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DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Institutes of Health
National Institute of
Environmental Health Sciences
P. O. Box 12233
Research Triangle Park, NC 27709

October 02, 2002

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Dear Document Control Office:

In response to your request for information on the National Toxicology Program's (NTP) chronic Inhalation studies on STODDARD SOLVENT (TYPE IIC) (64742-88-7) we are sending you the summary pathology tables for Mice, which contain the incidence rates of neoplastic and non-neoplastic lesions data and the statistical analysis of primary tumors data pertaining to the laboratory animals. All study data are subject to an NTP retrospective audit and the interpretation may be modified based on the findings.

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These tables along with a wide variety of NTP information are also available in electronic format on the world-wide web. For example, the NTP Annual Plan, abstracts of NTP Reports, study data, and the status of all NTP studies may be viewed electronically with access to the internet and a Web browser such as Netscape Navigator or Internet Explorer.

To locate the NTP home page, use the URL http://ntp-server.niehs.nih.gov/. The NTP individual animal and summary pathology tables, survival tables, and survival and growth curves may be accessed from the NTP homepage selecting "Testing Information and Study Results" and then choosing "Data of Completed Studies". Comments on the usefulness of this site and suggestions for improvement are encouraged.

Please contact Central Data Management (CDM) at (919)541-3419 if you have any questions. You may also fax your requests for information to CDM at (919)541-3687 or send them via e-mail to cdm@niehs.nih.gov.

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Hard copies of documents such as NTP Technical Reports, short-term Toxicity Reports, and the Report on Carcinogens are available from the Environmental Health Information Service (EHIS). You can contact EHIS by phone at (919) 541-3841, by fax at (919)541-0273, or by e-mail at ehis@niehs.nih.gov.

Sincerely,

William Eastin

William Eastin, Ph.D.
Head, Information Systems & Central Files
Environmental Toxicology Program

Encls: Pathology Summary Tables for Mice
cc: Central Data Management

PATHOLOGY WORKING GROUP
CHAIRPERSON'S REPORT

TWO YEAR CHRONIC STUDY OF STODDARD SOLVENT II-C (C96001/96001-06) ADMINISTERED BY INHALATION IN B6C3F1 MICE

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DATE OF PWG: June 13, 2002

LOCATION OF REVIEW: NIEHS, Research Triangle Park, NC

PARTICIPANTS:

Drs. James Hailey (NIEHS – NTP Study Pathologist), Ronald Herbert (NIEHS), Abraham Nyska (NIEHS), Georgette Hill (NIEHS), Shelley Ching (SVC Associates, Inc), Martha Hanes (Duke University – observer), Karen Cimon (EPL), Neil Allison (EPL – QA Pathologist), Andrew Suttie (ILS – PWG Chairperson).

SUMMARY OF FINDINGS FROM THE PWG

The PWG was convened to evaluate selected H&E slides from this two-year chronic inhalation study in B6C3F1 mice exposed to Stoddard Solvent II-C. The target organs are the liver in both sexes and the skin in the prepuce/groin region in males. The following is a summary of definitive treatment-related lesions.

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- LIVER: Chronic exposure of mice to Stoddard Solvent II-C caused increased incidences hepatocellular adenomas, and eosinophilic foci in the liver of both sexes.
- SKIN: Treatment with Stoddard Solvent II-C resulted in an increased incidence chronic active inflammation in the prepuce/groin region in males.

INTRODUCTION

Stoddard solvent is a name given to mineral spirit used in dry-cleaning. The type (I-IV) depends on flash point and odor and each is divided into classes (A-C). Composition depends on the crude oil composition and the refinery processing. Stoddard solvent generally contains linear and branched alkanes (parafins), cycloalkanes, and aromatic hydrocarbons. Type II-C has a high flash point and low aromatic content. In addition to dry cleaning, its uses include solvents, paints and thinners, adhesives, inks and

photocopier toners. It is used in high volumes and there is potential for human exposure, mostly through dermal contact or inhalation.

Epidemiological studies with exposed occupational groups show increased incidence of central nervous depression, respiratory system, pancreatic and renal cancers, and glomerulonephritis.

Short term toxicity studies with Stoddard solvent II-C by inhalation resulted in hepatocytomegaly in mice after 17 days exposure, but no histopathological changes after 13-weeks.

STUDY DESIGN

In this inhalation study, Stoddard solvent II-C was administered to mice at a dose level of 0 mg/m^3, 550 mg/m^3, 1100 mg/m^3, or 2200 mg/m^3 for two years.

The doses and numbers of animals examined microscopically per group are summarized below:

Dose Group	Female	Male
0 mg/m^3	50	50
550 mg/m^3	50	50
1100 mg/m^3	50	50
2200 mg/m^3	50	50

The study was conducted at Batelle Northwest, Richland, Washington. The Study Pathologist (SP) was Dr. Sondra Grumbein. The Quality Assessment Pathologist (QAP) was Dr. Neil Allison of EPL.

STUDY RESULTS

Morbidity, Mortality, Clinical Signs, Organ Weights, Body Weight

Treatment of mice with Stoddard solvent II-C had no statistically significant effect on survival. The following table depicts the numbers of animals in each dose group surviving to terminal sacrifice:

Dose	0 ppm	550 mg/m^3	1100 mg/m^3	2200 mg/m^3
Males	34	32	27	32
Females	36	34	27	34

Bodyweights were slightly increased in exposed females compared to controls, particularly in the 1100 mg/m^3 group.

Only minor clinical observations were reported, which included eye abnormalities, and increased ulcer/abscesses in exposed males.

CONDUCT OF THE PWG

The PWG convened to review selected slides from B6C3F1 mice exposed to whole body inhalation of Stoddard Solvent II-C for two years.

Before the PWG, the chairperson reviewed the laboratory reports and the SP's pathology narratives, the summary and individual animal pathology tables, the quality assessment reports, and microslides from the studies. The PWG chairperson selected a set of slides for review by the PWG which included examples of treatment related lesions as well as slides for which there were differences of opinion in diagnosis among the SP, QAP or PWG chair. The PWG consensus opinion for each slide examined, including any additional diagnoses made by the PWG, was recorded on the PWG chairperson's worksheets attached to this report.

Histopathology

Liver

There was a treatment-related increase in multiple hepatocellular adenomas in males at 2200 mg/m^3, and in females in all exposed groups. Eosinophilic foci were increased in both males and females in all exposed groups.

There was good correlation between the diagnoses of the SP and the QAP with respect to lesions in the liver of male and female mice. The PWG reviewed all examples where there was discrepancy in diagnoses of the SP and QAP between non-neoplastic and neoplastic. In all cases a consensus diagnosis was reached by the PWG.

Small Intestine

There was a high incidence of carcinoma reported in the small intestine sites in the 550 mg/m^3 males. There were 5 in this group compared to 2 in the 2200 mg/m^3 males, and 1 each in the 550 , 1100 and 2200 mg/m^3 females. The QAP considered that one of these lesions in the 550 mg/m^3 males was inflammation rather than neoplasia. The PWG reviewed all examples originally diagnosed as carcinoma in the male mice and agreed that in the 550 mg/m^3 group, one was inflammation and another was adenoma, with four remaining as carcinoma.

Skin

The SP reported a treatment-related increase in the incidence of inflammation of the skin in male mice. This lesion was nearly always seen as a gross lesion near the prepuce or groin. Affected skin was usually ulcerated with an infiltrate of neutrophils and other inflammatory cells, with underlying granulation tissue in some. The single diagnosis "skin-inflammation, chronic active" was used for this lesion. There was general agreement between the SP and QAP on incidence of this lesion. In addition to those reported by the SP, the QAP diagnosed this lesion in two additional 2200 mg/m^3 males. The PWG reviewed two representative cases of this lesion, and the two diagnosed by the QAP. This lesion was confirmed in all animals reviewed.

Miscellaneous

The PWG reviewed several cases involving discrepancies of diagnoses between the SP, QAP and/or PWG chairperson. A consensus diagnosis was reached for all.

HISTOTECHNIQUE QUALITY

The histotechnique quality assessment indicated that the overall histological processing and slide preparation was good, with no artifacts that would interfere with the interpretation of tissue sections.

Andrew W. Suttie, BVSc, PhD, DipRCPath
PWG Chairperson

July 3, 2002
Date

NATIONAL TOXICOLOGY PROGRAM

TR-519 STODDARD SOLVENT (TYPE IIC)

Pathology Tables - Mice

P03 - Incidence Rates of Non-Neoplastic Lesions

P05 - Incidence Rates of Neoplasms by Anatomic Site (systemic lesions abridged)

P08 - Statistical Analysis of Primary Tumors

P18 - Incidence Rates of Non-Neoplastic Lesions by Anatomic Site

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
STODDARD SOLVENT (TYPE IIC)

FINAL #1 MICE

Facility: Battelle Northwest

Chemical CAS #: 64742-88-7

Lock Date: 09/25/01

Cage Range: All

Reasons For Removal: All

Removal Date Range: All

Treatment Groups: Include All

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

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
DISPOSITION SUMMARY				
Animals Initially In Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	6	11	11	10
Natural Death	8	5	12	6
Survivors				
Terminal Sacrifice	36	34	27	34
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Intestine Small, Duodenum	(43)	(45)	(44)	(47)
Infiltration Cellular, Plasma Cell			1 (2%)	
Intestine Small, Jejunum	(43)	(47)	(43)	(47)
Necrosis			1 (2%)	
Intestine Small, Ileum	(43)	(47)	(44)	(46)
Inflammation				1 (2%)
Liver	(50)	(50)	(50)	(50)
Angiectasis	1 (2%)	1 (2%)		
Basophilic Focus	4 (8%)	5 (10%)	8 (16%)	4 (8%)
Clear Cell Focus	4 (8%)		2 (4%)	2 (4%)
Eosinophilic Focus	4 (8%)	9 (18%)	6 (12%)	11 (22%)
Fatty Change		2 (4%)	2 (4%)	
Hematopoietic Cell Proliferation		1 (2%)		
Infarct	1 (2%)			
Inflammation, Granulomatous		1 (2%)		
Inflammation, Suppurative				1 (2%)
Mixed Cell Focus			1 (2%)	1 (2%)
Necrosis	3 (6%)	3 (6%)	1 (2%)	
Parasite Metazoan		1 (2%)		
Tension Lipidosis	2 (4%)		1 (2%)	2 (4%)
Centrilobular, Necrosis	1 (2%)	2 (4%)		
Mesentery	(4)	(15)	(21)	(11)
Artery, Mineralization		1 (7%)		
Fat, Hemorrhage		1 (7%)	1 (5%)	1 (9%)
Fat, Necrosis	3 (75%)	10 (67%)	15 (71%)	9 (82%)
Pancreas	(49)	(50)	(48)	(49)
Atrophy		2 (4%)		
Atypia Cellular	1 (2%)			
Inflammation, Suppurative				1 (2%)
Lipomatosis			1 (2%)	1 (2%)

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

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
ALIMENTARY SYSTEM - CONT				
Acinus, Hypertrophy				1 (2%)
Duct, Cyst		2 (4%)		1 (2%)
Salivary Glands	(50)	(49)	(49)	(50)
Atrophy		1 (2%)	1 (2%)	
Stomach, Forestomach	(49)	(50)	(49)	(50)
Hyperplasia, Squamous	2 (4%)	2 (4%)	1 (2%)	1 (2%)
Inflammation, Chronic Active		2 (4%)	1 (2%)	
Ulcer	1 (2%)		1 (2%)	
Stomach, Glandular	(47)	(49)	(47)	(47)
Amyloid Deposition			1 (2%)	
Mineralization		1 (2%)	1 (2%)	1 (2%)
Necrosis		1 (2%)	1 (2%)	3 (6%)
CARDIOVASCULAR SYSTEM				
Blood Vessel	(1)			(2)
Aorta, Mineralization	1 (100%)			2 (100%)
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	6 (12%)	6 (12%)	6 (12%)	9 (18%)
Mineralization	3 (6%)	4 (8%)		4 (8%)
Thrombosis	2 (4%)			
Artery, Inflammation	1 (2%)		1 (2%)	
ENDOCRINE SYSTEM				
Adrenal Cortex	(50)	(50)	(49)	(50)
Hematopoietic Cell Proliferation		1 (2%)		
Hyperplasia	4 (8%)	3 (6%)	3 (6%)	6 (12%)
Hypertrophy	2 (4%)	3 (6%)	2 (4%)	3 (6%)
Necrosis			1 (2%)	
Vacuolization Cytoplasmic	1 (2%)			
Adrenal Medulla	(49)	(50)	(48)	(49)
Hyperplasia	2 (4%)	3 (6%)	4 (8%)	2 (4%)
Islets, Pancreatic	(49)	(50)	(48)	(48)
Hyperplasia	1 (2%)	1 (2%)		
Pituitary Gland	(47)	(49)	(49)	(48)
Angiectasis	1 (2%)			
Pars Distalis, Hyperplasia	10 (21%)	12 (24%)	16 (33%)	16 (33%)
Pars Intermedia, Hypertrophy			1 (2%)	
Thyroid Gland	(50)	(49)	(47)	(48)
Inflammation, Chronic	1 (2%)			

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

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
ENDOCRINE SYSTEM - CONT				
Follicular Cell, Hyperplasia		2 (4%)	1 (2%)	3 (6%)
GENERAL BODY SYSTEM				
Peritoneum		(1)		
Inflammation, Acute		1 (100%)		
GENITAL SYSTEM				
Clitoral Gland	(40)	(42)	(47)	(41)
Fibrosis		1 (2%)		
Ovary	(49)	(50)	(48)	(49)
Angiectasis	2 (4%)			
Cyst	12 (24%)	12 (24%)	9 (19%)	6 (12%)
Uterus	(49)	(50)	(49)	(49)
Angiectasis	1 (2%)			
Inflammation, Suppurative				1 (2%)
Endometrium, Hyperplasia, Cystic	5 (10%)	3 (6%)	9 (18%)	8 (16%)
HEMATOPOIETIC SYSTEM				
Bone Marrow	(49)	(49)	(48)	(50)
Atrophy		1 (2%)	1 (2%)	
Cytoplasmic Alteration, Focal		1 (2%)		
Hyperplasia				1 (2%)
Lymph Node	(5)	(7)	(9)	(10)
Angiectasis				1 (10%)
Iliac, Angiectasis				2 (20%)
Renal, Angiectasis	1 (20%)	2 (29%)	1 (11%)	1 (10%)
Renal, Ectasia			1 (11%)	
Lymph Node, Mandibular	(42)	(32)	(40)	(40)
Infiltration Cellular, Plasma Cell				1 (3%)
Lymph Node, Mesenteric	(47)	(49)	(47)	(50)
Angiectasis		1 (2%)		1 (2%)
Lymph Node, Mediastinal	(40)	(42)	(43)	(43)
Infiltration Cellular, Polymorphonuclear		1 (2%)		
Spleen	(49)	(50)	(48)	(47)
Angiectasis			1 (2%)	1 (2%)
Congestion		1 (2%)		
Hematopoietic Cell Proliferation	2 (4%)	8 (16%)	5 (10%)	3 (6%)

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

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
HEMATOPOIETIC SYSTEM - CONT				
Hyperplasia, Lymphoid	1 (2%)	1 (2%)		1 (2%)
Necrosis	1 (2%)			
Thymus	(43)	(45)	(47)	(46)
Atrophy			2 (4%)	
INTEGUMENTARY SYSTEM				
Skin	(50)	(50)	(50)	(50)
Infiltration Cellular, Mixed Cell	1 (2%)		1 (2%)	
Inflammation, Chronic Active	1 (2%)		1 (2%)	1 (2%)
Subcutaneous Tissue, Cyst Epithelial Inclusion	1 (2%)			
Subcutaneous Tissue, Edema		1 (2%)		1 (2%)
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Fracture		1 (2%)	1 (2%)	
Skeletal Muscle	(1)	(1)	(1)	(2)
Hemorrhage		1 (100%)		
Inflammation, Suppurative				1 (50%)
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Compression		1 (2%)		
Necrosis		1 (2%)	1 (2%)	
Artery, Inflammation	1 (2%)			
Meninges, Infiltration Cellular, Mononuclear Cell	6 (12%)	2 (4%)	2 (4%)	3 (6%)
Peripheral Nerve			(1)	(1)
Inflammation, Suppurative				1 (100%)
RESPIRATORY SYSTEM				
Larynx	(50)	(50)	(50)	(50)
Artery, Inflammation			1 (2%)	
Lung	(50)	(50)	(50)	(50)
Hemorrhage	1 (2%)			

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

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
RESPIRATORY SYSTEM - CONT				
Alveolar Epithelium, Hyperplasia	1 (2%)	3 (6%)	1 (2%)	3 (6%)
Alveolus, Infiltration Cellular, Histiocyte			1 (2%)	1 (2%)
Nose	(49)	(50)	(50)	(49)
Inflammation, Suppurative		1 (2%)	1 (2%)	1 (2%)
Respiratory Epithelium, Degeneration		1 (2%)		
Trachea	(49)	(50)	(49)	(47)
Artery, Inflammation	1 (2%)			
SPECIAL SENSES SYSTEM				
Eye	(46)	(49)	(45)	(46)
Cataract	1 (2%)	2 (4%)	2 (4%)	
Inflammation, Chronic	1 (2%)			
Cornea, Inflammation, Chronic Active		1 (2%)	1 (2%)	2 (4%)
Harderian Gland	(49)	(49)	(49)	(49)
Hyperplasia	4 (8%)	3 (6%)	4 (8%)	7 (14%)
Infiltration Cellular			1 (2%)	
Inflammation, Granulomatous	1 (2%)			
URINARY SYSTEM				
Kidney	(50)	(50)	(49)	(49)
Amyloid Deposition		1 (2%)		
Cyst	1 (2%)			
Infarct	1 (2%)			
Inflammation, Suppurative				1 (2%)
Metaplasia, Osseous		2 (4%)	1 (2%)	2 (4%)
Mineralization	1 (2%)	1 (2%)		2 (4%)
Nephropathy	39 (78%)	32 (64%)	33 (67%)	40 (82%)
Capsule, Fibrosis	1 (2%)			
Papilla, Necrosis				1 (2%)
Pelvis, Dilatation		1 (2%)		
Renal Tubule, Karyomegaly		1 (2%)		
Renal Tubule, Necrosis				1 (2%)
Urinary Bladder	(48)	(50)	(49)	(48)
Inflammation, Suppurative				1 (2%)

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

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
DISPOSITION SUMMARY				
Animals Initially In Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	7	9	16	13
Natural Death	9	9	6	5
Accidently Killed			1	
Survivors				
Terminal Sacrifice	34	32	27	32
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Gallbladder	(39)	(36)	(41)	(43)
Degeneration, Hyaline		1 (3%)		
Hyperplasia	1 (3%)			
Infiltration Cellular, Mixed Cell	1 (3%)			
Inflammation, Chronic Active		1 (3%)		
Intestine Large, Cecum	(45)	(41)	(46)	(47)
Hemorrhage	1 (2%)			1 (2%)
Intestine Small, Duodenum	(46)	(41)	(46)	(47)
Inflammation, Chronic Active			1 (2%)	
Intestine Small, Jejunum	(46)	(41)	(46)	(47)
Serosa, Inflammation, Granulomatous	1 (2%)			
Intestine Small, Ileum	(45)	(41)	(46)	(47)
Infiltration Cellular, Plasma Cell			1 (2%)	
Inflammation		1 (2%)		
Liver	(50)	(50)	(50)	(50)
Amyloid Deposition	1 (2%)			
Basophilic Focus	9 (18%)	13 (26%)	17 (34%)	11 (22%)
Clear Cell Focus	13 (26%)	11 (22%)	15 (30%)	10 (20%)
Eosinophilic Focus	5 (10%)	7 (14%)	14 (28%)	9 (18%)
Fatty Change	1 (2%)		1 (2%)	
Infarct	1 (2%)			1 (2%)
Inflammation, Chronic				1 (2%)
Mitotic Alteration		1 (2%)		
Mixed Cell Focus	2 (4%)	1 (2%)		1 (2%)
Necrosis	4 (8%)	4 (8%)	2 (4%)	4 (8%)
Tension Lipidosis	2 (4%)	3 (6%)	1 (2%)	2 (4%)
Bile Duct, Cyst				1 (2%)
Centrilobular, Necrosis	1 (2%)			1 (2%)
Mesentery	(6)	(6)	(7)	(5)

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

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
ALIMENTARY SYSTEM - CONT				
Artery, Inflammation	1 (17%)		1 (14%)	
Fat, Hemorrhage		1 (17%)		
Fat, Necrosis	4 (67%)	5 (83%)	5 (71%)	5 (100%)
Pancreas	(49)	(49)	(49)	(50)
Atrophy	1 (2%)	1 (2%)		
Salivary Glands	(50)	(50)	(49)	(50)
Atrophy			1 (2%)	
Stomach, Forestomach	(49)	(48)	(49)	(49)
Hyperplasia, Squamous	5 (10%)	3 (6%)		4 (8%)
Inflammation, Chronic Active	5 (10%)	1 (2%)		2 (4%)
Ulcer	2 (4%)	1 (2%)		2 (4%)
Stomach, Glandular	(48)	(44)	(49)	(48)
Degeneration, Hyaline				1 (2%)
Hyperplasia		1 (2%)		
Mineralization	2 (4%)	1 (2%)		
Necrosis	2 (4%)		1 (2%)	1 (2%)
Vacuolization Cytoplasmic			1 (2%)	
Tongue				(1)
Mineralization				1 (100%)
Tooth	(19)	(16)	(21)	(17)
Malformation				1 (6%)
CARDIOVASCULAR SYSTEM				
Blood Vessel			(1)	(1)
Aorta, Mineralization			1 (100%)	
Heart	(50)	(50)	(50)	(50)
Amyloid Deposition	1 (2%)			
Angiectasis		1 (2%)		
Cardiomyopathy	15 (30%)	12 (24%)	21 (42%)	19 (38%)
Infiltration Cellular, Polymorphonuclear			1 (2%)	
Mineralization	1 (2%)	2 (4%)	2 (4%)	1 (2%)
Thrombosis		1 (2%)	1 (2%)	1 (2%)
Artery, Inflammation			1 (2%)	
Capillary, Endothelium, Hyperplasia		1 (2%)		
ENDOCRINE SYSTEM				
Adrenal Cortex	(49)	(50)	(49)	(50)
Atrophy			1 (2%)	
Hyperplasia	13 (27%)	10 (20%)	7 (14%)	15 (30%)

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

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
ENDOCRINE SYSTEM - CONT				
Hypertrophy	30 (61%)	29 (58%)	20 (41%)	20 (40%)
Adrenal Medulla	(48)	(49)	(49)	(50)
Hyperplasia	3 (6%)	4 (8%)	3 (6%)	1 (2%)
Islets, Pancreatic	(48)	(49)	(49)	(50)
Hyperplasia		1 (2%)	1 (2%)	
Pituitary Gland	(49)	(49)	(48)	(46)
Pars Distalis, Hyperplasia	2 (4%)		2 (4%)	2 (4%)
Pars Intermedia, Hyperplasia				1 (2%)
Thyroid Gland	(49)	(48)	(47)	(50)
Follicular Cell, Hyperplasia	3 (6%)	2 (4%)	3 (6%)	2 (4%)
GENERAL BODY SYSTEM				
Peritoneum	(1)	(1)	(1)	
Inflammation, Suppurative	1 (100%)			
GENITAL SYSTEM				
Coagulating Gland			(2)	
Hyperplasia			1 (50%)	
Epididymis	(50)	(50)	(50)	(50)
Granuloma Sperm	3 (6%)		3 (6%)	2 (4%)
Infiltration Cellular, Mononuclear Cell				1 (2%)
Penis		(3)		(1)
Inflammation, Acute		2 (67%)		1 (100%)
Preputial Gland	(49)	(49)	(50)	(48)
Ectasia	1 (2%)			
Inflammation, Chronic Active	2 (4%)	3 (6%)	2 (4%)	1 (2%)
Prostate	(46)	(50)	(50)	(50)
Inflammation, Suppurative	1 (2%)	1 (2%)		1 (2%)
Artery, Inflammation			1 (2%)	
Seminal Vesicle	(48)	(46)	(50)	(48)
Amyloid Deposition				1 (2%)
Infiltration Cellular, Mononuclear Cell		1 (2%)		
Inflammation, Chronic		1 (2%)		
Inflammation, Suppurative		1 (2%)		
Testes	(50)	(50)	(50)	(50)
Atrophy	2 (4%)	1 (2%)	1 (2%)	2 (4%)
Mineralization		1 (2%)		
Germinal Epithelium, Degeneration	1 (2%)			
Interstitial Cell, Hyperplasia	2 (4%)			

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

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
HEMATOPOIETIC SYSTEM				
Lymph Node	(1)		(1)	(3)
Deep Cervical, Hyperplasia, Lymphoid				1 (33%)
Lumbar, Infiltration Cellular, Plasma Cell				2 (67%)
Lymph Node, Mesenteric	(48)	(46)	(48)	(48)
Angiectasis			1 (2%)	
Hyperplasia, Lymphoid				1 (2%)
Infiltration Cellular, Plasma Cell			1 (2%)	
Lymph Node, Mediastinal	(39)	(40)	(36)	(43)
Infiltration Cellular, Plasma Cell				1 (2%)
Spleen	(49)	(49)	(49)	(50)
Amyloid Deposition	1 (2%)			
Angiectasis			1 (2%)	
Hematopoietic Cell Proliferation		3 (6%)	3 (6%)	2 (4%)
Thymus	(41)	(39)	(40)	(42)
Cyst	1 (2%)			
INTEGUMENTARY SYSTEM				
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion	1 (2%)			
Infiltration Cellular, Mixed Cell	1 (2%)			
Inflammation, Chronic Active	6 (12%)	7 (14%)	11 (22%)	18 (36%)
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Intervertebral Disc, Necrosis			1 (2%)	
Skeletal Muscle				(1)
Inflammation, Suppurative				1 (100%)
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Inflammation, Granulomatous			1 (2%)	
Meninges, Infiltration Cellular, Mononuclear Cell			1 (2%)	
Spinal Cord				(1)
Degeneration				1 (100%)

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

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
RESPIRATORY SYSTEM				
Lung	(50)	(49)	(50)	(50)
Fibrosis			1 (2%)	
Hemorrhage	1 (2%)	1 (2%)	2 (4%)	
Inflammation, Chronic Active				1 (2%)
Thrombosis	1 (2%)		1 (2%)	
Alveolar Epithelium, Hyperplasia		4 (8%)		2 (4%)
Alveolus, Infiltration Cellular, Histiocyte	2 (4%)	1 (2%)	3 (6%)	1 (2%)
Bronchiole, Hyperplasia	2 (4%)			
Mediastinum, Thrombosis		1 (2%)		
Nose	(50)	(48)	(50)	(50)
Inflammation, Suppurative	3 (6%)	2 (4%)	1 (2%)	2 (4%)
Polyp, Inflammatory	1 (2%)		1 (2%)	
Olfactory Epithelium, Atrophy	3 (6%)	1 (2%)	2 (4%)	
Olfactory Epithelium, Inflammation, Granulomatous			1 (2%)	
SPECIAL SENSES SYSTEM				
Eye	(46)	(46)	(47)	(46)
Cornea, Inflammation, Chronic Active		3 (7%)	1 (2%)	1 (2%)
Harderian Gland	(50)	(50)	(50)	(49)
Hyperplasia	3 (6%)	4 (8%)	1 (2%)	1 (2%)
Zymbal's Gland	(1)			(1)
Cyst	1 (100%)			
URINARY SYSTEM				
Kidney	(50)	(50)	(49)	(50)
Amyloid Deposition	1 (2%)			
Cyst	3 (6%)	1 (2%)	3 (6%)	1 (2%)
Inflammation, Granulomatous			1 (2%)	
Inflammation, Suppurative	1 (2%)		2 (4%)	2 (4%)
Metaplasia, Osseous	3 (6%)	4 (8%)		2 (4%)
Nephropathy	44 (88%)	43 (86%)	42 (86%)	44 (88%)
Capsule, Fibrosis	1 (2%)			1 (2%)
Papilla, Necrosis		1 (2%)	1 (2%)	
Pelvis, Dilatation		1 (2%)		2 (4%)
Renal Tubule, Hyperplasia	2 (4%)	1 (2%)		
Renal Tubule, Necrosis		2 (4%)		

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

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
URINARY SYSTEM - CONT				
Transitional Epithelium, Hyperplasia			1 (2%)	2 (4%)
Urinary Bladder	(49)	(46)	(49)	(50)
Infiltration Cellular, Mixed Cell		1 (2%)	1 (2%)	
Inflammation, Acute			1 (2%)	
Inflammation, Chronic Active	1 (2%)		1 (2%)	2 (4%)
Transitional Epithelium, Hyperplasia	1 (2%)		1 (2%)	1 (2%)

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

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---------- END OF REPORT ----------

FINAL #1 MICE

Facility: Battelle Northwest

Chemical CAS #: 64742-88-7

Lock Date: 09/25/01

Cage Range: All

Reasons For Removal: All

Removal Date Range: All

Treatment Groups: Include All

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2002 OCT -8 AM 11:43

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

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
DISPOSITION SUMMARY				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	6	11	11	10
Natural Death	8	5	12	6
Survivors				
Terminal Sacrifice	36	34	27	34
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Gallbladder	(40)	(43)	(32)	(45)
Hepatocholangiocarcinoma, Metastatic, Liver				1 (2%)
Intestine Large, Rectum	(44)	(48)	(44)	(47)
Intestine Large, Cecum	(43)	(47)	(44)	(46)
Leiomyosarcoma	1 (2%)			
Intestine Small, Duodenum	(43)	(45)	(44)	(47)
Carcinoma				1 (2%)
Intestine Small, Jejunum	(43)	(47)	(43)	(47)
Carcinoma		1 (2%)		
Intestine Small, Ileum	(43)	(47)	(44)	(46)
Carcinoma			1 (2%)	
Liver	(50)	(50)	(50)	(50)
Hemangiosarcoma		1 (2%)		1 (2%)
Hepatocellular Carcinoma	4 (8%)	7 (14%)	4 (8%)	6 (12%)
Hepatocellular Carcinoma, Multiple	2 (4%)		1 (2%)	
Hepatocellular Adenoma	9 (18%)	9 (18%)	11 (22%)	11 (22%)
Hepatocellular Adenoma, Multiple		3 (6%)	4 (8%)	7 (14%)
Hepatocholangiocarcinoma		2 (4%)		
Hepatocholangiocarcinoma, Multiple				1 (2%)
Histiocytic Sarcoma	1 (2%)	2 (4%)	1 (2%)	2 (4%)
Sarcoma, Metastatic, Skin			1 (2%)	
Mesentery	(4)	(15)	(21)	(11)
Carcinoma, Metastatic, Intestine Small, Ileum			1 (5%)	
Hepatocholangiocarcinoma, Metastatic, Liver				1 (9%)
Histiocytic Sarcoma				1 (9%)
Sarcoma		1 (7%)		
Sarcoma, Metastatic, Skin			2 (10%)	
Oral Mucosa	(1)			
Pharyngeal, Squamous Cell Carcinoma	1 (100%)			

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
ALIMENTARY SYSTEM - cont				
Pancreas	(49)	(50)	(48)	(49)
Carcinoma, Metastatic, Intestine Small, Ileum			1 (2%)	
Hepatocholangiocarcinoma, Metastatic, Liver				1 (2%)
Sarcoma, Metastatic, Skin			1 (2%)	
Salivary Glands	(50)	(49)	(49)	(50)
Stomach, Forestomach	(49)	(50)	(49)	(50)
Hepatocholangiocarcinoma, Metastatic, Liver				1 (2%)
Squamous Cell Papilloma			1 (2%)	1 (2%)
Stomach, Glandular	(47)	(49)	(47)	(47)
Adenoma	1 (2%)			1 (2%)
Hepatocholangiocarcinoma, Metastatic, Liver				1 (2%)
Sarcoma, Metastatic, Skin			1 (2%)	
CARDIOVASCULAR SYSTEM				
Heart	(50)	(50)	(50)	(50)
Carcinoma, Metastatic, Intestine Small, Ileum			1 (2%)	
Histiocytic Sarcoma				1 (2%)
ENDOCRINE SYSTEM				
Adrenal Cortex	(50)	(50)	(49)	(50)
Carcinoma, Metastatic, Intestine Small, Ileum			1 (2%)	
Hepatocholangiocarcinoma, Metastatic, Liver				1 (2%)
Histiocytic Sarcoma	1 (2%)	1 (2%)	1 (2%)	1 (2%)
Subcapsular, Adenoma	1 (2%)	1 (2%)		
Adrenal Medulla	(49)	(50)	(48)	(49)
Histiocytic Sarcoma	1 (2%)		1 (2%)	
Pheochromocytoma Malignant	1 (2%)			
Pheochromocytoma Benign	1 (2%)			1 (2%)
Islets, Pancreatic	(49)	(50)	(48)	(48)
Adenoma	1 (2%)	1 (2%)		
Pituitary Gland	(47)	(49)	(49)	(48)
Pars Distalis, Adenoma	10 (21%)	8 (16%)	10 (20%)	10 (21%)
Pars Distalis, Carcinoma		1 (2%)		
Pars Intermedia, Adenoma		1 (2%)		
Thyroid Gland	(50)	(49)	(47)	(48)
Follicular Cell, Adenoma	2 (4%)			
Follicular Cell, Carcinoma		1 (2%)		

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
GENERAL BODY SYSTEM				
None				
GENITAL SYSTEM				
Clitoral Gland	(40)	(42)	(47)	(41)
Carcinoma				1 (2%)
Ovary	(49)	(50)	(48)	(49)
Carcinoma		1 (2%)		
Cystadenoma	1 (2%)	2 (4%)	1 (2%)	1 (2%)
Granulosa Cell Tumor Benign		1 (2%)		
Granulosa-Theca Tumor Benign			1 (2%)	
Hemangioma	1 (2%)		1 (2%)	
Histiocytic Sarcoma	2 (4%)	2 (4%)		1 (2%)
Sarcoma, Metastatic, Skin			2 (4%)	
Teratoma Benign	1 (2%)			
Uterus	(49)	(50)	(49)	(49)
Adenoma		1 (2%)		
Carcinoma		1 (2%)		
Hemangiosarcoma		1 (2%)		
Histiocytic Sarcoma		2 (4%)		1 (2%)
Polyp Stromal	2 (4%)			1 (2%)
Sarcoma Stromal	1 (2%)			
Sarcoma Stromal, Multiple		1 (2%)		
HEMATOPOIETIC SYSTEM				
Bone Marrow	(49)	(49)	(48)	(50)
Hemangiosarcoma		1 (2%)		1 (2%)
Histiocytic Sarcoma	2 (4%)	1 (2%)	1 (2%)	1 (2%)
Lymph Node	(5)	(7)	(9)	(10)
Lumbar, Hemangiosarcoma, Metastatic, Spleen				1 (10%)
Lumbar, Histiocytic Sarcoma	1 (20%)			
Lumbar, Sarcoma Stromal, Metastatic, Uterus		1 (14%)		
Renal, Histiocytic Sarcoma	1 (20%)	1 (14%)		
Lymph Node, Bronchial	(41)	(37)	(40)	(42)
Carcinoma, Metastatic, Intestine Small, Ileum			1 (3%)	
Hepatocholangiocarcinoma, Metastatic, Liver		1 (3%)		1 (2%)
Histiocytic Sarcoma		1 (3%)	1 (3%)	1 (2%)
Lymph Node, Mandibular	(42)	(32)	(40)	(40)

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
HEMATOPOIETIC SYSTEM - cont				
Histiocytic Sarcoma	2 (5%)	1 (3%)		1 (3%)
Lymph Node, Mesenteric	(47)	(49)	(47)	(50)
Carcinoma, Metastatic, Uterus		1 (2%)		
Carcinoma, Metastatic, Intestine Small, Ileum			1 (2%)	
Hepatocholangiocarcinoma, Metastatic, Liver				1 (2%)
Histiocytic Sarcoma	2 (4%)	1 (2%)	1 (2%)	2 (4%)
Sarcoma, Metastatic, Skin			1 (2%)	
Lymph Node, Mediastinal	(40)	(42)	(43)	(43)
Carcinoma, Metastatic, Intestine Small, Ileum			1 (2%)	
Hemangioma		1 (2%)		
Hepatocholangiocarcinoma, Metastatic, Liver				1 (2%)
Histiocytic Sarcoma	2 (5%)	1 (2%)		2 (5%)
Spleen	(49)	(50)	(48)	(47)
Hemangiosarcoma	1 (2%)			1 (2%)
Histiocytic Sarcoma	2 (4%)		1 (2%)	1 (2%)
Thymus	(43)	(45)	(47)	(46)
Carcinoma, Metastatic, Intestine Small, Ileum			1 (2%)	
Hepatocholangiocarcinoma, Metastatic, Liver		1 (2%)		1 (2%)
Histiocytic Sarcoma	1 (2%)	1 (2%)		1 (2%)
INTEGUMENTARY SYSTEM				
Mammary Gland	(50)	(50)	(50)	(50)
Carcinoma		1 (2%)		1 (2%)
Skin	(50)	(50)	(50)	(50)
Basosquamous Tumor Malignant				1 (2%)
Squamous Cell Papilloma	1 (2%)			
Sebaceous Gland, Adenoma	1 (2%)			
Subcutaneous Tissue, Hemangioma				1 (2%)
Subcutaneous Tissue, Hemangiosarcoma		1 (2%)		
Subcutaneous Tissue, Histiocytic Sarcoma	1 (2%)			1 (2%)
Subcutaneous Tissue, Sarcoma	1 (2%)		3 (6%)	2 (4%)
Subcutaneous Tissue, Sarcoma, Multiple			2 (4%)	
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Osteosarcoma	1 (2%)			
Skeletal Muscle	(1)	(1)	(1)	(2)
Hepatocholangiocarcinoma, Metastatic, Liver				1 (50%)

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Histiocytic Sarcoma	1 (2%)	1 (2%)	1 (2%)	1 (2%)
RESPIRATORY SYSTEM				
Larynx	(50)	(50)	(50)	(50)
Lung	(50)	(50)	(50)	(50)
Alveolar/Bronchiolar Adenoma	1 (2%)	2 (4%)	3 (6%)	1 (2%)
Alveolar/Bronchiolar Adenoma, Multiple	1 (2%)			
Alveolar/Bronchiolar Carcinoma				2 (4%)
Basosquamous Tumor Malignant, Metastatic, Skin				1 (2%)
Carcinoma, Metastatic, Harderian Gland	1 (2%)			
Carcinoma, Metastatic, Islets, Pancreatic		1 (2%)		
Carcinoma, Metastatic, Intestine Small, Ileum			1 (2%)	
Hepatocellular Carcinoma, Metastatic, Liver	2 (4%)	4 (8%)	1 (2%)	3 (6%)
Hepatocholangiocarcinoma, Metastatic, Liver		1 (2%)		1 (2%)
Histiocytic Sarcoma	1 (2%)	2 (4%)	1 (2%)	2 (4%)
Pheochromocytoma Malignant, Metastatic, Adrenal Medulla	1 (2%)			
Sarcoma, Metastatic, Skin			1 (2%)	
Nose	(49)	(50)	(50)	(49)
Carcinoma, Metastatic, Harderian Gland	1 (2%)			
Histiocytic Sarcoma				1 (2%)
Sarcoma	1 (2%)			
Pleura		(1)	(1)	
Carcinoma, Metastatic, Intestine Small, Ileum			1 (100%)	
Hepatocholangiocarcinoma, Metastatic, Liver		1 (100%)		
SPECIAL SENSES SYSTEM				
Eye	(46)	(49)	(45)	(46)
Carcinoma, Metastatic, Harderian Gland	1 (2%)			
Histiocytic Sarcoma		1 (2%)		1 (2%)
Sarcoma	1 (2%)			
Harderian Gland	(49)	(49)	(49)	(49)
Adenoma	4 (8%)	2 (4%)	4 (8%)	3 (6%)
Carcinoma	1 (2%)	1 (2%)	1 (2%)	
Histiocytic Sarcoma		1 (2%)		

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
SPECIAL SENSES SYSTEM - cont				
Bilateral, Adenoma			2 (4%)	
URINARY SYSTEM				
Kidney	(50)	(50)	(49)	(49)
Carcinoma, Metastatic, Intestine Small, Ileum			1 (2%)	
Hepatocholangiocarcinoma, Metastatic, Liver				1 (2%)
Histiocytic Sarcoma	1 (2%)	1 (2%)	1 (2%)	2 (4%)
Urinary Bladder	(48)	(50)	(49)	(48)
Hepatocholangiocarcinoma, Metastatic, Liver				1 (2%)
Histiocytic Sarcoma		2 (4%)		
SYSTEMIC LESIONS				
Multiple Organs	*(50)	*(50)	*(50)	*(50)
Histiocytic Sarcoma	2 (4%)	2 (4%)	1 (2%)	2 (4%)
Lymphoma Malignant	5 (10%)	9 (18%)	11 (22%)	8 (16%)

* Number of animals with any tissue examined microscopically

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
TUMOR SUMMARY				
Total Animals with Primary Neoplasms (b)	39	41	41	39
Total Primary Neoplasms	61	65	62	66
Total Animals with Benign Neoplasms	27	24	30	27
Total Benign Neoplasms	38	32	38	38
Total Animals with Malignant Neoplasms	19	26	23	23
Total Malignant Neoplasms	23	33	24	28
Total Animals with Metastatic Neoplasms	4	8	4	6
Total Metastatic Neoplasm	6	11	21	19
Total Animals with Malignant Neoplasms Uncertain Primary Site				
Total Animals with Neoplasms Uncertain-Benign or Malignant				
Total Uncertain Neoplasms				

a Number of animals examined microscopically at site and number of animals with lesion
b Primary tumors: all tumors except metastatic tumors

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
DISPOSITION SUMMARY				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	7	9	16	13
Natural Death	9	9	6	5
Accidently Killed			1	
Survivors				
Terminal Sacrifice	34	32	27	32
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Intestine Small, Duodenum	(46)	(41)	(46)	(47)
Sarcoma, Metastatic, Skin	1 (2%)			
Intestine Small, Jejunum	(46)	(41)	(46)	(47)
Carcinoma		3 (7%)		
Sarcoma, Metastatic, Skin	1 (2%)			
Intestine Small, Ileum	(45)	(41)	(46)	(47)
Adenoma		1 (2%)		
Carcinoma				2 (4%)
Liver	(50)	(50)	(50)	(50)
Hemangioma	1 (2%)			
Hemangiosarcoma		1 (2%)	3 (6%)	
Hepatoblastoma				1 (2%)
Hepatocellular Carcinoma	10 (20%)	11 (22%)	12 (24%)	9 (18%)
Hepatocellular Carcinoma, Multiple	6 (12%)	4 (8%)	5 (10%)	1 (2%)
Hepatocellular Adenoma	13 (26%)	16 (32%)	14 (28%)	11 (22%)
Hepatocellular Adenoma, Multiple	10 (20%)	12 (24%)	7 (14%)	18 (36%)
Histiocytic Sarcoma		1 (2%)	1 (2%)	
Ito Cell Tumor Benign		1 (2%)		
Sarcoma		1 (2%)		
Sarcoma, Metastatic, Skin	1 (2%)			
Mesentery	(6)	(6)	(7)	(5)
Sarcoma, Metastatic, Skin	1 (17%)			
Pancreas	(49)	(49)	(49)	(50)
Sarcoma		1 (2%)		
Sarcoma, Metastatic, Skin	1 (2%)			
Stomach, Forestomach	(49)	(48)	(49)	(49)
Sarcoma, Metastatic, Skin	1 (2%)			
Squamous Cell Carcinoma				1 (2%)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
ALIMENTARY SYSTEM - cont				
Squamous Cell Papilloma			2 (4%)	1 (2%)
Stomach, Glandular	(48)	(44)	(49)	(48)
CARDIOVASCULAR SYSTEM				
Heart	(50)	(50)	(50)	(50)
ENDOCRINE SYSTEM				
Adrenal Cortex	(49)	(50)	(49)	(50)
Adenoma	1 (2%)			
Carcinoma, Metastatic, Parathyroid Gland				1 (2%)
Hepatocellular Carcinoma, Metastatic, Liver			1 (2%)	
Histiocytic Sarcoma		1 (2%)		
Bilateral, Subcapsular, Adenoma		1 (2%)		
Subcapsular, Adenoma	3 (6%)	2 (4%)	1 (2%)	1 (2%)
Subcapsular, Carcinoma			1 (2%)	
Adrenal Medulla	(48)	(49)	(49)	(50)
Hepatocellular Carcinoma, Metastatic, Liver			1 (2%)	
Islets, Pancreatic	(48)	(49)	(49)	(50)
Adenoma			1 (2%)	1 (2%)
Pituitary Gland	(49)	(49)	(48)	(46)
Thyroid Gland	(49)	(48)	(47)	(50)
C-Cell, Carcinoma				1 (2%)
Follicular Cell, Adenoma	1 (2%)			
GENERAL BODY SYSTEM				
Peritoneum	(1)	(1)	(1)	
Histiocytic Sarcoma			1 (100%)	
Sarcoma		1 (100%)		
GENITAL SYSTEM				
Coagulating Gland			(2)	
Adenoma			1 (50%)	
Epididymis	(50)	(50)	(50)	(50)
Histiocytic Sarcoma			1 (2%)	
Preputial Gland	(49)	(49)	(50)	(48)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
GENITAL SYSTEM - cont				
Histiocytic Sarcoma			1 (2%)	
Prostate	(46)	(50)	(50)	(50)
Seminal Vesicle	(48)	(46)	(50)	(48)
Histiocytic Sarcoma			1 (2%)	
Sarcoma, Metastatic, Skin	1 (2%)			
Testes	(50)	(50)	(50)	(50)
Interstitial Cell, Adenoma	1 (2%)	2 (4%)		2 (4%)
HEMATOPOIETIC SYSTEM				
Bone Marrow	(49)	(50)	(49)	(50)
Hemangiosarcoma			1 (2%)	
Lymph Node	(1)		(1)	(3)
Pancreatic, Hepatocellular Carcinoma, Metastatic, Liver			1 (100%)	
Lymph Node, Bronchial	(38)	(32)	(28)	(28)
Hemangiosarcoma	1 (3%)			
Hepatocellular Carcinoma, Metastatic, Liver				1 (4%)
Histiocytic Sarcoma		1 (3%)		
Lymph Node, Mandibular	(29)	(26)	(26)	(36)
Lymph Node, Mesenteric	(48)	(46)	(48)	(48)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung				1 (2%)
Sarcoma		1 (2%)		
Lymph Node, Mediastinal	(39)	(40)	(36)	(43)
Hemangiosarcoma	1 (3%)			
Hepatocellular Carcinoma, Metastatic, Liver	1 (3%)			1 (2%)
Histiocytic Sarcoma		1 (3%)		
Sarcoma, Metastatic, Skin	1 (3%)			
Spleen	(49)	(49)	(49)	(50)
Hemangiosarcoma				1 (2%)
Sarcoma, Metastatic, Skin	1 (2%)			
Thymus	(41)	(39)	(40)	(42)
INTEGUMENTARY SYSTEM				
Skin	(50)	(50)	(50)	(50)
Melanoma Malignant	1 (2%)			1 (2%)
Squamous Cell Papilloma		1 (2%)		
Subcutaneous Tissue, Fibrous Histiocytoma				1 (2%)
Subcutaneous Tissue, Hemangiosarcoma			2 (4%)	1 (2%)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
INTEGUMENTARY SYSTEM - cont				
Subcutaneous Tissue, Sarcoma	1 (2%)			
MUSCULOSKELETAL SYSTEM				
None				
NERVOUS SYSTEM				
None				
RESPIRATORY SYSTEM				
Lung	(50)	(49)	(50)	(50)
Alveolar/Bronchiolar Adenoma	5 (10%)	2 (4%)	3 (6%)	1 (2%)
Alveolar/Bronchiolar Adenoma, Multiple	1 (2%)			
Alveolar/Bronchiolar Carcinoma	5 (10%)	2 (4%)	4 (8%)	5 (10%)
Alveolar/Bronchiolar Carcinoma, Multiple	2 (4%)			
Carcinoma, Metastatic, Harderian Gland		1 (2%)	1 (2%)	
Carcinoma, Metastatic, Parathyroid Gland				1 (2%)
Hepatocellular Carcinoma, Metastatic, Liver	6 (12%)	6 (12%)	9 (18%)	3 (6%)
Histiocytic Sarcoma			1 (2%)	
SPECIAL SENSES SYSTEM				
Harderian Gland	(50)	(50)	(50)	(49)
Adenoma	6 (12%)	6 (12%)	5 (10%)	4 (8%)
Carcinoma		4 (8%)	3 (6%)	3 (6%)
Bilateral, Adenoma	1 (2%)			
URINARY SYSTEM				
Kidney	(50)	(50)	(49)	(50)
Hepatocellular Carcinoma, Metastatic, Liver			1 (2%)	

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
SYSTEMIC LESIONS				
Multiple Organs	*(50)	*(50)	*(50)	*(50)
Histiocytic Sarcoma		1 (2%)	3 (6%)	
Lymphoma Malignant	3 (6%)	1 (2%)		2 (4%)

* Number of animals with any tissue examined microscopically

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
TUMOR SUMMARY				
Total Animals with Primary Neoplasms (b)	42	43	41	41
Total Primary Neoplasms	73	75	68	68
Total Animals with Benign Neoplasms	32	31	30	33
Total Benign Neoplasms	43	44	34	39
Total Animals with Malignant Neoplasms	23	23	25	23
Total Malignant Neoplasms	30	31	34	29
Total Animals with Metastatic Neoplasms	6	7	10	5
Total Metastatic Neoplasm	16	7	14	8
Total Animals with Malignant Neoplasms Uncertain Primary Site				
Total Animals with Neoplasms Uncertain-Benign or Malignant				
Total Uncertain Neoplasms				

a Number of animals examined microscopically at site and number of animals with lesion
b Primary tumors: all tumors except metastatic tumors

END OF REPORT

FINAL #1 MICE

REASONS FOR REMOVAL: ALL

REMOVAL DATE RANGE: ALL

TREATMENT GROUPS: INCLUDE ALL

RECEIVED
OPPT CBIC
2002 OCT -8 AM 11:43

RECEIVED
OPPT NCIC
2002 OCT 22 AM 11:16

NTP
LAB: Battelle Northwest
EXPERIMENT: 96001 TEST: 06
TEST TYPE: CHRONIC
CONT: NO1-ES-75410
PATHOLOGIST: GRUMBEIN, SONDR
Mice(B6C3F1)

STATISTICAL ANALYSIS OF PRIMARY TUMORS
STODDARD SOLVENT (TYPE IIC)

CAGES FROM 0000 TO LAST CAGE
ROUTE: RESPIRATORY EXPOSURE WHOLE BODY

REPORT: PEIRPT08
DATE: 09/25/02
TIME: 11:17:13

NTP C#: C96001
CAS: 64742-88-7

FOR ALL DOSES THE TUMOR RATES IN THE FOLLOWING TISSUES/ORGANS ARE BASED ON NUMBER OF TISSUES EXAMINED. IN OTHER TISSUES/ORGANS RATES ARE BASED ON THE NUMBER OF ANIMALS NECROPSIED.

Adrenal Cortex
Adrenal Medulla
Bone Marrow
Clitoral/Preputial Gland
Islets, Pancreatic
Liver
Lung
Nose
Ovary
Pancreas
Pituitary Gland
Spleen
Testes
Thyroid Gland

NTP
LAB: Battelle Northwest
EXPERIMENT: 96001 TEST: 06
TEST TYPE: CHRONIC
CONT: NO1-ES-75410
PATHOLOGIST: GRUMBEIN, SONDR

STATISTICAL ANALYSIS OF PRIMARY TUMORS
STODDARD SOLVENT (TYPE IIC)

CAGES FROM 0000 TO LAST CAGE
ROUTE: RESPIRATORY EXPOSURE WHOLE BODY

REPORT: PEIRPT08
DATE: 09/25/02
TIME: 11:17:13

NTP C#: C96001
CAS: 64742-88-7

SUMMARY OF STATISTICALLY SIGNIFICANT (P<=.05) RESULTS
IN THE ANALYSIS OF STODDARD SOLVENT (TYPE IIC)

Male Mice

Organ	Morphology
Intestine Small: Ileum	Carcinoma
Lung	Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma

Female Mice

Organ	Morphology
Liver	Hepatocellular Adenoma
Lung	Alveolar/Bronchiolar Carcinoma
All Organs	Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Adrenal Cortex Adenoma								
TUMOR RATES								
OVERALL (a)	4/49 (8%)	3/50 (6%)	1/49 (2%)	1/50 (2%)	1/50 (2%)	1/50 (2%)	0/49 (0%)	0/50 (0%)
POLY-3 RATE (b)	4/43.20	3/43.68	1/40.73	1/42.54	1/45.92	1/43.40	0/42.07	0/44.68
POLY-3 PERCENT (g)	9.3%	6.9%	2.5%	2.4%	2.2%	2.3%	0.0%	0.0%
TERMINAL (d)	4/34 (12%)	2/32 (6%)	1/27 (4%)	1/32 (3%)	0/36 (0%)	1/34 (3%)	0/27 (0%)	0/34 (0%)
FIRST INCIDENCE	729 (T)	618	729 (T)	729 (T)	530	730 (T)	---	---
STATISTICAL TESTS								
LIFE TABLE	P=0.110N	P=0.527N	P=0.253N	P=0.197N	P=0.248N	P=0.752	P=0.500N	P=0.508N
POLY 3	P=0.096N	P=0.494N	P=0.196N	P=0.183N	P=0.242N	P=0.748	P=0.517N	P=0.505N
POLY 1.5	P=0.094N	P=0.493N	P=0.192N	P=0.179N	P=0.240N	P=0.753	P=0.513N	P=0.504N
POLY 6	P=0.098N	P=0.493N	P=0.200N	P=0.187N	P=0.243N	P=0.742	P=0.525N	P=0.506N
LOGISTIC REGRESSION	P=0.100N	P=0.501N	P=0.253N	P=0.197N	P=0.220N	P=0.732N	P=0.411N	P=0.391N
COCH-ARM / FISHERS	P=0.090N	P=0.489N	P=0.181N	P=0.175N	P=0.236N	P=0.753N	P=0.505N	P=0.500N

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Adrenal Medulla Pheochromocytoma: Benign, Complex, Malignant, NOS								
TUMOR RATES								
OVERALL (a)	0/48 (0%)	0/49 (0%)	0/49 (0%)	0/50 (0%)	2/49 (4%)	0/50 (0%)	0/48 (0%)	1/49 (2%)
POLY-3 RATE (b)	0/42.82	0/42.68	0/40.73	0/42.54	2/45.07	0/43.40	0/41.34	1/43.90
POLY-3 PERCENT (g)	0.0%	0.0%	0.0%	0.0%	4.4%	0.0%	0.0%	2.3%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	0/27 (0%)	0/32 (0%)	1/36 (3%)	0/34 (0%)	0/27 (0%)	0/34 (0%)
FIRST INCIDENCE	---	---	---	---	594	---	---	709
STATISTICAL TESTS								
LIFE TABLE	(e)	(e)	(e)	(e)	P=0.469N	P=0.251N	P=0.276N	P=0.509N
POLY 3	(e)	(e)	(e)	(e)	P=0.458N	P=0.246N	P=0.257N	P=0.509N
POLY 1.5	(e)	(e)	(e)	(e)	P=0.460N	P=0.240N	P=0.252N	P=0.507N
POLY 6	(e)	(e)	(e)	(e)	P=0.456N	P=0.253N	P=0.266N	P=0.510N
LOGISTIC REGRESSION	(e)	(e)	(e)	(e)	P=0.460N	P=0.213N	P=0.222N	P=0.488N
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)	P=0.463N	P=0.242N	P=0.253N	P=0.500N

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3	Females CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
Harderian Gland Adenoma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	7/50 (14%)	6/50 (12%)	5/50 (10%)	4/50 (8%)	4/50 (8%)	2/50 (4%)	6/50 (12%)	3/50 (6%)
POLY-3 RATE (b)	7/44.05	6/43.68	5/41.65	4/42.54	4/45.81	2/43.40	6/43.16	3/44.68
POLY-3 PERCENT (g)	15.9%	13.7%	12.0%	9.4%	8.7%	4.6%	13.9%	6.7%
TERMINAL (d)	5/34 (15%)	5/32 (16%)	4/27 (15%)	4/32 (13%)	2/36 (6%)	2/34 (6%)	4/27 (15%)	3/34 (9%)
FIRST INCIDENCE	651	618	644	729 (T)	618	730 (T)	673	730 (T)
STATISTICAL TESTS								
LIFE TABLE	P=0.240N	P=0.534N	P=0.509N	P=0.297N	P=0.563	P=0.371N	P=0.250	P=0.520N
POLY 3	P=0.219N	P=0.507N	P=0.419N	P=0.280N	P=0.558N	P=0.362N	P=0.332	P=0.514N
POLY 1.5	P=0.212N	P=0.505N	P=0.409N	P=0.272N	P=0.560N	P=0.352N	P=0.345	P=0.511N
POLY 6	P=0.229N	P=0.509N	P=0.429N	P=0.291N	P=0.554N	P=0.376N	P=0.309	P=0.515N
LOGISTIC REGRESSION	P=0.220N	P=0.506N	P=0.422N	P=0.281N	P=0.555N	P=0.350N	P=0.340	P=0.506N
COCH-ARM / FISHERS	P=0.200N	P=0.500N	P=0.380N	P=0.262N	P=0.554N	P=0.339N	P=0.370	P=0.500N

Dose	Males CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3	Females CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
Harderian Gland Carcinoma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	0/50 (0%)	4/50 (8%)	3/50 (6%)	3/50 (6%)	1/50 (2%)	1/50 (2%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	0/43.60	4/43.52	3/41.96	3/42.91	1/45.50	1/43.40	1/43.05	0/44.68
POLY-3 PERCENT (g)	0.0%	9.2%	7.2%	7.0%	2.2%	2.3%	2.3%	0.0%
TERMINAL (d)	0/34 (0%)	2/32 (6%)	2/27 (7%)	2/32 (6%)	0/36 (0%)	1/34 (3%)	0/27 (0%)	0/34 (0%)
FIRST INCIDENCE	---	675	527	626	681	730 (T)	664	---
STATISTICAL TESTS								
LIFE TABLE	P=0.207	P=0.061	P=0.093	P=0.113	P=0.319N	P=0.737	P=0.726	P=0.500N
POLY 3	P=0.211	P=0.060	P=0.112	P=0.115	P=0.315N	P=0.750	P=0.748	P=0.504N
POLY 1.5	P=0.214	P=0.060	P=0.113	P=0.117	P=0.315N	P=0.754	P=0.752	P=0.503N
POLY 6	P=0.208	P=0.060	P=0.110	P=0.114	P=0.315N	P=0.745	P=0.740	P=0.503N
LOGISTIC REGRESSION	P=0.217	P=0.061	P=0.125	P=0.118	P=0.312N	P=0.757	P=0.756N	P=0.495N
COCH-ARM / FISHERS	P=0.221	P=0.059	P=0.121	P=0.121	P=0.311N	P=0.753N	P=0.753N	P=0.500N

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Harderian Gland Carcinoma or Adenoma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	7/50 (14%)	10/50 (20%)	8/50 (16%)	7/50 (14%)	5/50 (10%)	3/50 (6%)	7/50 (14%)	3/50 (6%)
POLY-3 RATE (b)	7/44.05	10/43.91	8/42.27	7/42.91	5/46.00	3/43.40	7/43.40	3/44.68
POLY-3 PERCENT (g)	15.9%	22.8%	18.9%	16.3%	10.9%	6.9%	16.1%	6.7%
TERMINAL (d)	5/34 (15%)	7/32 (22%)	6/27 (22%)	6/32 (19%)	2/36 (6%)	3/34 (9%)	4/27 (15%)	3/34 (9%)
FIRST INCIDENCE	651	618	527	626	618	730 (T)	664	730 (T)
STATISTICAL TESTS								
LIFE TABLE	P=0.507N	P=0.270	P=0.356	P=0.566	P=0.428N	P=0.402N	P=0.255	P=0.377N
POLY 3	P=0.477N	P=0.292	P=0.465	P=0.594	P=0.408N	P=0.389N	P=0.338	P=0.373N
POLY 1.5	P=0.466N	P=0.293	P=0.472	P=0.601	P=0.409N	P=0.375N	P=0.353	P=0.368N
POLY 6	P=0.491N	P=0.292	P=0.458	P=0.584	P=0.405N	P=0.407N	P=0.314	P=0.376N
LOGISTIC REGRESSION	P=0.477N	P=0.290	P=0.461	P=0.589	P=0.405N	P=0.372N	P=0.359	P=0.361N
COCH-ARM / FISHERS	P=0.448N	P=0.298	P=0.500	P=0.613N	P=0.401N	P=0.357N	P=0.380	P=0.357N

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Intestine Small: Ileum Carcinoma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	2/50 (4%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	0/43.60	0/43.29	0/41.34	2/43.37	0/45.31	0/43.40	1/43.36	0/44.68
POLY-3 PERCENT (g)	0.0%	0.0%	0.0%	4.6%	0.0%	0.0%	2.3%	0.0%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	0/27 (0%)	0/32 (0%)	0/36 (0%)	0/34 (0%)	0/27 (0%)	0/34 (0%)
FIRST INCIDENCE	---	---	---	593	---	---	557	---
STATISTICAL TESTS								
LIFE TABLE	P=0.045 *	(e)	(e)	P=0.229	P=0.689	(e)	P=0.500	(e)
POLY 3	P=0.045 *	(e)	(e)	P=0.236	P=0.695	(e)	P=0.491	(e)
POLY 1.5	P=0.045 *	(e)	(e)	P=0.236	P=0.693	(e)	P=0.494	(e)
POLY 6	P=0.045 *	(e)	(e)	P=0.236	P=0.701	(e)	P=0.485	(e)
LOGISTIC REGRESSION	P=0.044 *	(e)	(e)	P=0.264	P=0.728	(e)	P=0.575	(e)
COCH-ARM / FISHERS	P=0.046 *	(e)	(e)	P=0.247	P=0.694	(e)	P=0.500	(e)

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Intestine Small: Jejunum Carcinoma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	0/50 (0%)	3/50 (6%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/43.60	3/43.29	0/41.34	0/42.54	0/45.31	1/43.40	0/42.80	0/44.68
POLY-3 PERCENT (g)	0.0%	6.9%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%
TERMINAL (d)	0/34 (0%)	3/32 (9%)	0/27 (0%)	0/32 (0%)	0/36 (0%)	1/34 (3%)	0/27 (0%)	0/34 (0%)
FIRST INCIDENCE	---	729 (T)	---	---	---	730 (T)	---	---
STATISTICAL TESTS								
LIFE TABLE	P=0.331N	P=0.110	(e)	(e)	P=0.576N	P=0.489	(e)	(e)
POLY 3	P=0.319N	P=0.117	(e)	(e)	P=0.576N	P=0.491	(e)	(e)
POLY 1.5	P=0.316N	P=0.118	(e)	(e)	P=0.573N	P=0.495	(e)	(e)
POLY 6	P=0.323N	P=0.117	(e)	(e)	P=0.580N	P=0.487	(e)	(e)
LOGISTIC REGRESSION	(e)	P=0.110	(e)	(e)	(e)	P=0.489	(e)	(e)
COCH-ARM / FISHERS	P=0.311N	P=0.121	(e)	(e)	P=0.567N	P=0.500	(e)	(e)

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Intestine Small: Site Unspecified Carcinoma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	0/50 (0%)	3/50 (6%)	0/50 (0%)	2/50 (4%)	0/50 (0%)	1/50 (2%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	0/43.60	3/43.29	0/41.34	2/43.37	0/45.31	1/43.40	1/43.36	1/44.68
POLY-3 PERCENT (g)	0.0%	6.9%	0.0%	4.6%	0.0%	2.3%	2.3%	2.2%
TERMINAL (d)	0/34 (0%)	3/32 (9%)	0/27 (0%)	0/32 (0%)	0/36 (0%)	1/34 (3%)	0/27 (0%)	1/34 (3%)
FIRST INCIDENCE	---	729 (T)	---	593	---	730 (T)	557	730 (T)
STATISTICAL TESTS								
LIFE TABLE	P=0.336	P=0.110	(e)	P=0.229	P=0.371	P=0.489	P=0.500	P=0.489
POLY 3	P=0.345	P=0.117	(e)	P=0.236	P=0.381	P=0.491	P=0.491	P=0.497
POLY 1.5	P=0.346	P=0.118	(e)	P=0.236	P=0.381	P=0.495	P=0.494	P=0.497
POLY 6	P=0.345	P=0.117	(e)	P=0.236	P=0.384	P=0.487	P=0.485	P=0.498
LOGISTIC REGRESSION	P=0.351	P=0.110	(e)	P=0.264	P=0.388	P=0.489	P=0.575	P=0.489
COCH-ARM / FISHERS	P=0.351	P=0.121	(e)	P=0.247	P=0.384	P=0.500	P=0.500	P=0.500

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Intestine Small: Site Unspecified								
Carcinoma or Adenoma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	0/50 (0%)	4/50 (8%)	0/50 (0%)	2/50 (4%)	0/50 (0%)	1/50 (2%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	0/43.60	4/43.29	0/41.34	2/43.37	0/45.31	1/43.40	1/43.36	1/44.68
POLY-3 PERCENT (g)	0.0%	9.2%	0.0%	4.6%	0.0%	2.3%	2.3%	2.2%
TERMINAL (d)	0/34 (0%)	4/32 (13%)	0/27 (0%)	0/32 (0%)	0/36 (0%)	1/34 (3%)	0/27 (0%)	1/34 (3%)
FIRST INCIDENCE	---	729 (T)	---	593	---	730 (T)	557	730 (T)
STATISTICAL TESTS								
LIFE TABLE	P=0.424	P=0.055	(e)	P=0.229	P=0.371	P=0.489	P=0.500	P=0.489
POLY 3	P=0.437	P=0.059	(e)	P=0.236	P=0.381	P=0.491	P=0.491	P=0.497
POLY 1.5	P=0.438	P=0.059	(e)	P=0.236	P=0.381	P=0.495	P=0.494	P=0.497
POLY 6	P=0.437	P=0.058	(e)	P=0.236	P=0.384	P=0.487	P=0.485	P=0.498
LOGISTIC REGRESSION	P=0.441	P=0.055	(e)	P=0.264	P=0.388	P=0.489	P=0.575	P=0.489
COCH-ARM / FISHERS	P=0.444	P=0.059	(e)	P=0.247	P=0.384	P=0.500	P=0.500	P=0.500

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Liver								
Hemangiosarcoma								
TUMOR RATES								
OVERALL (a)	0/50 (0%)	1/50 (2%)	3/50 (6%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/43.60	1/43.47	3/41.88	0/42.54	0/45.31	1/43.40	0/42.80	1/44.70
POLY-3 PERCENT (g)	0.0%	2.3%	7.2%	0.0%	0.0%	2.3%	0.0%	2.2%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	0/27 (0%)	0/32 (0%)	0/36 (0%)	1/34 (3%)	0/27 (0%)	0/34 (0%)
FIRST INCIDENCE	---	683	628	---	---	730 (T)	---	725
STATISTICAL TESTS								
LIFE TABLE	P=0.617	P=0.495	P=0.109	(e)	P=0.395	P=0.489	(e)	P=0.489
POLY 3	P=0.621	P=0.499	P=0.111	(e)	P=0.400	P=0.491	(e)	P=0.497
POLY 1.5	P=0.627	P=0.499	P=0.113	(e)	P=0.401	P=0.495	(e)	P=0.497
POLY 6	P=0.614	P=0.500	P=0.111	(e)	P=0.401	P=0.487	(e)	P=0.498
LOGISTIC REGRESSION	P=0.634N	P=0.501	P=0.118	(e)	P=0.408	P=0.489	(e)	P=0.499
COCH-ARM / FISHERS	P=0.634	P=0.500	P=0.121	(e)	P=0.405	P=0.500	(e)	P=0.500

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Liver Hepatocellular Adenoma								
TUMOR RATES								
OVERALL (a)	23/50 (46%)	28/50 (56%)	21/50 (42%)	29/50 (58%)	9/50 (18%)	12/50 (24%)	15/50 (30%)	18/50 (36%)
POLY-3 RATE (b)	23/44.70	28/46.14	21/43.49	29/46.13	9/46.16	12/43.90	15/44.44	18/46.35
POLY-3 PERCENT (g)	51.5%	60.7%	48.3%	62.9%	19.5%	27.3%	33.8%	38.8%
TERMINAL (d)	21/34 (62%)	20/32 (63%)	14/27 (52%)	21/32 (66%)	5/36 (14%)	11/34 (32%)	7/27 (26%)	13/34 (38%)
FIRST INCIDENCE	458	398	509	506	590	578	600	465
STATISTICAL TESTS								
LIFE TABLE	P=0.147	P=0.151	P=0.395	P=0.103	P=0.025 *	P=0.260	P=0.053	P=0.037 *
POLY 3	P=0.225	P=0.244	P=0.466N	P=0.180	P=0.023 *	P=0.264	P=0.095	P=0.032 *
POLY 1.5	P=0.214	P=0.225	P=0.467N	P=0.166	P=0.022 *	P=0.284	P=0.102	P=0.032 *
POLY 6	P=0.246	P=0.280	P=0.448N	P=0.206	P=0.024 *	P=0.238	P=0.083	P=0.033 *
LOGISTIC REGRESSION	P=0.180	P=0.197	P=0.513N	P=0.131	P=0.022 *	P=0.272	P=0.104	P=0.035 *
COCH-ARM / FISHERS	P=0.215	P=0.212	P=0.420N	P=0.158	P=0.023 *	P=0.312	P=0.121	P=0.035 *

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Liver Hepatocellular Carcinoma								
TUMOR RATES								
OVERALL (a)	16/50 (32%)	15/50 (30%)	17/50 (34%)	10/50 (20%)	6/50 (12%)	7/50 (14%)	5/50 (10%)	6/50 (12%)
POLY-3 RATE (b)	16/48.66	15/48.38	17/46.19	10/44.77	6/45.65	7/44.40	5/43.64	6/44.86
POLY-3 PERCENT (g)	32.9%	31.0%	36.8%	22.3%	13.1%	15.8%	11.5%	13.4%
TERMINAL (d)	6/34 (18%)	4/32 (13%)	3/27 (11%)	4/32 (13%)	4/36 (11%)	4/34 (12%)	2/27 (7%)	4/34 (12%)
FIRST INCIDENCE	458	398	478	563	668	620	639	705
STATISTICAL TESTS								
LIFE TABLE	P=0.185N	P=0.520N	P=0.377	P=0.186N	P=0.523N	P=0.452	P=0.606	P=0.596
POLY 3	P=0.181N	P=0.508N	P=0.427	P=0.182N	P=0.512N	P=0.479	P=0.532N	P=0.609
POLY 1.5	P=0.154N	P=0.504N	P=0.443	P=0.160N	P=0.511N	P=0.486	P=0.522N	P=0.610
POLY 6	P=0.211N	P=0.513N	P=0.416	P=0.207N	P=0.511N	P=0.470	P=0.550N	P=0.611
LOGISTIC REGRESSION	P=0.071N	P=0.504N	P=0.541N	P=0.083N	P=0.505N	P=0.487	P=0.520N	P=0.614
COCH-ARM / FISHERS	P=0.113N	P=0.500N	P=0.500	P=0.127N	P=0.500N	P=0.500	P=0.500N	P=0.620N

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Liver								
Hepatocellular Carcinoma or Hepatoblastoma								
TUMOR RATES								
OVERALL (a)	16/50 (32%)	15/50 (30%)	17/50 (34%)	11/50 (22%)	6/50 (12%)	7/50 (14%)	5/50 (10%)	6/50 (12%)
POLY-3 RATE (b)	16/48.66	15/48.38	17/46.19	11/44.77	6/45.65	7/44.40	5/43.64	6/44.86
POLY-3 PERCENT (g)	32.9%	31.0%	36.8%	24.6%	13.1%	15.8%	11.5%	13.4%
TERMINAL (d)	6/34 (18%)	4/32 (13%)	3/27 (11%)	5/32 (16%)	4/36 (11%)	4/34 (12%)	2/27 (7%)	4/34 (12%)
FIRST INCIDENCE	458	398	478	563	668	620	639	705
STATISTICAL TESTS								
LIFE TABLE	P=0.246N	P=0.520N	P=0.377	P=0.249N	P=0.523N	P=0.452	P=0.606	P=0.596
POLY 3	P=0.253N	P=0.508N	P=0.427	P=0.256N	P=0.512N	P=0.479	P=0.532N	P=0.609
POLY 1.5	P=0.219N	P=0.504N	P=0.443	P=0.227N	P=0.511N	P=0.486	P=0.522N	P=0.610
POLY 6	P=0.290N	P=0.513N	P=0.416	P=0.287N	P=0.511N	P=0.470	P=0.550N	P=0.611
LOGISTIC REGRESSION	P=0.114N	P=0.504N	P=0.541N	P=0.132N	P=0.505N	P=0.487	P=0.520N	P=0.614
COCH-ARM / FISHERS	P=0.166N	P=0.500N	P=0.500	P=0.184N	P=0.500N	P=0.500	P=0.500N	P=0.620N

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Liver								
Hepatocellular Carcinoma or Hepatocellular Adenoma								
TUMOR RATES								
OVERALL (a)	34/50 (68%)	37/50 (74%)	30/50 (60%)	32/50 (64%)	13/50 (26%)	17/50 (34%)	18/50 (36%)	21/50 (42%)
POLY-3 RATE (b)	34/49.01	37/49.49	30/46.27	32/46.59	13/46.39	17/44.91	18/44.71	21/46.44
POLY-3 PERCENT (g)	69.4%	74.8%	64.8%	68.7%	28.0%	37.9%	40.3%	45.2%
TERMINAL (d)	23/34 (68%)	21/32 (66%)	15/27 (56%)	22/32 (69%)	8/36 (22%)	13/34 (38%)	9/27 (33%)	15/34 (44%)
FIRST INCIDENCE	458	398	478	506	590	578	600	465
STATISTICAL TESTS								
LIFE TABLE	P=0.424N	P=0.306	P=0.489	P=0.545N	P=0.065	P=0.209	P=0.076	P=0.069
POLY 3	P=0.402N	P=0.355	P=0.399N	P=0.560N	P=0.059	P=0.217	P=0.154	P=0.063
POLY 1.5	P=0.342N	P=0.343	P=0.366N	P=0.505N	P=0.058	P=0.232	P=0.165	P=0.064
POLY 6	P=0.470N	P=0.374	P=0.426N	P=0.566	P=0.060	P=0.200	P=0.136	P=0.064
LOGISTIC REGRESSION	P=0.245N	P=0.333	P=0.265N	P=0.412N	P=0.059	P=0.227	P=0.161	P=0.065
COCH-ARM / FISHERS	P=0.247N	P=0.330	P=0.266N	P=0.417N	P=0.063	P=0.257	P=0.194	P=0.069

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Liver Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma								
TUMOR RATES								
OVERALL (a)	34/50 (68%)	37/50 (74%)	30/50 (60%)	32/50 (64%)	13/50 (26%)	17/50 (34%)	18/50 (36%)	21/50 (42%)
POLY-3 RATE (b)	34/49.01	37/49.49	30/46.27	32/46.59	13/46.39	17/44.91	18/44.71	21/46.44
POLY-3 PERCENT (g)	69.4%	74.8%	64.8%	68.7%	28.0%	37.9%	40.3%	45.2%
TERMINAL (d)	23/34 (68%)	21/32 (66%)	15/27 (56%)	22/32 (69%)	8/36 (22%)	13/34 (38%)	9/27 (33%)	15/34 (44%)
FIRST INCIDENCE	458	398	478	506	590	578	600	465
STATISTICAL TESTS								
LIFE TABLE	P=0.424N	P=0.306	P=0.489	P=0.545N	P=0.065	P=0.209	P=0.076	P=0.069
POLY 3	P=0.402N	P=0.355	P=0.399N	P=0.560N	P=0.059	P=0.217	P=0.154	P=0.063
POLY 1.5	P=0.342N	P=0.343	P=0.366N	P=0.505N	P=0.058	P=0.232	P=0.165	P=0.064
POLY 6	P=0.470N	P=0.374	P=0.426N	P=0.566	P=0.060	P=0.200	P=0.136	P=0.064
LOGISTIC REGRESSION	P=0.245N	P=0.333	P=0.265N	P=0.412N	P=0.059	P=0.227	P=0.161	P=0.065
COCH-ARM / FISHERS	P=0.247N	P=0.330	P=0.266N	P=0.417N	P=0.063	P=0.257	P=0.194	P=0.069

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Liver Hepatocholangiocarcinoma								
TUMOR RATES								
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	2/50 (4%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/43.60	0/43.29	0/41.34	0/42.54	0/45.31	2/43.89	0/42.80	1/44.82
POLY-3 PERCENT (g)	0.0%	0.0%	0.0%	0.0%	0.0%	4.6%	0.0%	2.2%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	0/27 (0%)	0/32 (0%)	0/36 (0%)	0/34 (0%)	0/27 (0%)	0/34 (0%)
FIRST INCIDENCE	---	---	---	---	---	653	---	694
STATISTICAL TESTS								
LIFE TABLE	(e)	(e)	(e)	(e)	P=0.547	P=0.224	(e)	P=0.510
POLY 3	(e)	(e)	(e)	(e)	P=0.532	P=0.230	(e)	P=0.498
POLY 1.5	(e)	(e)	(e)	(e)	P=0.533	P=0.233	(e)	P=0.498
POLY 6	(e)	(e)	(e)	(e)	P=0.533	P=0.227	(e)	P=0.499
LOGISTIC REGRESSION	(e)	(e)	(e)	(e)	P=0.543	P=0.251	(e)	P=0.501
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)	P=0.539	P=0.247	(e)	P=0.500

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Lung Alveolar/Bronchiolar Adenoma								
TUMOR RATES								
OVERALL (a)	6/50 (12%)	2/49 (4%)	3/50 (6%)	1/50 (2%)	2/50 (4%)	2/50 (4%)	3/50 (6%)	1/50 (2%)
POLY-3 RATE (b)	6/43.60	2/42.55	3/41.44	1/42.54	2/45.31	2/43.90	3/42.80	1/44.68
POLY-3 PERCENT (g)	13.8%	4.7%	7.2%	2.4%	4.4%	4.6%	7.0%	2.2%
TERMINAL (d)	6/34 (18%)	2/32 (6%)	2/27 (7%)	1/32 (3%)	2/36 (6%)	1/34 (3%)	3/27 (11%)	1/34 (3%)
FIRST INCIDENCE	729 (T)	729 (T)	702	729 (T)	730 (T)	578	730 (T)	730 (T)
STATISTICAL TESTS								
LIFE TABLE	P=0.066N	P=0.151N	P=0.353N	P=0.066N	P=0.434N	P=0.676	P=0.369	P=0.520N
POLY 3	P=0.055N	P=0.140N	P=0.266N	P=0.059N	P=0.408N	P=0.683	P=0.474	P=0.505N
POLY 1.5	P=0.054N	P=0.141N	P=0.262N	P=0.058N	P=0.409N	P=0.687	P=0.483	P=0.505N
POLY 6	P=0.056N	P=0.138N	P=0.270N	P=0.060N	P=0.404N	P=0.678	P=0.457	P=0.503N
LOGISTIC REGRESSION	P=0.060N	P=0.151N	P=0.297N	P=0.066N	P=0.406N	P=0.694N	P=0.369	P=0.520N
COCH-ARM / FISHERS	P=0.053N	P=0.141N	P=0.243N	P=0.056N	P=0.404N	P=0.691N	P=0.500	P=0.500N

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Lung Alveolar/Bronchiolar Carcinoma								
TUMOR RATES								
OVERALL (a)	7/50 (14%)	2/49 (4%)	4/50 (8%)	5/50 (10%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	2/50 (4%)
POLY-3 RATE (b)	7/44.15	2/42.76	4/41.52	5/43.21	0/45.31	0/43.40	0/42.80	2/45.42
POLY-3 PERCENT (g)	15.9%	4.7%	9.6%	11.6%	0.0%	0.0%	0.0%	4.4%
TERMINAL (d)	5/34 (15%)	1/32 (3%)	2/27 (7%)	3/32 (9%)	0/36 (0%)	0/34 (0%)	0/27 (0%)	1/34 (3%)
FIRST INCIDENCE	628	675	702	506	---	---	---	465
STATISTICAL TESTS								
LIFE TABLE	P=0.505N	P=0.097N	P=0.369N	P=0.420N	P=0.047 *	(e)	(e)	P=0.231
POLY 3	P=0.475N	P=0.085N	P=0.296N	P=0.394N	P=0.046 *	(e)	(e)	P=0.238
POLY 1.5	P=0.470N	P=0.086N	P=0.287N	P=0.388N	P=0.046 *	(e)	(e)	P=0.237
POLY 6	P=0.483N	P=0.085N	P=0.306N	P=0.403N	P=0.047 *	(e)	(e)	P=0.240
LOGISTIC REGRESSION	P=0.479N	P=0.086N	P=0.295N	P=0.390N	P=0.046 *	(e)	(e)	P=0.284
COCH-ARM / FISHERS	P=0.462N	P=0.085N	P=0.262N	P=0.380N	P=0.046 *	(e)	(e)	P=0.247

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Lung Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma								
TUMOR RATES								
OVERALL (a)	13/50 (26%)	4/49 (8%)	6/50 (12%)	6/50 (12%)	2/50 (4%)	2/50 (4%)	3/50 (6%)	3/50 (6%)
POLY-3 RATE (b)	13/44.15	4/42.76	6/41.52	6/43.21	2/45.31	2/43.90	3/42.80	3/45.42
POLY-3 PERCENT (g)	29.5%	9.4%	14.5%	13.9%	4.4%	4.6%	7.0%	6.6%
TERMINAL (d)	11/34 (32%)	3/32 (9%)	4/27 (15%)	4/32 (13%)	2/36 (6%)	1/34 (3%)	3/27 (11%)	2/34 (6%)
FIRST INCIDENCE	628	675	702	506	730 (T)	578	730 (T)	465
STATISTICAL TESTS								
LIFE TABLE	P=0.124N	P=0.023N*	P=0.145N	P=0.084N	P=0.346	P=0.676	P=0.369	P=0.477
POLY 3	P=0.091N	P=0.016N*	P=0.076N	P=0.063N	P=0.377	P=0.683	P=0.474	P=0.501
POLY 1.5	P=0.090N	P=0.016N*	P=0.073N	P=0.062N	P=0.372	P=0.687	P=0.483	P=0.499
POLY 6	P=0.094N	P=0.015N*	P=0.081N	P=0.066N	P=0.384	P=0.678	P=0.457	P=0.506
LOGISTIC REGRESSION	P=0.103N	P=0.017N*	P=0.081N	P=0.070N	P=0.372	P=0.694N	P=0.369	P=0.515
COCH-ARM / FISHERS	P=0.091N	P=0.017N*	P=0.062N	P=0.062N	P=0.371	P=0.691N	P=0.500	P=0.500

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Ovary Cystadenoma								
TUMOR RATES								
OVERALL (a)					1/49 (2%)	2/50 (4%)	1/48 (2%)	1/49 (2%)
POLY-3 RATE (b)					1/44.31	2/43.60	1/41.15	1/44.45
POLY-3 PERCENT (g)					2.3%	4.6%	2.4%	2.3%
TERMINAL (d)					1/35 (3%)	1/34 (3%)	1/27 (4%)	0/34 (0%)
FIRST INCIDENCE					730 (T)	677	730 (T)	503
STATISTICAL TESTS								
LIFE TABLE					P=0.538N	P=0.479	P=0.703	P=0.755
POLY 3					P=0.534N	P=0.494	P=0.744	P=0.760N
POLY 1.5					P=0.535N	P=0.499	P=0.748	P=0.760
POLY 6					P=0.530N	P=0.489	P=0.737	P=0.757N
LOGISTIC REGRESSION					P=0.529N	P=0.492	P=0.703	P=0.728N
COCH-ARM / FISHERS					P=0.534N	P=0.508	P=0.747	P=0.753N

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Pituitary Gland: Pars Distalis or Unspecified Site Adenoma								
TUMOR RATES								
OVERALL (a)	0/49 (0%)	0/49 (0%)	0/48 (0%)	0/46 (0%)	10/47 (21%)	8/49 (16%)	10/49 (20%)	10/48 (21%)
POLY-3 RATE (b)	0/43.28	0/42.55	0/40.08	0/39.42	10/43.41	8/42.40	10/43.26	10/43.57
POLY-3 PERCENT (g)	0.0%	0.0%	0.0%	0.0%	23.0%	18.9%	23.1%	23.0%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	0/27 (0%)	0/29 (0%)	10/35 (29%)	8/33 (24%)	7/27 (26%)	8/34 (24%)
FIRST INCIDENCE	---	---	---	---	730 (T)	730 (T)	590	554
STATISTICAL TESTS								
LIFE TABLE	(e)	(e)	(e)	(e)	P=0.442	P=0.449N	P=0.372	P=0.573
POLY 3	(e)	(e)	(e)	(e)	P=0.490	P=0.417N	P=0.597	P=0.597N
POLY 1.5	(e)	(e)	(e)	(e)	P=0.482	P=0.395N	P=0.591N	P=0.596N
POLY 6	(e)	(e)	(e)	(e)	P=0.511	P=0.445N	P=0.578	P=0.587N
LOGISTIC REGRESSION	(e)	(e)	(e)	(e)	P=0.472	P=0.449N	P=0.563	P=0.591
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)	P=0.488	P=0.360N	P=0.558N	P=0.578N

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Pituitary Gland: Pars Distalis or Unspecified Site Carcinoma or Adenoma								
TUMOR RATES								
OVERALL (a)	0/49 (0%)	0/49 (0%)	0/48 (0%)	0/46 (0%)	10/47 (21%)	9/49 (18%)	10/49 (20%)	10/48 (21%)
POLY-3 RATE (b)	0/43.28	0/42.55	0/40.08	0/39.42	10/43.41	9/42.53	10/43.26	10/43.57
POLY-3 PERCENT (g)	0.0%	0.0%	0.0%	0.0%	23.0%	21.2%	23.1%	23.0%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	0/27 (0%)	0/29 (0%)	10/35 (29%)	8/33 (24%)	7/27 (26%)	8/34 (24%)
FIRST INCIDENCE	---	---	---	---	730 (T)	695	590	554
STATISTICAL TESTS								
LIFE TABLE	(e)	(e)	(e)	(e)	P=0.481	P=0.561N	P=0.372	P=0.573
POLY 3	(e)	(e)	(e)	(e)	P=0.525	P=0.520N	P=0.597	P=0.597N
POLY 1.5	(e)	(e)	(e)	(e)	P=0.517	P=0.497N	P=0.591N	P=0.596N
POLY 6	(e)	(e)	(e)	(e)	P=0.544	P=0.546N	P=0.578	P=0.587N
LOGISTIC REGRESSION	(e)	(e)	(e)	(e)	P=0.509	P=0.597N	P=0.563	P=0.591
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)	P=0.524	P=0.459N	P=0.558N	P=0.578N

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Skin Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	1/50 (2%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	1/50 (2%)	0/50 (0%)	5/50 (10%)	2/50 (4%)
POLY-3 RATE (b)	1/44.23	0/43.29	0/41.34	1/42.54	1/45.39	0/43.40	5/44.25	2/44.70
POLY-3 PERCENT (g)	2.3%	0.0%	0.0%	2.4%	2.2%	0.0%	11.3%	4.5%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	0/27 (0%)	1/32 (3%)	0/36 (0%)	0/34 (0%)	1/27 (4%)	1/34 (3%)
FIRST INCIDENCE	525	---	---	729 (T)	708	---	506	725
STATISTICAL TESTS								
LIFE TABLE	P=0.584	P=0.504N	P=0.517N	P=0.751	P=0.230	P=0.522N	P=0.077	P=0.487
POLY 3	P=0.590	P=0.504N	P=0.513N	P=0.752	P=0.231	P=0.509N	P=0.095	P=0.495
POLY 1.5	P=0.592	P=0.503N	P=0.510N	P=0.755	P=0.228	P=0.505N	P=0.097	P=0.495
POLY 6	P=0.588	P=0.506N	P=0.517N	P=0.748	P=0.237	P=0.514N	P=0.090	P=0.496
LOGISTIC REGRESSION	P=0.609	P=0.409N	P=0.396N	P=0.743N	P=0.237	P=0.507N	P=0.121	P=0.497
COCH-ARM / FISHERS	P=0.595	P=0.500N	P=0.500N	P=0.753N	P=0.232	P=0.500N	P=0.102	P=0.500

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Skin Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	1/50 (2%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	1/50 (2%)	0/50 (0%)	5/50 (10%)	2/50 (4%)
POLY-3 RATE (b)	1/44.23	0/43.29	0/41.34	1/42.54	1/45.39	0/43.40	5/44.25	2/44.70
POLY-3 PERCENT (g)	2.3%	0.0%	0.0%	2.4%	2.2%	0.0%	11.3%	4.5%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	0/27 (0%)	1/32 (3%)	0/36 (0%)	0/34 (0%)	1/27 (4%)	1/34 (3%)
FIRST INCIDENCE	525	---	---	729 (T)	708	---	506	725
STATISTICAL TESTS								
LIFE TABLE	P=0.584	P=0.504N	P=0.517N	P=0.751	P=0.230	P=0.522N	P=0.077	P=0.487
POLY 3	P=0.590	P=0.504N	P=0.513N	P=0.752	P=0.231	P=0.509N	P=0.095	P=0.495
POLY 1.5	P=0.592	P=0.503N	P=0.510N	P=0.755	P=0.228	P=0.505N	P=0.097	P=0.495
POLY 6	P=0.588	P=0.506N	P=0.517N	P=0.748	P=0.237	P=0.514N	P=0.090	P=0.496
LOGISTIC REGRESSION	P=0.609	P=0.409N	P=0.396N	P=0.743N	P=0.237	P=0.507N	P=0.121	P=0.497
COCH-ARM / FISHERS	P=0.595	P=0.500N	P=0.500N	P=0.753N	P=0.232	P=0.500N	P=0.102	P=0.500

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Skin Hemangiosarcoma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	1/50 (2%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/43.60	0/43.29	2/41.42	1/42.55	0/45.31	1/43.56	0/42.80	0/44.68
POLY-3 PERCENT (g)	0.0%	0.0%	4.8%	2.4%	0.0%	2.3%	0.0%	0.0%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	1/27 (4%)	0/32 (0%)	0/36 (0%)	0/34 (0%)	0/27 (0%)	0/34 (0%)
FIRST INCIDENCE	---	---	709	728	---	688	---	---
STATISTICAL TESTS								
LIFE TABLE	P=0.243	(e)	P=0.199	P=0.494	P=0.554N	P=0.479	(e)	(e)
POLY 3	P=0.238	(e)	P=0.226	P=0.495	P=0.576N	P=0.492	(e)	(e)
POLY 1.5	P=0.241	(e)	P=0.228	P=0.497	P=0.573N	P=0.495	(e)	(e)
POLY 6	P=0.234	(e)	P=0.223	P=0.493	P=0.579N	P=0.489	(e)	(e)
LOGISTIC REGRESSION	P=0.236	(e)	P=0.220	P=0.492	P=0.567N	P=0.503	(e)	(e)
COCH-ARM / FISHERS	P=0.246	(e)	P=0.247	P=0.500	P=0.567N	P=0.500	(e)	(e)

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Skin Sarcoma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	5/50 (10%)	2/50 (4%)
POLY-3 RATE (b)	1/44.23	0/43.29	0/41.34	0/42.54	1/45.39	0/43.40	5/44.25	2/44.70
POLY-3 PERCENT (g)	2.3%	0.0%	0.0%	0.0%	2.2%	0.0%	11.3%	4.5%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	0/27 (0%)	0/32 (0%)	0/36 (0%)	0/34 (0%)	1/27 (4%)	1/34 (3%)
FIRST INCIDENCE	525	---	---	---	708	---	506	725
STATISTICAL TESTS								
LIFE TABLE	P=0.311N	P=0.504N	P=0.517N	P=0.504N	P=0.230	P=0.522N	P=0.077	P=0.487
POLY 3	P=0.304N	P=0.504N	P=0.513N	P=0.508N	P=0.231	P=0.509N	P=0.095	P=0.495
POLY 1.5	P=0.305N	P=0.503N	P=0.510N	P=0.505N	P=0.228	P=0.505N	P=0.097	P=0.495
POLY 6	P=0.303N	P=0.506N	P=0.517N	P=0.511N	P=0.237	P=0.514N	P=0.090	P=0.496
LOGISTIC REGRESSION	P=0.266N	P=0.409N	P=0.396N	P=0.412N	P=0.237	P=0.507N	P=0.121	P=0.497
COCH-ARM / FISHERS	P=0.306N	P=0.500N	P=0.500N	P=0.500N	P=0.232	P=0.500N	P=0.102	P=0.500

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Stomach, Forestomach Squamous Cell Carcinoma or Papilloma Squamous								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	2/50 (4%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	0/43.60	0/43.29	2/41.46	2/42.83	0/45.31	0/43.40	1/42.80	1/44.76
POLY-3 PERCENT (g)	0.0%	0.0%	4.8%	4.7%	0.0%	0.0%	2.3%	2.2%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	1/27 (4%)	1/32 (3%)	0/36 (0%)	0/34 (0%)	1/27 (4%)	0/34 (0%)
FIRST INCIDENCE	---	---	698	653	---	---	730 (T)	709
STATISTICAL TESTS								
LIFE TABLE	P=0.085	(e)	P=0.215	P=0.233	P=0.238	(e)	P=0.443	P=0.500
POLY 3	P=0.083	(e)	P=0.226	P=0.233	P=0.238	(e)	P=0.489	P=0.498
POLY 1.5	P=0.084	(e)	P=0.228	P=0.234	P=0.236	(e)	P=0.493	P=0.497
POLY 6	P=0.082	(e)	P=0.224	P=0.232	P=0.242	(e)	P=0.481	P=0.499
LOGISTIC REGRESSION	P=0.083	(e)	P=0.223	P=0.236	P=0.240	(e)	P=0.443	P=0.498
COCH-ARM / FISHERS	P=0.086	(e)	P=0.247	P=0.247	P=0.236	(e)	P=0.500	P=0.500

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Stomach, Forestomach Squamous Cell Papilloma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	0/43.60	0/43.29	2/41.46	1/42.54	0/45.31	0/43.40	1/42.80	1/44.76
POLY-3 PERCENT (g)	0.0%	0.0%	4.8%	2.4%	0.0%	0.0%	2.3%	2.2%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	1/27 (4%)	1/32 (3%)	0/36 (0%)	0/34 (0%)	1/27 (4%)	0/34 (0%)
FIRST INCIDENCE	---	---	698	729 (T)	---	---	730 (T)	709
STATISTICAL TESTS								
LIFE TABLE	P=0.240	(e)	P=0.215	P=0.488	P=0.238	(e)	P=0.443	P=0.500
POLY 3	P=0.238	(e)	P=0.226	P=0.495	P=0.238	(e)	P=0.489	P=0.498
POLY 1.5	P=0.241	(e)	P=0.228	P=0.497	P=0.236	(e)	P=0.493	P=0.497
POLY 6	P=0.234	(e)	P=0.224	P=0.493	P=0.242	(e)	P=0.481	P=0.499
LOGISTIC REGRESSION	P=0.237	(e)	P=0.223	P=0.488	P=0.240	(e)	P=0.443	P=0.498
COCH-ARM / FISHERS	P=0.246	(e)	P=0.247	P=0.500	P=0.236	(e)	P=0.500	P=0.500

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Testes Adenoma								
TUMOR RATES								
OVERALL (a)	1/50 (2%)	2/50 (4%)	0/50 (0%)	2/50 (4%)				
POLY-3 RATE (b)	1/43.60	2/43.29	0/41.34	2/42.62				
POLY-3 PERCENT (g)	2.3%	4.6%	0.0%	4.7%				
TERMINAL (d)	1/34 (3%)	2/32 (6%)	0/27 (0%)	1/32 (3%)				
FIRST INCIDENCE	729 (T)	729 (T)	---	710				
STATISTICAL TESTS								
LIFE TABLE	P=0.450	P=0.479	P=0.546N	P=0.483				
POLY 3	P=0.460	P=0.497	P=0.511N	P=0.492				
POLY 1.5	P=0.463	P=0.498	P=0.508N	P=0.495				
POLY 6	P=0.456	P=0.497	P=0.513N	P=0.489				
LOGISTIC REGRESSION	P=0.454	P=0.479	(e)	P=0.485				
COCH-ARM / FISHERS	P=0.469	P=0.500	P=0.500N	P=0.500				

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Thyroid Gland: Follicular Cell Adenoma								
TUMOR RATES								
OVERALL (a)	1/49 (2%)	0/48 (0%)	0/47 (0%)	0/50 (0%)	2/50 (4%)	0/49 (0%)	0/47 (0%)	0/48 (0%)
POLY-3 RATE (b)	1/43.38	0/41.78	0/38.85	0/42.54	2/45.31	0/42.95	0/40.23	0/43.38
POLY-3 PERCENT (g)	2.3%	0.0%	0.0%	0.0%	4.4%	0.0%	0.0%	0.0%
TERMINAL (d)	0/34 (0%)	0/31 (0%)	0/26 (0%)	0/32 (0%)	2/36 (6%)	0/34 (0%)	0/27 (0%)	0/34 (0%)
FIRST INCIDENCE	681	---	---	---	730 (T)	---	---	---
STATISTICAL TESTS								
LIFE TABLE	P=0.315N	P=0.511N	P=0.511N	P=0.516N	P=0.129N	P=0.251N	P=0.303N	P=0.251N
POLY 3	P=0.303N	P=0.507N	P=0.522N	P=0.504N	P=0.118N	P=0.249N	P=0.264N	P=0.247N
POLY 1.5	P=0.304N	P=0.506N	P=0.518N	P=0.501N	P=0.118N	P=0.246N	P=0.260N	P=0.248N
POLY 6	P=0.302N	P=0.509N	P=0.526N	P=0.508N	P=0.117N	P=0.253N	P=0.272N	P=0.244N
LOGISTIC REGRESSION	P=0.304N	P=0.502N	P=0.509N	P=0.493N	P=0.129N	(e)	(e)	(e)
COCH-ARM / FISHERS	P=0.304N	P=0.505N	P=0.510N	P=0.495N	P=0.120N	P=0.253N	P=0.263N	P=0.258N

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Thyroid Gland: Follicular Cell Carcinoma or Adenoma								
TUMOR RATES								
OVERALL (a)	1/49 (2%)	0/48 (0%)	0/47 (0%)	0/50 (0%)	2/50 (4%)	1/49 (2%)	0/47 (0%)	0/48 (0%)
POLY-3 RATE (b)	1/43.38	0/41.78	0/38.85	0/42.54	2/45.31	1/42.95	0/40.23	0/43.38
POLY-3 PERCENT (g)	2.3%	0.0%	0.0%	0.0%	4.4%	2.3%	0.0%	0.0%
TERMINAL (d)	0/34 (0%)	0/31 (0%)	0/26 (0%)	0/32 (0%)	2/36 (6%)	1/34 (3%)	0/27 (0%)	0/34 (0%)
FIRST INCIDENCE	681	---	---	---	730 (T)	730 (T)	---	---
STATISTICAL TESTS								
LIFE TABLE	P=0.315N	P=0.511N	P=0.511N	P=0.516N	P=0.116N	P=0.520N	P=0.303N	P=0.251N
POLY 3	P=0.303N	P=0.507N	P=0.522N	P=0.504N	P=0.107N	P=0.519N	P=0.264N	P=0.247N
POLY 1.5	P=0.304N	P=0.506N	P=0.518N	P=0.501N	P=0.107N	P=0.514N	P=0.260N	P=0.248N
POLY 6	P=0.302N	P=0.509N	P=0.526N	P=0.508N	P=0.106N	P=0.524N	P=0.272N	P=0.244N
LOGISTIC REGRESSION	P=0.304N	P=0.502N	P=0.509N	P=0.493N	P=0.116N	P=0.520N	(e)	(e)
COCH-ARM / FISHERS	P=0.304N	P=0.505N	P=0.510N	P=0.495N	P=0.106N	P=0.508N	P=0.263N	P=0.258N

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Uterus Polyp Stromal								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)					2/50 (4%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)					2/45.31	0/43.40	0/42.80	1/45.01
POLY-3 PERCENT (g)					4.4%	0.0%	0.0%	2.2%
TERMINAL (d)					2/36 (6%)	0/34 (0%)	0/27 (0%)	0/34 (0%)
FIRST INCIDENCE					730 (T)	---	---	639
STATISTICAL TESTS								
LIFE TABLE					P=0.473N	P=0.251N	P=0.303N	P=0.513N
POLY 3					P=0.457N	P=0.247N	P=0.250N	P=0.502N
POLY 1.5					P=0.459N	P=0.243N	P=0.246N	P=0.503N
POLY 6					P=0.456N	P=0.252N	P=0.258N	P=0.499N
LOGISTIC REGRESSION					P=0.462N	(e)	(e)	P=0.501N
COCH-ARM / FISHERS					P=0.461N	P=0.247N	P=0.247N	P=0.500N

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
Uterus Sarcoma Stromal or Polyp Stromal								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)					3/50 (6%)	1/50 (2%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)					3/45.31	1/43.88	0/42.80	1/45.01
POLY-3 PERCENT (g)					6.6%	2.3%	0.0%	2.2%
TERMINAL (d)					3/36 (8%)	0/34 (0%)	0/27 (0%)	0/34 (0%)
FIRST INCIDENCE					730 (T)	586	---	639
STATISTICAL TESTS								
LIFE TABLE					P=0.217N	P=0.326N	P=0.176N	P=0.322N
POLY 3					P=0.200N	P=0.317N	P=0.129N	P=0.308N
POLY 1.5					P=0.200N	P=0.313N	P=0.126N	P=0.309N
POLY 6					P=0.199N	P=0.322N	P=0.136N	P=0.304N
LOGISTIC REGRESSION					P=0.198N	P=0.304N	(e)	P=0.308N
COCH-ARM / FISHERS					P=0.200N	P=0.309N	P=0.121N	P=0.309N

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
All Organs Hemangiosarcoma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	1/50 (2%)	1/50 (2%)	5/50 (10%)	2/50 (4%)	1/50 (2%)	4/50 (8%)	0/50 (0%)	3/50 (6%)
POLY-3 RATE (b)	1/44.00	1/43.47	5/41.96	2/42.73	1/45.77	4/44.06	0/42.80	3/44.70
POLY-3 PERCENT (g)	2.3%	2.3%	11.9%	4.7%	2.2%	9.1%	0.0%	6.7%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	1/27 (4%)	0/32 (0%)	0/36 (0%)	2/34 (6%)	0/27 (0%)	2/34 (6%)
FIRST INCIDENCE	617	683	628	681	594	578	---	725
STATISTICAL TESTS								
LIFE TABLE	P=0.286	P=0.757	P=0.085	P=0.479	P=0.390	P=0.168	P=0.509N	P=0.291
POLY 3	P=0.285	P=0.758	P=0.090	P=0.490	P=0.388	P=0.167	P=0.513N	P=0.297
POLY 1.5	P=0.292	P=0.759	P=0.093	P=0.494	P=0.392	P=0.172	P=0.509N	P=0.299
POLY 6	P=0.277	P=0.758	P=0.088	P=0.485	P=0.384	P=0.162	P=0.522N	P=0.296
LOGISTIC REGRESSION	P=0.299	P=0.755N	P=0.100	P=0.505	P=0.404	P=0.199	P=0.448N	P=0.306
COCH-ARM / FISHERS	P=0.302	P=0.753N	P=0.102	P=0.500	P=0.404	P=0.181	P=0.500N	P=0.309

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
All Organs Hemangiosarcoma or Hemangioma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	2/50 (4%)	1/50 (2%)	5/50 (10%)	2/50 (4%)	2/50 (4%)	5/50 (10%)	1/50 (2%)	4/50 (8%)
POLY-3 RATE (b)	2/44.00	1/43.47	5/41.96	2/42.73	2/46.16	5/44.06	1/42.80	4/45.44
POLY-3 PERCENT (g)	4.6%	2.3%	11.9%	4.7%	4.3%	11.4%	2.3%	8.8%
TERMINAL (d)	1/34 (3%)	0/32 (0%)	1/27 (4%)	0/32 (0%)	0/36 (0%)	3/34 (9%)	1/27 (4%)	2/34 (6%)
FIRST INCIDENCE	617	683	628	681	594	578	730 (T)	465
STATISTICAL TESTS								
LIFE TABLE	P=0.432	P=0.510N	P=0.175	P=0.670	P=0.403	P=0.202	P=0.543N	P=0.325
POLY 3	P=0.439	P=0.504N	P=0.196	P=0.684	P=0.408	P=0.197	P=0.526N	P=0.330
POLY 1.5	P=0.446	P=0.503N	P=0.201	P=0.687	P=0.411	P=0.205	P=0.517N	P=0.331
POLY 6	P=0.431	P=0.505N	P=0.194	P=0.679	P=0.404	P=0.188	P=0.543N	P=0.329
LOGISTIC REGRESSION	P=0.451	P=0.497N	P=0.206	P=0.694	P=0.430	P=0.241	P=0.462N	P=0.383
COCH-ARM / FISHERS	P=0.456	P=0.500N	P=0.218	P=0.691N	P=0.420	P=0.218	P=0.500N	P=0.339

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
All Organs Histiocytic Sarcoma								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	3/50 (6%)	0/50 (0%)	2/50 (4%)	2/50 (4%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	0/43.60	1/43.68	3/41.68	0/42.54	2/46.11	2/44.61	1/43.15	2/45.64
POLY-3 PERCENT (g)	0.0%	2.3%	7.2%	0.0%	4.3%	4.5%	2.3%	4.4%
TERMINAL (d)	0/34 (0%)	0/32 (0%)	1/27 (4%)	0/32 (0%)	1/36 (3%)	0/34 (0%)	0/27 (0%)	0/34 (0%)
FIRST INCIDENCE	---	618	667	---	424	455	634	408
STATISTICAL TESTS								
LIFE TABLE	P=0.617	P=0.505	P=0.108	(e)	P=0.577N	P=0.683	P=0.538N	P=0.685
POLY 3	P=0.621	P=0.500	P=0.110	(e)	P=0.581N	P=0.682	P=0.523N	P=0.690
POLY 1.5	P=0.627	P=0.500	P=0.112	(e)	P=0.581N	P=0.686	P=0.516N	P=0.690
POLY 6	P=0.614	P=0.502	P=0.109	(e)	P=0.580N	P=0.677	P=0.535N	P=0.693
LOGISTIC REGRESSION	P=0.633N	P=0.521	P=0.113	(e)	P=0.507N	P=0.581N	P=0.413N	P=0.580N
COCH-ARM / FISHERS	P=0.634	P=0.500	P=0.121	(e)	P=0.577N	P=0.691N	P=0.500N	P=0.691N

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

All Organs
Malignant Lymphoma: Histiocytic, Lymphocytic, Mixed, NOS, or Undifferentiated Cell Type

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	3/50 (6%)	1/50 (2%)	0/50 (0%)	2/50 (4%)	5/50 (10%)	9/50 (18%)	11/50 (22%)	8/50 (16%)
POLY-3 RATE (b)	3/43.74	1/43.29	0/41.34	2/42.54	5/46.01	9/43.64	11/43.84	8/45.01
POLY-3 PERCENT (g)	6.9%	2.3%	0.0%	4.7%	10.9%	20.6%	25.1%	17.8%
TERMINAL (d)	2/34 (6%)	1/32 (3%)	0/27 (0%)	2/32 (6%)	3/36 (8%)	8/34 (24%)	5/27 (19%)	5/34 (15%)
FIRST INCIDENCE	694	729 (T)	---	729 (T)	492	666	652	672
STATISTICAL TESTS								
LIFE TABLE	P=0.469N	P=0.325N	P=0.153N	P=0.527N	P=0.270	P=0.165	P=0.040 *	P=0.255
POLY 3	P=0.451N	P=0.309N	P=0.129N	P=0.513N	P=0.276	P=0.163	P=0.066	P=0.261
POLY 1.5	P=0.449N	P=0.308N	P=0.126N	P=0.508N	P=0.276	P=0.174	P=0.072	P=0.263
POLY 6	P=0.453N	P=0.310N	P=0.131N	P=0.519N	P=0.284	P=0.150	P=0.059	P=0.264
LOGISTIC REGRESSION	P=0.462N	P=0.308N	P=0.132N	P=0.519N	P=0.288	P=0.174	P=0.079	P=0.270
COCH-ARM / FISHERS	P=0.444N	P=0.309N	P=0.121N	P=0.500N	P=0.292	P=0.194	P=0.086	P=0.277

All Organs
Benign Tumors

Dose	Males CONTROL	Males 550 MG/M3	Males 1100 MG/M3	Males 2200 MG/M3	Females CONTROL	Females 550 MG/M3	Females 1100 MG/M3	Females 2200 MG/M3
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	32/50 (64%)	31/50 (62%)	30/50 (60%)	33/50 (66%)	27/50 (54%)	24/50 (48%)	30/50 (60%)	27/50 (54%)
POLY-3 RATE (b)	32/45.34	31/46.14	30/44.74	33/46.43	27/47.63	24/44.10	30/45.54	27/47.42
POLY-3 PERCENT (g)	70.6%	67.2%	67.1%	71.1%	56.7%	54.4%	65.9%	56.9%
TERMINAL (d)	27/34 (79%)	23/32 (72%)	19/27 (70%)	23/32 (72%)	20/36 (56%)	22/34 (65%)	18/27 (67%)	18/34 (53%)
FIRST INCIDENCE	458	398	484	506	530	578	590	465
STATISTICAL TESTS								
LIFE TABLE	P=0.309	P=0.536	P=0.304	P=0.369	P=0.341	P=0.465N	P=0.074	P=0.492
POLY 3	P=0.484	P=0.448N	P=0.445N	P=0.574	P=0.462	P=0.497N	P=0.239	P=0.572
POLY 1.5	P=0.457	P=0.475N	P=0.462N	P=0.535	P=0.436	P=0.430N	P=0.268	P=0.567
POLY 6	P=0.528	P=0.409N	P=0.404N	P=0.571N	P=0.504	P=0.586	P=0.200	P=0.583N
LOGISTIC REGRESSION	P=0.380	P=0.517N	P=0.549N	P=0.441	P=0.402	P=0.428N	P=0.267	P=0.568
COCH-ARM / FISHERS	P=0.441	P=0.500N	P=0.418N	P=0.500	P=0.424	P=0.345N	P=0.343	P=0.579N

Statistical Analysis of Primary Tumors in Mice(B6C3F1) - STODDARD SOLVENT (TYPE IIC)

Terminal Sacrifice at 105 weeks

Dose	Males CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3	Females CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
All Organs Malignant Tumors								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	23/50 (46%)	23/50 (46%)	25/50 (50%)	23/50 (46%)	19/50 (38%)	26/50 (52%)	23/50 (46%)	23/50 (46%)
POLY-3 RATE (b)	23/48.98	23/48.61	25/46.63	23/46.55	19/48.29	26/47.35	23/47.02	23/48.31
POLY-3 PERCENT (g)	47.0%	47.3%	53.6%	49.4%	39.3%	54.9%	48.9%	47.6%
TERMINAL (d)	11/34 (32%)	10/32 (31%)	9/27 (33%)	12/32 (38%)	10/36 (28%)	15/34 (44%)	8/27 (30%)	12/34 (35%)
FIRST INCIDENCE	458	398	478	506	424	455	506	282
STATISTICAL TESTS								
LIFE TABLE	P=0.433	P=0.522	P=0.259	P=0.494	P=0.343	P=0.109	P=0.125	P=0.269
POLY 3	P=0.406	P=0.566	P=0.328	P=0.486	P=0.362	P=0.091	P=0.231	P=0.269
POLY 1.5	P=0.444	P=0.572	P=0.347	P=0.519	P=0.359	P=0.097	P=0.237	P=0.270
POLY 6	P=0.376	P=0.557	P=0.315	P=0.458	P=0.367	P=0.090	P=0.223	P=0.273
LOGISTIC REGRESSION	P=0.514N	P=0.580N	P=0.498	P=0.537N	P=0.374	P=0.137	P=0.313	P=0.296
COCH-ARM / FISHERS	P=0.519	P=0.579N	P=0.421	P=0.579N	P=0.359	P=0.114	P=0.272	P=0.272

Dose	Males CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3	Females CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
All Organs Malignant and Benign Tumors								
TUMOR RATES	#	#	#	#	#	#	#	#
OVERALL (a)	42/50 (84%)	43/50 (86%)	41/50 (82%)	41/50 (82%)	39/50 (78%)	41/50 (82%)	41/50 (82%)	39/50 (78%)
POLY-3 RATE (b)	42/49.49	43/49.70	41/47.07	41/48.00	39/49.56	41/47.55	41/48.29	39/49.66
POLY-3 PERCENT (g)	84.9%	86.5%	87.1%	85.4%	78.7%	86.2%	84.9%	78.5%
TERMINAL (d)	28/34 (82%)	26/32 (81%)	23/27 (85%)	26/32 (81%)	27/36 (75%)	29/34 (85%)	21/27 (78%)	24/34 (71%)
FIRST INCIDENCE	458	398	478	506	424	455	506	282
STATISTICAL TESTS								
LIFE TABLE	P=0.467	P=0.398	P=0.227	P=0.491	P=0.450	P=0.280	P=0.073	P=0.466
POLY 3	P=0.539	P=0.520	P=0.490	P=0.584	P=0.444N	P=0.235	P=0.295	P=0.590N
POLY 1.5	P=0.513N	P=0.512	P=0.539	P=0.597N	P=0.467N	P=0.287	P=0.305	P=0.593N
POLY 6	P=0.498	P=0.531	P=0.455	P=0.556	P=0.420N	P=0.199	P=0.291	P=0.583N
LOGISTIC REGRESSION	P=0.407N	P=0.506	P=0.585N	P=0.509N	P=0.510N	P=0.369	P=0.370	P=0.587N
COCH-ARM / FISHERS	P=0.386N	P=0.500	P=0.500N	P=0.500N	P=0.500N	P=0.402	P=0.402	P=0.595N

(a) Number of tumor-bearing animals / number of animals examined at site.
(b) Number of tumor-bearing animals / Poly-3 number
(d) Observed incidence at terminal kill.
(f) Beneath the control incidence are the P-values associated with the trend test. Beneath the dosed group incidence are the P-values corresponding to

pairwise comparisons between the controls and that dosed group. The life table analysis regards tumors in animals dying prior to terminal kill as being (directly or indirectly) the cause of death.
Logistic regression is an alternative method for analyzing the incidence of non-fatal tumors. The Cochran-Armitage and Fishers exact tests compare directly the overall incidence rates
For all tests a negative trend is indicated by N

(e) Value of Statistic cannot be computed.
(g) Poly-3 adjusted lifetime tumor incidence.
(I) Interim sacrifice
(T) Terminal sacrifice
Tumor rates based on number of animals necropsied.
* To the right of any statistical result, indicates significance at (P<=0.05).
** To the right of any statistical result, indicates significance at (P<=0.01).

NTP Experiment-Test: 96001-06
Study Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
WITH AVERAGE SEVERITY GRADES[b]
STODDARD SOLVENT (TYPE IIC)

FINAL #1 MICE

Report: PEIRPT18
Date: 09/25/02
Time: 11:16:23

Facility: Battelle Northwest

Chemical CAS #: 64742-88-7

Lock Date: 09/25/01

Cage Range: All

Reasons For Removal: All

Removal Date Range: All

Treatment Groups: Include All

RECEIVED
OPPT CBIC
2002 OCT -8 AM 11:43

RECEIVED
OPPT NCIC
2002 OCT 22 AM 11:18

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)

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
WITH AVERAGE SEVERITY GRADES[b]
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
DISPOSITION SUMMARY				
Animals Initially In Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	6	11	11	10
Natural Death	8	5	12	6
Survivors				
Terminal Sacrifice	36	34	27	34
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Intestine Small, Duodenum	(43)	(45)	(44)	(47)
Infiltration Cellular, Plasma Cell			1 [3.0]	
Intestine Small, Jejunum	(43)	(47)	(43)	(47)
Necrosis			1 [3.0]	
Intestine Small, Ileum	(43)	(47)	(44)	(46)
Inflammation				1 [3.0]
Liver	(50)	(50)	(50)	(50)
Angiectasis	1 [2.0]	1 [2.0]		
Basophilic Focus	4 [2.3]	5 [2.6]	8 [2.1]	4 [3.0]
Clear Cell Focus	4 [1.5]		2 [2.0]	2 [2.5]
Eosinophilic Focus	4 [2.3]	9 [2.5]	6 [2.5]	11 [2.2]
Fatty Change		2 [2.5]	2 [2.5]	
Hematopoietic Cell Proliferation		1 [4.0]		
Infarct	1 [4.0]			
Inflammation, Granulomatous		1 [2.0]		
Inflammation, Suppurative				1 [2.0]
Mixed Cell Focus			1 [2.0]	1 [3.0]
Necrosis	3 [2.0]	3 [2.3]	1 [2.0]	
Parasite Metazoan		1 [2.0]		
Tension Lipidosis	2 [1.5]		1 [2.0]	2 [2.0]
Centrilobular, Necrosis	1 [1.0]	2 [2.0]		
Mesentery	(4)	(15)	(21)	(11)
Artery, Mineralization		1 [3.0]		
Fat, Hemorrhage		1 [1.0]	1 [2.0]	1 [2.0]
Fat, Necrosis	3 [2.3]	10 [2.3]	15 [2.0]	9 [2.0]
Pancreas	(49)	(50)	(48)	(49)
Atrophy		2 [1.0]		
Atypia Cellular	1 [1.0]			
Inflammation, Suppurative				1 [3.0]
Lipomatosis			1 [4.0]	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)

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
WITH AVERAGE SEVERITY GRADES[b]
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
ALIMENTARY SYSTEM - CONT				
Acinus, Hypertrophy				1 [1.0]
Duct, Cyst		2 [3.5]		1 [4.0]
Salivary Glands	(50)	(49)	(49)	(50)
Atrophy		1 [2.0]	1 [2.0]	
Stomach, Forestomach	(49)	(50)	(49)	(50)
Hyperplasia, Squamous	2 [2.5]	2 [1.0]	1 [1.0]	1 [3.0]
Inflammation, Chronic Active		2 [1.5]	1 [1.0]	
Ulcer	1 [3.0]		1 [1.0]	
Stomach, Glandular	(47)	(49)	(47)	(47)
Amyloid Deposition			1 [2.0]	
Mineralization		1 [1.0]	1 [1.0]	1 [2.0]
Necrosis		1 [1.0]	1 [1.0]	3 [1.7]
CARDIOVASCULAR SYSTEM				
Blood Vessel	(1)			(2)
Aorta, Mineralization	1 [3.0]			2 [2.0]
Heart	(50)	(50)	(50)	(50)
Cardiomyopathy	6 [1.2]	6 [1.0]	6 [1.0]	9 [1.2]
Mineralization	3 [1.3]	4 [1.3]		4 [1.5]
Thrombosis	2 [2.0]			
Artery, Inflammation	1 [1.0]		1 [3.0]	
ENDOCRINE SYSTEM				
Adrenal Cortex	(50)	(50)	(49)	(50)
Hematopoietic Cell Proliferation		1 [4.0]		
Hyperplasia	4 [1.5]	3 [1.7]	3 [2.0]	6 [2.0]
Hypertrophy	2 [1.5]	3 [1.7]	2 [1.0]	3 [2.0]
Necrosis			1 [2.0]	
Vacuolization Cytoplasmic	1 [4.0]			
Adrenal Medulla	(49)	(50)	(48)	(49)
Hyperplasia	2 [2.0]	3 [2.3]	4 [2.5]	2 [1.5]
Islets, Pancreatic	(49)	(50)	(48)	(48)
Hyperplasia	1 [2.0]	1 [3.0]		
Pituitary Gland	(47)	(49)	(49)	(48)
Angiectasis	1 [2.0]			
Pars Distalis, Hyperplasia	10 [1.7]	12 [1.5]	16 [1.7]	16 [2.5]
Pars Intermedia, Hypertrophy			1 [1.0]	
Thyroid Gland	(50)	(49)	(47)	(48)
Inflammation, Chronic	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)

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
WITH AVERAGE SEVERITY GRADES[b]
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
ENDOCRINE SYSTEM - CONT				
Follicular Cell, Hyperplasia		2 [2.0]	1 [1.0]	3 [1.3]
GENERAL BODY SYSTEM				
Peritoneum		(1)		
Inflammation, Acute		1 [3.0]		
GENITAL SYSTEM				
Clitoral Gland	(40)	(42)	(47)	(41)
Fibrosis		1 [3.0]		
Ovary	(49)	(50)	(48)	(49)
Angiectasis	2 [4.0]			
Cyst	12 [2.6]	12 [2.3]	9 [2.2]	6 [2.3]
Uterus	(49)	(50)	(49)	(49)
Angiectasis	1 [3.0]			
Inflammation, Suppurative				1 [2.0]
Endometrium, Hyperplasia, Cystic	5 [4.0]	3 [2.3]	9 [3.0]	8 [3.3]
HEMATOPOIETIC SYSTEM				
Bone Marrow	(49)	(49)	(48)	(50)
Atrophy		1 [2.0]	1 [2.0]	
Cytoplasmic Alteration, Focal		1 [2.0]		
Hyperplasia				1 [3.0]
Lymph Node	(5)	(7)	(9)	(10)
Angiectasis				1 [3.0]
Iliac, Angiectasis				2 [2.5]
Renal, Angiectasis	1 [4.0]	2 [3.0]	1 [4.0]	1 [2.0]
Renal, Ectasia			1 [2.0]	
Lymph Node, Mandibular	(42)	(32)	(40)	(40)
Infiltration Cellular, Plasma Cell				1 [3.0]
Lymph Node, Mesenteric	(47)	(49)	(47)	(50)
Angiectasis		1 [3.0]		1 [3.0]
Lymph Node, Mediastinal	(40)	(42)	(43)	(43)
Infiltration Cellular, Polymorphonuclear		1 [3.0]		
Spleen	(49)	(50)	(48)	(47)
Angiectasis			1 [2.0]	1 [4.0]
Congestion		1 [3.0]		
Hematopoietic Cell Proliferation	2 [3.0]	8 [2.6]	5 [2.8]	3 [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)

INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
WITH AVERAGE SEVERITY GRADES[b]
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
HEMATOPOIETIC SYSTEM - CONT				
Hyperplasia, Lymphoid	1 [4.0]	1 [2.0]		1 [2.0]
Necrosis	1 [4.0]			
Thymus	(43)	(45)	(47)	(46)
Atrophy			2 [3.0]	
INTEGUMENTARY SYSTEM				
Skin	(50)	(50)	(50)	(50)
Infiltration Cellular, Mixed Cell	1 [1.0]		1 [2.0]	
Inflammation, Chronic Active	1 [4.0]		1 [1.0]	1 [3.0]
Subcutaneous Tissue, Cyst Epithelial Inclusion	1 [2.0]			
Subcutaneous Tissue, Edema		1 [2.0]		1 [2.0]
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Fracture		1	1	
Skeletal Muscle	(1)	(1)	(1)	(2)
Hemorrhage		1 [3.0]		
Inflammation, Suppurative				1 [3.0]
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Compression		1 [4.0]		
Necrosis		1 [2.0]	1 [2.0]	
Artery, Inflammation	1 [1.0]			
Meninges, Infiltration Cellular, Mononuclear Cell	6 [1.2]	2 [1.5]	2 [1.5]	3 [1.3]
Peripheral Nerve			(1)	(1)
Inflammation, Suppurative				1 [4.0]
RESPIRATORY SYSTEM				
Larynx	(50)	(50)	(50)	(50)
Artery, Inflammation			1 [2.0]	
Lung	(50)	(50)	(50)	(50)
Hemorrhage	1 [1.0]			

a Number of animals examined microscopically at site and number of animals with lesion
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INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
WITH AVERAGE SEVERITY GRADES[b]
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE FEMALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
RESPIRATORY SYSTEM - CONT				
Alveolar Epithelium, Hyperplasia	1 [1.0]	3 [2.3]	1 [1.0]	3 [1.3]
Alveolus, Infiltration Cellular, Histiocyte			1 [1.0]	1 [1.0]
Nose	(49)	(50)	(50)	(49)
Inflammation, Suppurative		1 [2.0]	1 [2.0]	1 [2.0]
Respiratory Epithelium, Degeneration		1 [2.0]		
Trachea	(49)	(50)	(49)	(47)
Artery, Inflammation	1 [2.0]			
SPECIAL SENSES SYSTEM				
Eye	(46)	(49)	(45)	(46)
Cataract	1 [3.0]	2 [2.0]	2 [2.0]	
Inflammation, Chronic	1 [3.0]			
Cornea, Inflammation, Chronic Active		1 [3.0]	1 [1.0]	2 [2.0]
Harderian Gland	(49)	(49)	(49)	(49)
Hyperplasia	4 [2.0]	3 [2.0]	4 [2.3]	7 [1.7]
Infiltration Cellular			1 [2.0]	
Inflammation, Granulomatous	1 [1.0]			
URINARY SYSTEM				
Kidney	(50)	(50)	(49)	(49)
Amyloid Deposition		1 [3.0]		
Cyst	1 [2.0]			
Infarct	1 [3.0]			
Inflammation, Suppurative				1 [4.0]
Metaplasia, Osseous		2 [1.0]	1 [1.0]	2 [2.5]
Mineralization	1 [2.0]	1 [2.0]		2 [1.0]
Nephropathy	39 [1.1]	32 [1.3]	33 [1.0]	40 [1.1]
Capsule, Fibrosis	1 [2.0]			
Papilla, Necrosis				1 [3.0]
Pelvis, Dilatation		1 [2.0]		
Renal Tubule, Karyomegaly		1 [1.0]		
Renal Tubule, Necrosis				1 [2.0]
Urinary Bladder	(48)	(50)	(49)	(48)
Inflammation, Suppurative				1 [2.0]

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INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
WITH AVERAGE SEVERITY GRADES[b]
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
DISPOSITION SUMMARY				
Animals Initially In Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	7	9	16	13
Natural Death	9	9	6	5
Accidently Killed			1	
Survivors				
Terminal Sacrifice	34	32	27	32
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Gallbladder	(39)	(36)	(41)	(43)
Degeneration, Hyaline		1 [2.0]		
Hyperplasia	1 [2.0]			
Infiltration Cellular, Mixed Cell	1 [2.0]			
Inflammation, Chronic Active		1 [3.0]		
Intestine Large, Cecum	(45)	(41)	(46)	(47)
Hemorrhage	1 [4.0]			1 [2.0]
Intestine Small, Duodenum	(46)	(41)	(46)	(47)
Inflammation, Chronic Active			1 [4.0]	
Intestine Small, Jejunum	(46)	(41)	(46)	(47)
Serosa, Inflammation, Granulomatous	1 [3.0]			
Intestine Small, Ileum	(45)	(41)	(46)	(47)
Infiltration Cellular, Plasma Cell			1 [2.0]	
Inflammation		1 [3.0]		
Liver	(50)	(50)	(50)	(50)
Amyloid Deposition	1 [3.0]			
Basophilic Focus	9 [2.3]	13 [2.3]	17 [2.4]	11 [2.5]
Clear Cell Focus	13 [1.9]	11 [2.0]	15 [2.1]	10 [2.3]
Eosinophilic Focus	5 [1.8]	7 [2.1]	14 [2.2]	9 [1.9]
Fatty Change	1 [2.0]		1 [2.0]	
Infarct	1 [2.0]			1 [4.0]
Inflammation, Chronic				1 [2.0]
Mitotic Alteration		1 [3.0]		
Mixed Cell Focus	2 [0.0]	1 [2.0]		1 [2.0]
Necrosis	4 [1.5]	4 [2.3]	2 [2.0]	4 [2.0]
Tension Lipidosis	2 [1.0]	3 [1.3]	1 [2.0]	2 [1.5]
Bile Duct, Cyst				1 [2.0]
Centrilobular, Necrosis	1 [2.0]			1 [3.0]
Mesentery	(6)	(6)	(7)	(5)

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INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
WITH AVERAGE SEVERITY GRADES[b]
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
ALIMENTARY SYSTEM - CONT				
Artery, Inflammation	1 [3.0]		1 [3.0]	
Fat, Hemorrhage		1 [3.0]		
Fat, Necrosis	4 [1.8]	5 [2.0]	5 [2.2]	5 [2.2]
Pancreas	(49)	(49)	(49)	(50)
Atrophy	1 [1.0]	1 [1.0]		
Salivary Glands	(50)	(50)	(49)	(50)
Atrophy			1 [2.0]	
Stomach, Forestomach	(49)	(48)	(49)	(49)
Hyperplasia, Squamous	5 [2.2]	3 [2.3]		4 [1.8]
Inflammation, Chronic Active	5 [1.6]	1 [3.0]		2 [2.5]
Ulcer	2 [2.0]	1 [2.0]		2 [2.5]
Stomach, Glandular	(48)	(44)	(49)	(48)
Degeneration, Hyaline				1 [2.0]
Hyperplasia		1 [2.0]		
Mineralization	2 [1.0]	1 [1.0]		
Necrosis	2 [1.5]		1 [3.0]	1 [1.0]
Vacuolization Cytoplasmic			1 [2.0]	
Tongue				(1)
Mineralization				1 [1.0]
Tooth	(19)	(16)	(21)	(17)
Malformation				1 [4.0]
CARDIOVASCULAR SYSTEM				
Blood Vessel			(1)	(1)
Aorta, Mineralization			1 [3.0]	
Heart	(50)	(50)	(50)	(50)
Amyloid Deposition	1 [1.0]			
Angiectasis		1 [2.0]		
Cardiomyopathy	15 [1.3]	12 [1.1]	21 [1.2]	19 [1.1]
Infiltration Cellular, Polymorphonuclear			1 [2.0]	
Mineralization	1 [2.0]	2 [1.0]	2 [1.0]	1 [1.0]
Thrombosis		1 [4.0]	1 [3.0]	1 [3.0]
Artery, Inflammation			1 [3.0]	
Capillary, Endothelium, Hyperplasia		1 [2.0]		
ENDOCRINE SYSTEM				
Adrenal Cortex	(49)	(50)	(49)	(50)
Atrophy			1 [2.0]	
Hyperplasia	13 [2.0]	10 [1.8]	7 [2.0]	15 [1.6]

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INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
WITH AVERAGE SEVERITY GRADES[b]
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
ENDOCRINE SYSTEM - CONT				
Hypertrophy	30 [1.7]	29 [1.7]	20 [1.8]	20 [1.9]
Adrenal Medulla	(48)	(49)	(49)	(50)
Hyperplasia	3 [1.7]	4 [2.3]	3 [1.7]	1 [1.0]
Islets, Pancreatic	(48)	(49)	(49)	(50)
Hyperplasia		1 [2.0]	1 [2.0]	
Pituitary Gland	(49)	(49)	(48)	(46)
Pars Distalis, Hyperplasia	2 [1.5]		2 [2.0]	2 [1.5]
Pars Intermedia, Hyperplasia				1 [2.0]
Thyroid Gland	(49)	(48)	(47)	(50)
Follicular Cell, Hyperplasia	3 [1.0]	2 [1.0]	3 [1.0]	2 [1.0]
GENERAL BODY SYSTEM				
Peritoneum	(1)	(1)	(1)	
Inflammation, Suppurative	1 [3.0]			
GENITAL SYSTEM				
Coagulating Gland			(2)	
Hyperplasia			1 [2.0]	
Epididymis	(50)	(50)	(50)	(50)
Granuloma Sperm	3 [2.0]		3 [1.7]	2 [2.0]
Infiltration Cellular, Mononuclear Cell				1 [3.0]
Penis		(3)		(1)
Inflammation, Acute		2 [3.5]		1 [2.0]
Preputial Gland	(49)	(49)	(50)	(48)
Ectasia	1 [2.0]			
Inflammation, Chronic Active	2 [2.5]	3 [2.0]	2 [3.0]	1 [4.0]
Prostate	(46)	(50)	(50)	(50)
Inflammation, Suppurative	1 [2.0]	1 [2.0]		1 [3.0]
Artery, Inflammation			1 [3.0]	
Seminal Vesicle	(48)	(46)	(50)	(48)
Amyloid Deposition				1 [3.0]
Infiltration Cellular, Mononuclear Cell		1 [2.0]		
Inflammation, Chronic		1 [2.0]		
Inflammation, Suppurative		1 [3.0]		
Testes	(50)	(50)	(50)	(50)
Atrophy	2 [2.0]	1 [4.0]	1 [2.0]	2 [3.0]
Mineralization		1 [4.0]		
Germinal Epithelium, Degeneration	1 [2.0]			
Interstitial Cell, Hyperplasia	2 [3.0]			

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INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
WITH AVERAGE SEVERITY GRADES[b]
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
HEMATOPOIETIC SYSTEM				
Lymph Node	(1)		(1)	(3)
Deep Cervical, Hyperplasia, Lymphoid				1 [3.0]
Lumbar, Infiltration Cellular, Plasma Cell				2 [2.0]
Lymph Node, Mesenteric	(48)	(46)	(48)	(48)
Angiectasis			1 [3.0]	
Hyperplasia, Lymphoid				1 [3.0]
Infiltration Cellular, Plasma Cell			1 [4.0]	
Lymph Node, Mediastinal	(39)	(40)	(36)	(43)
Infiltration Cellular, Plasma Cell				1 [2.0]
Spleen	(49)	(49)	(49)	(50)
Amyloid Deposition	1 [3.0]			
Angiectasis			1 [2.0]	
Hematopoietic Cell Proliferation		3 [3.0]	3 [3.3]	2 [3.5]
Thymus	(41)	(39)	(40)	(42)
Cyst	1 [2.0]			
INTEGUMENTARY SYSTEM				
Skin	(50)	(50)	(50)	(50)
Cyst Epithelial Inclusion	1 [3.0]			
Infiltration Cellular, Mixed Cell	1 [1.0]			
Inflammation, Chronic Active	6 [3.0]	7 [3.4]	11 [3.3]	18 [3.3]
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Intervertebral Disc, Necrosis			1 [2.0]	
Skeletal Muscle				(1)
Inflammation, Suppurative				1 [4.0]
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Inflammation, Granulomatous			1 [2.0]	
Meninges, Infiltration Cellular, Mononuclear Cell			1 [2.0]	
Spinal Cord				(1)
Degeneration				1 [3.0]

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INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
WITH AVERAGE SEVERITY GRADES[b]
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
RESPIRATORY SYSTEM				
Lung	(50)	(49)	(50)	(50)
Fibrosis			1 [3.0]	
Hemorrhage	1 [1.0]	1 [2.0]	2 [2.0]	
Inflammation, Chronic Active				1 [1.0]
Thrombosis	1 [1.0]		1 [1.0]	
Alveolar Epithelium, Hyperplasia		4 [1.8]		2 [3.0]
Alveolus, Infiltration Cellular, Histiocyte	2 [1.5]	1 [2.0]	3 [2.0]	1 [4.0]
Bronchiole, Hyperplasia	2 [1.0]			
Mediastinum, Thrombosis		1 [2.0]		
Nose	(50)	(48)	(50)	(50)
Inflammation, Suppurative	3 [2.3]	2 [1.5]	1 [2.0]	2 [2.5]
Polyp, Inflammatory	1 [3.0]		1 [3.0]	
Olfactory Epithelium, Atrophy	3 [2.3]	1 [2.0]	2 [2.0]	
Olfactory Epithelium, Inflammation, Granulomatous			1 [3.0]	
SPECIAL SENSES SYSTEM				
Eye	(46)	(46)	(47)	(46)
Cornea, Inflammation, Chronic Active		3 [2.0]	1 [2.0]	1 [4.0]
Harderian Gland	(50)	(50)	(50)	(49)
Hyperplasia	3 [2.3]	4 [2.5]	1 [3.0]	1 [3.0]
Zymbal's Gland	(1)			(1)
Cyst	1 [3.0]			
URINARY SYSTEM				
Kidney	(50)	(50)	(49)	(50)
Amyloid Deposition	1 [4.0]			
Cyst	3 [2.0]	1 [1.0]	3 [1.7]	1 [2.0]
Inflammation, Granulomatous			1 [2.0]	
Inflammation, Suppurative	1 [2.0]		2 [2.5]	2 [3.0]
Metaplasia, Osseous	3 [1.0]	4 [1.5]		2 [1.5]
Nephropathy	44 [1.4]	43 [1.5]	42 [1.4]	44 [1.3]
Capsule, Fibrosis	1 [2.0]			1 [2.0]
Papilla, Necrosis		1 [4.0]	1 [4.0]	
Pelvis, Dilatation		1 [3.0]		2 [2.0]
Renal Tubule, Hyperplasia	2 [1.0]	1 [2.0]		
Renal Tubule, Necrosis		2 [2.5]		

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INCIDENCE RATES OF NONNEOPLASTIC LESIONS BY ANATOMIC SITE (a)
WITH AVERAGE SEVERITY GRADES[b]
STODDARD SOLVENT (TYPE IIC)

B6C3F1 MICE MALE	CONTROL	550 MG/M3	1100 MG/M3	2200 MG/M3
URINARY SYSTEM - CONT				
Transitional Epithelium, Hyperplasia			1 [2.0]	2 [1.0]
Urinary Bladder	(49)	(46)	(49)	(50)
Infiltration Cellular, Mixed Cell		1 [2.0]	1 [3.0]	
Inflammation, Acute			1 [2.0]	
Inflammation, Chronic Active	1 [4.0]		1 [4.0]	2 [3.0]
Transitional Epithelium, Hyperplasia	1 [2.0]		1 [3.0]	1 [3.0]

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

END OF REPORT