |
| Hyperplasia | | | 1 [1.0] | |
| Islets, Pancreatic | (49) | (50) | (50) | (50) |
| Hyperplasia | 4 [2.0] | 12 [1.7] | 11 [2.1] | 4 [1.5] |
| Parathyroid Gland | (45) | (45) | (47) | (49) |
| Cyst | | | 3 | |
| Pituitary Gland | (50) | (49) | (49) | (50) |
| Pars Distalis, Cyst | 2 | 2 | 1 | 3 |
| Pars Distalis, Hyperplasia, Focal | 2 [2.0] | | | 1 [1.0] |
| Thyroid Gland | (50) | (50) | (50) | (50) |
| Follicle, Cyst | | 2 | 4 | |
| Follicle, Degeneration, Focal | 5 [2.0] | 6 [1.2] | 6 [1.3] | 4 [1.8] |
| Follicular Cell, Hyperplasia | | | | 1 [2.0] |

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

| | | | | |
|-----------------------------|---------|---------|---------|---------|
| Coagulating Gland | (0) | (1) | (0) | (0) |
| Inflammation, Suppurative | | 1 [3.0] | | |
| Epididymis | (50) | (50) | (50) | (50) |
| Cyst | | 1 | | |
| Granuloma Sperm | | | 1 [2.0] | |
| Preputial Gland | (50) | (50) | (50) | (50) |
| Atrophy | | | 1 [3.0] | |
| Cyst | 19 | 17 | 25 | 13 |
| Hyperplasia | | 1 [2.0] | 4 [2.0] | 2 [2.0] |
| Inflammation, Suppurative | 1 [4.0] | 3 [2.7] | 4 [3.3] | 2 [3.0] |
| Inflammation, Chronic | 1 [2.0] | 4 [3.0] | 3 [2.7] | 2 [2.0] |
| Bilateral, Cyst | | | 1 | |
| Prostate | (50) | (50) | (50) | (50) |
| Inflammation, Suppurative | | 1 [3.0] | | |
| Inflammation, Granulomatous | | | 1 [1.0] | |
| Inflammation, Chronic | | 2 [2.0] | | |
| Epithelium, Hyperplasia | 2 [2.0] | 1 [2.0] | 1 [2.0] | 3 [1.7] |
| Seminal Vesicle | (50) | (50) | (50) | (50) |
| Inflammation, Suppurative | | 1 [3.0] | | |

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| B6C3F1 MICE MALE | 0 PPM | 3000 PPM | 9000 PPM | 25000 PPM |
|----------------------------------|----------|----------|----------|-----------|
| Testes | (50) | (50) | (50) | (50) |
| Germinal Epithelium, Atrophy | 1 [3.0] | | 5 [2.4] | 2 [2.5] |
| HEMATOPOIETIC SYSTEM | | | | |
| Bone Marrow | (50) | (50) | (50) | (50) |
| Angiectasis | 1 [2.0] | | | |
| Depletion Cellular | | 1 [2.0] | | |
| Hyperplasia | 6 [2.3] | 17 [2.1] | 14 [1.9] | 14 [2.0] |
| Lymph Node | (2) | (5) | (2) | (2) |
| Bronchial, Hyperplasia | | | | 1 [3.0] |
| Iliac, Hemorrhage | 1 [3.0] | | | |
| Pancreatic, Hemorrhage | | 1 [3.0] | | |
| Renal, Hemorrhage | | 1 [2.0] | | |
| Lymph Node, Mandibular | (46) | (46) | (50) | (49) |
| Atrophy | | | 1 [2.0] | |
| Hyperplasia, Lymphoid | | 3 [3.0] | 2 [2.0] | 2 [2.5] |
| Lymph Node, Mesenteric | (48) | (44) | (49) | (48) |
| Atrophy | | 1 [3.0] | | |
| Hemorrhage | | 1 [2.0] | | |
| Hyperplasia, Histiocytic | 2 [1.5] | | 1 [1.0] | 1 [1.0] |
| Hyperplasia, Lymphoid | 3 [2.7] | 2 [2.5] | 2 [2.5] | 2 [2.5] |
| Hyperplasia, Plasma Cell | | | 1 [4.0] | |
| Spleen | (50) | (49) | (50) | (50) |
| Atrophy | | 2 [3.0] | 1 [2.0] | |
| Hematopoietic Cell Proliferation | 23 [1.7] | 33 [1.9] | 27 [1.8] | 20 [1.9] |
| Hyperplasia | 2 [1.0] | | | 1 [1.0] |
| Lymphoid Follicle, Hyperplasia | 4 [2.3] | 3 [2.0] | 4 [1.8] | 3 [2.3] |
| Thymus | (44) | (39) | (43) | (41) |
| Atrophy | 3 [3.0] | 8 [2.9] | 1 [3.0] | 2 [2.5] |
| Cyst | | | 2 | |
| Hyperplasia, Lymphoid | | 1 [2.0] | | |
| Necrosis, Lymphoid | | | | 1 [3.0] |
| INTEGUMENTARY SYSTEM | | | | |
| Skin | (50) | (50) | (50) | (50) |
| Cyst Epithelial Inclusion | | | 1 | |
| Inflammation, Chronic | 1 [3.0] | 1 [3.0] | | |

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|---|---------|----------|----------|-----------|
| Ulcer | | 1 [3.0] | | |
| Epidermis, Hyperplasia | 1 [2.0] | 1 [4.0] | | |
| Hair Follicle, Cyst | 1 | | | |
| MUSCULOSKELETAL SYSTEM | | | | |
| Bone | (50) | (50) | (50) | (50) |
| Cranium, Hyperostosis | 1 [3.0] | | | |
| Maxilla, Fibrosis | | 1 [3.0] | | |
| Skeletal Muscle | (0) | (1) | (3) | (0) |
| NERVOUS SYSTEM | | | | |
| None | | | | |
| RESPIRATORY SYSTEM | | | | |
| Lung | (50) | (50) | (50) | (50) |
| Edema | | 1 [2.0] | | |
| Fibrosis | 1 [3.0] | | | |
| Infiltration Cellular, Histiocyte | 2 [3.0] | | 1 [1.0] | 2 [1.0] |
| Infiltration Cellular, Lymphocyte | 3 [2.0] | | | 1 [2.0] |
| Alveolar Epithelium, Hyperplasia | 6 [1.8] | 2 [2.5] | 3 [1.7] | 5 [1.8] |
| Nose | (50) | (50) | (50) | (50) |
| Inflammation, Suppurative | | | 1 [2.0] | |
| Glands, Degeneration, Cystic | | 1 [2.0] | | |
| Nasolacrimal Duct, Inflammation, Suppurative | 1 [2.0] | | | |
| Trachea | (50) | (50) | (50) | (50) |
| SPECIAL SENSES SYSTEM | | | | |
| Eye | (46) | (50) | (49) | (50) |
| Cataract | | | 1 [1.0] | |
| Inflammation, Acute | 1 [1.0] | | | |
| Cornea, Inflammation, Chronic | | 1 [2.0] | | |
| Harderian Gland | (50) | (50) | (50) | (50) |
| Atrophy | | | 1 [3.0] | |

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|---|----------|----------|----------|-----------|
| Hyperplasia | 1 [2.0] | | | |
| Hyperplasia, Focal | | 1 [2.0] | | 1 [2.0] |
| Infiltration Cellular, Lymphocyte | | | 1 [2.0] | |
| URINARY SYSTEM | | | | |
| Kidney | (50) | (50) | (50) | (50) |
| Cyst | 4 | 3 | 9 | 2 |
| Glomerulosclerosis | | | 1 [3.0] | |
| Hydronephrosis | | 1 [3.0] | | |
| Infarct | 2 [2.0] | 4 [1.8] | | 1 [2.0] |
| Infiltration Cellular, Lymphocyte | 1 [1.0] | 2 [1.5] | 2 [2.0] | 2 [2.0] |
| Inflammation, Suppurative | 1 [2.0] | 1 [3.0] | | |
| Metaplasia, Osseous | 1 [2.0] | 1 [2.0] | 2 [1.5] | 3 [1.7] |
| Nephropathy | 42 [1.5] | 43 [1.3] | 46 [1.5] | 48 [1.5] |
| Thrombosis | 1 [2.0] | | | |
| Bilateral, Hydronephrosis | | 1 [4.0] | | |
| Papilla, Inflammation, Suppurative | | | 1 [2.0] | |
| Papilla, Necrosis | | 1 [2.0] | | |
| Renal Tubule, Accumulation, Hyaline Droplet | | | 1 [2.0] | |
| Renal Tubule, Pigmentation | | | | 2 [2.5] |
| Urinary Bladder | (49) | (50) | (50) | (50) |
| Calculus Gross Observation | | 1 | | |
| Hemorrhage | | | | 1 [2.0] |
| Infiltration Cellular, Lymphocyte | | 1 [2.0] | 1 [2.0] | 1 [1.0] |
| Inflammation, Chronic | | 1 [3.0] | | |
| Transitional Epithelium, Hyperplasia | | 1 [3.0] | | |

*** END OF MALE ***

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|----------------------------------|-------|----------|----------|-----------|
| Disposition Summary | | | | |
| Animals Initially in Study | 50 | 50 | 50 | 50 |
| Early Deaths | | | | |
| Moribund Sacrifice | 4 | 2 | 2 | 3 |
| Natural Death | 1 | 4 | 12 | 4 |
| Survivors | | | | |
| Natural Death | 1 | | | |
| Terminal Sacrifice | 44 | 44 | 36 | 43 |
| Animals Examined Microscopically | 50 | 50 | 50 | 50 |

ALIMENTARY SYSTEM

| | | | | |
|-----------------------------------|----------|----------|----------|----------|
| Gallbladder | (48) | (46) | (39) | (47) |
| Inflammation, Chronic | | 1 [3.0] | | |
| Intestine Large, Cecum | (48) | (46) | (41) | (47) |
| Cyst | | | | 1 |
| Intestine Large, Rectum | (48) | (47) | (43) | (47) |
| Intestine Small, Ileum | (48) | (46) | (39) | (47) |
| Hyperplasia, Lymphoid | 1 [2.0] | | | |
| Intestine Small, Jejunum | (48) | (46) | (43) | (48) |
| Hyperplasia, Lymphoid | | 1 [2.0] | 2 [2.0] | |
| Inflammation, Suppurative | | | 1 [1.0] | |
| Liver | (50) | (50) | (49) | (50) |
| Angiectasis | | | | 1 [1.0] |
| Basophilic Focus | 1 | | 3 | 1 |
| Clear Cell Focus | | 2 | | 2 |
| Cyst | | | 1 | 2 |
| Eosinophilic Focus | 3 | 3 | 2 | 4 |
| Hematopoietic Cell Proliferation | 3 [1.3] | 2 [2.0] | 2 [1.5] | 1 [2.0] |
| Hepatodiaphragmatic Nodule | | | | 1 |
| Infarct | | | | 1 [2.0] |
| Infiltration Cellular, Lymphocyte | 24 [1.2] | 24 [1.1] | 26 [1.1] | 21 [1.1] |
| Infiltration Cellular, Mixed Cell | 7 [1.0] | 9 [1.0] | 10 [1.0] | 6 [1.2] |
| Inflammation, Acute | | | | 1 [1.0] |
| Mixed Cell Focus | | 3 | 2 | 4 |
| Necrosis, Focal | 1 [1.0] | 1 [1.0] | | |
| Tension Lipidosis | 3 | 1 | | |

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| B6C3F1 MICE FEMALE | 0 PPM | 3000 PPM | 9000 PPM | 25000 PPM |
|---------------------------------------|----------|----------|----------|-----------|
| Capsule, Fibrosis | | | 1 [2.0] | |
| Hepatocyte, Vacuolization Cytoplasmic | 1 [2.0] | 3 [1.7] | 7 [1.9] | 4 [2.0] |
| Kupffer Cell, Pigmentation | | | | 1 [2.0] |
| Mesentery | (10) | (6) | (9) | (2) |
| Hemorrhage | 1 [2.0] | | 1 [4.0] | |
| Infiltration Cellular, Lymphocyte | | | 1 [3.0] | |
| Fat, Necrosis | 8 [2.0] | 6 [2.2] | 7 [2.3] | 2 [2.5] |
| Pancreas | (48) | (48) | (47) | (50) |
| Atrophy | 1 [3.0] | 1 [1.0] | | 1 [2.0] |
| Cyst | 1 | 1 | 1 | 1 |
| Infiltration Cellular, Lymphocyte | | | | 2 [2.0] |
| Inflammation, Granulomatous, Chronic | | 1 [4.0] | | |
| Acinus, Cytoplasmic Alteration | 4 [1.5] | 2 [1.0] | 1 [1.0] | 1 [2.0] |
| Artery, Inflammation | | | 1 [3.0] | |
| Salivary Glands | (50) | (50) | (50) | (50) |
| Fibrosis | 1 [2.0] | 1 [2.0] | 1 [2.0] | |
| Infiltration Cellular, Lymphocyte | 2 [1.5] | 2 [1.5] | 5 [1.6] | 3 [1.0] |
| Stomach, Forestomach | (49) | (50) | (48) | (50) |
| Cyst | | | 2 | |
| Edema | | 1 [3.0] | | |
| Infiltration Cellular, Lymphocyte | | | 1 [2.0] | 1 [2.0] |
| Inflammation, Granulomatous, Chronic | | 1 [3.0] | | |
| Inflammation, Chronic | 1 [2.0] | | | |
| Ulcer | | 1 [3.0] | 2 [2.0] | 2 [2.0] |
| Epithelium, Hyperplasia | | 3 [2.0] | 3 [2.0] | 2 [2.0] |
| Stomach, Glandular | (49) | (49) | (48) | (50) |
| Cyst | 7 | 4 | 2 | 6 |
| Ulcer | | | 1 [2.0] | |
| Glands, Ectasia | | | | 1 [2.0] |
| CARDIOVASCULAR SYSTEM | | | | |
| Heart | (50) | (50) | (50) | (50) |
| Cardiomyopathy | 39 [1.2] | 38 [1.1] | 37 [1.0] | 33 [1.2] |
| Mineralization | 1 [2.0] | | | |
| ENDOCRINE SYSTEM | | | | |
| Adrenal Cortex | (50) | (50) | (48) | (50) |

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| B6C3F1 MICE FEMALE | 0 PPM | 3000 PPM | 9000 PPM | 25000 PPM |
|--------------------------------------|----------|----------|----------|-----------|
| Accessory Adrenal Cortical Nodule | 1 [2.0] | | | |
| Angiectasis | | 1 [3.0] | 1 [3.0] | |
| Degeneration, Cystic | 1 [1.0] | | 2 [3.0] | 1 [4.0] |
| Degeneration, Fatty | | 1 [2.0] | | |
| Hematopoietic Cell Proliferation | 1 [1.0] | | | |
| Hyperplasia, Focal | 1 [1.0] | 1 [2.0] | | |
| Hypertrophy, Focal | 1 [3.0] | 1 [3.0] | | 4 [2.0] |
| Inflammation, Granulomatous, Chronic | | 1 [2.0] | | |
| Vacuolization Cytoplasmic | | | | 1 [2.0] |
| Capsule, Hyperplasia | 49 [2.0] | 50 [1.8] | 47 [1.6] | 49 [2.0] |
| Adrenal Medulla | (50) | (50) | (49) | (50) |
| Amyloid Deposition | | | 1 [2.0] | |
| Hyperplasia | 1 [2.0] | 2 [1.0] | 2 [1.0] | |
| Islets, Pancreatic | (48) | (49) | (48) | (50) |
| Hyperplasia | 4 [2.0] | 2 [1.5] | 1 [2.0] | 1 [2.0] |
| Parathyroid Gland | (45) | (44) | (48) | (47) |
| Cyst | | 1 | | 1 |
| Infiltration Cellular, Lymphocyte | 1 [2.0] | 1 [2.0] | | |
| Pituitary Gland | (50) | (49) | (49) | (49) |
| Angiectasis | 1 [1.0] | 1 [1.0] | 1 [3.0] | |
| Pars Distalis, Cyst | | | 2 | 3 |
| Pars Distalis, Hyperplasia, Focal | 8 [1.8] | 5 [1.8] | 6 [1.2] | 4 [1.8] |
| Thyroid Gland | (50) | (50) | (48) | (50) |
| Inflammation, Suppurative | | 1 [1.0] | | |
| Follicle, Cyst | | 3 | 2 | 2 |
| Follicle, Degeneration, Focal | 18 [1.4] | 18 [1.6] | 16 [1.4] | 10 [1.6] |
| Follicular Cell, Hyperplasia | | | 1 [1.0] | 1 [1.0] |

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

| | | | | |
|----------------|------|---------|------|------|
| Clitoral Gland | (50) | (50) | (49) | (50) |
| Cyst | 2 | 3 | 4 | |
| Ovary | (49) | (48) | (50) | (50) |
| Angiectasis | | 1 [2.0] | | |
| Cyst | 10 | 14 | 10 | 12 |

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

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Test Type: CHRONIC

Goldenseal root powder

Time Report Requested: 12:25:59

Route: DOSED FEED

CAS Number: GOLDENSEALRT

First Dose M/F: 05/12/03 / 05/12/03

Species/Strain: MICE/B6C3F1

Lab: SRI

| B6C3F1 MICE FEMALE | 0 PPM | 3000 PPM | 9000 PPM | 25000 PPM |
|--------------------------------------|----------|----------|----------|-----------|
| Hemorrhage | 10 [1.6] | 6 [1.7] | 7 [1.6] | 5 [1.8] |
| Mineralization | | | 1 [3.0] | |
| Pigmentation | | | 1 [4.0] | |
| Thrombosis | | 1 [4.0] | 1 [3.0] | |
| Bilateral, Cyst | | 1 | | 1 |
| Corpus Luteum, Hyperplasia | 4 [2.3] | 1 [2.0] | | 2 [2.5] |
| Granulosa Cell, Hyperplasia | | | | 2 [2.0] |
| Uterus | (50) | (49) | (50) | (50) |
| Fibrosis | | | | 1 [2.0] |
| Hyperplasia, Cystic | 48 [2.5] | 46 [2.4] | 45 [2.3] | 44 [2.4] |
| Infiltration Cellular, Histiocyte | | 1 [2.0] | | |
| Inflammation, Suppurative | 1 [3.0] | | | 1 [2.0] |
| Inflammation, Granulomatous, Chronic | | 1 [4.0] | | |
| Thrombosis | | 2 [2.5] | 1 [3.0] | |
| Myometrium, Hypertrophy | | | | 1 [3.0] |
| HEMATOPOIETIC SYSTEM | | | | |
| Bone Marrow | (49) | (50) | (50) | (50) |
| Depletion Cellular | | | | 1 [3.0] |
| Hyperplasia | 2 [3.5] | 2 [2.5] | 1 [3.0] | 2 [3.5] |
| Inflammation, Chronic | | | 1 [2.0] | |
| Myelofibrosis | 6 [1.7] | 1 [3.0] | 5 [2.6] | 5 [1.6] |
| Lymph Node | (6) | (4) | (5) | (4) |
| Iliac, Hyperplasia, Lymphoid | | | 1 [2.0] | |
| Pancreatic, Hyperplasia, Lymphoid | 1 [3.0] | | 1 [2.0] | |
| Renal, Hyperplasia, Lymphoid | 1 [2.0] | | 1 [2.0] | |
| Lymph Node, Mandibular | (50) | (49) | (48) | (49) |
| Hyperplasia, Lymphoid | 6 [2.8] | 2 [2.5] | 4 [2.5] | 7 [2.3] |
| Pigmentation | 1 [2.0] | | | |
| Lymph Node, Mesenteric | (48) | (43) | (48) | (49) |
| Ectasia | | 3 [3.0] | 3 [3.3] | 2 [4.0] |
| Hyperplasia, Histiocytic | 1 [1.0] | 1 [1.0] | 1 [1.0] | 1 [1.0] |
| Hyperplasia, Lymphoid | 4 [2.5] | 1 [2.0] | 3 [2.7] | 4 [2.8] |
| Inflammation, Granulomatous, Chronic | | 1 [4.0] | | |
| Spleen | (48) | (48) | (47) | (49) |
| Atrophy | | | 1 [2.0] | |
| Hematopoietic Cell Proliferation | 5 [3.0] | 7 [2.4] | 8 [2.5] | 4 [2.8] |
| Lymphoid Follicle, Hyperplasia | 24 [2.4] | 26 [2.1] | 18 [2.3] | 22 [2.4] |

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Test Type: CHRONIC

Goldenseal root powder

Time Report Requested: 12:25:59

Route: DOSED FEED

CAS Number: GOLDENSEALRT

First Dose M/F: 05/12/03 / 05/12/03

Species/Strain: MICE/B6C3F1

Lab: SRI

| B6C3F1 MICE FEMALE | 0 PPM | 3000 PPM | 9000 PPM | 25000 PPM |
|-----------------------------------|---------|----------|----------|-----------|
| Thymus | (49) | (48) | (50) | (48) |
| Atrophy | | 1 [2.0] | 1 [3.0] | |
| Hemorrhage | 1 [2.0] | | | |
| Hyperplasia, Lymphoid | 4 [2.5] | 2 [2.5] | 4 [1.8] | 7 [2.3] |
| Necrosis, Lymphoid | | 1 [3.0] | | |
| INTEGUMENTARY SYSTEM | | | | |
| Mammary Gland | (49) | (49) | (48) | (50) |
| Cyst | | 1 | | |
| Hyperplasia | | 1 [2.0] | | |
| Skin | (50) | (50) | (50) | (50) |
| Edema | 1 [3.0] | | | |
| Mineralization | | | | 1 [2.0] |
| Pigmentation | | | | 1 [2.0] |
| Subcutaneous Tissue, Infiltration | | | | 1 [3.0] |
| Cellular, Lymphocyte | | | | |
| MUSCULOSKELETAL SYSTEM | | | | |
| Bone | (50) | (50) | (50) | (50) |
| Fracture | | | 1 [3.0] | |
| Maxilla, Fibrosis | | | | 1 [3.0] |
| Skeletal Muscle | (1) | (1) | (2) | (0) |
| Necrosis | | | 1 [2.0] | |
| NERVOUS SYSTEM | | | | |
| Brain | (50) | (50) | (50) | (50) |
| Compression | | 1 [2.0] | | |
| Hemorrhage | | | 1 [2.0] | |
| RESPIRATORY SYSTEM | | | | |
| Lung | (50) | (50) | (50) | (50) |
| Foreign Body | | | 1 [1.0] | |
| Hemorrhage | 2 [2.0] | | 2 [1.0] | 1 [2.0] |
| Hyperplasia, Lymphoid | | | | 1 [3.0] |

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Goldenseal root powder

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First Dose M/F: 05/12/03 / 05/12/03

Species/Strain: MICE/B6C3F1

Lab: SRI

| B6C3F1 MICE FEMALE | 0 PPM | 3000 PPM | 9000 PPM | 25000 PPM |
|--|----------|----------|----------|-----------|
| Infiltration Cellular, Histiocyte | | | | 1 [1.0] |
| Infiltration Cellular, Lymphocyte | 7 [1.9] | 2 [2.0] | 1 [2.0] | 2 [2.0] |
| Inflammation, Suppurative | | | 1 [2.0] | |
| Inflammation, Chronic | 1 [2.0] | | | |
| Metaplasia, Osseous | 1 [1.0] | | | |
| Alveolar Epithelium, Hyperplasia | 1 [1.0] | 3 [2.0] | 2 [2.0] | |
| Nose | (50) | (50) | (50) | (50) |
| Foreign Body | | | 1 [2.0] | |
| Inflammation, Suppurative | | | 1 [2.0] | |
| Glands, Degeneration, Cystic | | | 2 [2.5] | 1 [2.0] |
| Glands, Inflammation | | | | 1 [2.0] |
| Respiratory Epithelium, Hyperplasia | | | | 1 [1.0] |
| Trachea | (50) | (50) | (49) | (50) |
| Glands, Degeneration, Cystic | | | | 1 [3.0] |
| SPECIAL SENSES SYSTEM | | | | |
| Eye | (49) | (47) | (41) | (46) |
| Atrophy | 1 [2.0] | | | |
| Cornea, Inflammation, Suppurative | 1 [3.0] | | | |
| Harderian Gland | (50) | (49) | (50) | (50) |
| Hyperplasia | | | 1 [4.0] | |
| Hyperplasia, Focal | 5 [1.8] | 2 [1.5] | 4 [1.5] | 2 [1.5] |
| Inflammation, Chronic | 1 [3.0] | | | |
| URINARY SYSTEM | | | | |
| Kidney | (50) | (49) | (50) | (50) |
| Atrophy | | 1 [4.0] | | |
| Casts Protein | 2 [1.5] | | 1 [1.0] | |
| Cyst | 1 | | | |
| Hydronephrosis | | 1 [3.0] | | |
| Infarct | | 1 [1.0] | 3 [1.7] | |
| Infiltration Cellular, Lymphocyte | 7 [2.1] | 7 [1.6] | 4 [1.8] | 9 [1.4] |
| Metaplasia, Osseous | 1 [1.0] | 1 [2.0] | 1 [2.0] | |
| Nephropathy | 13 [1.1] | 19 [1.1] | 15 [1.0] | 15 [1.1] |
| Renal Tubule, Accumulation, Hyaline Droplet | | | | 2 [2.5] |
| Renal Tubule, Dilatation | | 1 [1.0] | | |

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Route: DOSED FEED

CAS Number: GOLDENSEALRT

First Dose M/F: 05/12/03 / 05/12/03

Species/Strain: MICE/B6C3F1

Lab: SRI

| B6C3F1 MICE FEMALE | 0 PPM | 3000 PPM | 9000 PPM | 25000 PPM |
|--------------------------------------|---------|----------|----------|-----------|
| Transitional Epithelium, Hyperplasia | | 1 [3.0] | | |
| Urinary Bladder | (49) | (49) | (50) | (50) |
| Infiltration Cellular, Lymphocyte | 7 [1.7] | 6 [1.7] | 5 [1.2] | 3 [1.3] |

*** END OF REPORT ***

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