

**TDMS No.** 99028 - 05

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS  
ABRIDGED) (a)**

**Date Report Reqsted:** 11/12/2007

**Test Type:** CHRONIC

bis(2-Chloroethoxy)methane

**Time Report Reqsted:** 14:57:37

**Route:** SKIN APPLICATION

**CAS Number:** 111-91-1

**First Dose M/F:** 09/16/02 / 09/17/02

**Species/Strain:** RATS/F 344

**Lab:** BAT

F1\_R2

**C Number:** C99028

**Lock Date:** 07/12/2005

**Cage Range:** ALL

**Date Range:** ALL

**Reasons For Removal:** ALL

**Removal Date Range:** ALL

**Treatment Groups:** Include ALL

**TDMSE Version:** 1.9.1

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Species/Strain: RATS/F 344

Lab: BAT

FISCHER 344 RATS MALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
<b>Disposition Summary</b>				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	21	17	31	20
Natural Death	8	4	5	6
Survivors				
Moribund Sacrifice		1		
Terminal Sacrifice	21	28	14	24
Animals Examined Microscopically	50	50	50	50
<b>ALIMENTARY SYSTEM</b>				
Esophagus	(50)	(50)	(50)	(50)
Intestine Large, Cecum	(49)	(50)	(50)	(50)
Adenoma		1 (2%)		
Intestine Large, Colon	(50)	(50)	(50)	(50)
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Adenoma			1 (2%)	1 (2%)
Intestine Small, Duodenum	(50)	(50)	(50)	(50)
Intestine Small, Ileum	(50)	(50)	(50)	(50)
Intestine Small, Jejunum	(50)	(50)	(50)	(50)
Granular Cell Tumor Malignant	1 (2%)			
Liver	(50)	(50)	(50)	(50)
Rhabdomyosarcoma, Metastatic, Skeletal Muscle			1 (2%)	
Mesentery	(10)	(10)	(9)	(9)
Oral Mucosa	(2)	(0)	(0)	(0)
Pancreas	(50)	(50)	(50)	(50)
Salivary Glands	(50)	(50)	(50)	(50)
Schwannoma Malignant				1 (2%)
Stomach, Forestomach	(50)	(50)	(50)	(50)
Stomach, Glandular	(50)	(50)	(50)	(50)
<b>CARDIOVASCULAR SYSTEM</b>				
Heart	(50)	(50)	(50)	(50)
Schwannoma Benign	2 (4%)	1 (2%)	1 (2%)	1 (2%)

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

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Species/Strain: RATS/F 344

Lab: BAT

FISCHER 344 RATS MALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
Schwannoma Malignant, Metastatic, Skin			1 (2%)	
<b>ENDOCRINE SYSTEM</b>				
Adrenal Cortex	(50)	(50)	(50)	(50)
Adenoma				1 (2%)
Adrenal Medulla	(50)	(50)	(50)	(50)
Ganglioneuroma			1 (2%)	1 (2%)
Pheochromocytoma Benign	2 (4%)	4 (8%)	5 (10%)	6 (12%)
Pheochromocytoma Complex		1 (2%)		
Bilateral, Pheochromocytoma Benign	1 (2%)	1 (2%)	1 (2%)	
Bilateral, Pheochromocytoma Benign, Multiple			1 (2%)	
Islets, Pancreatic	(50)	(50)	(50)	(50)
Adenoma	3 (6%)	7 (14%)	2 (4%)	3 (6%)
Carcinoma			1 (2%)	1 (2%)
Parathyroid Gland	(49)	(44)	(45)	(47)
Pituitary Gland	(49)	(50)	(50)	(50)
Pars Distalis, Adenoma	32 (65%)	23 (46%)	22 (44%)	29 (58%)
Pars Distalis, Adenoma, Multiple	3 (6%)	1 (2%)	4 (8%)	
Pars Intermedia, Adenoma		1 (2%)		1 (2%)
Thyroid Gland	(50)	(50)	(50)	(50)
Bilateral, C-cell, Adenoma			1 (2%)	
Bilateral, C-cell, Adenoma, Multiple	1 (2%)			
C-cell, Adenoma	8 (16%)	9 (18%)	7 (14%)	7 (14%)
C-cell, Adenoma, Multiple	1 (2%)			1 (2%)
C-cell, Carcinoma	1 (2%)			
Follicle, Adenoma				1 (2%)
Follicle, Carcinoma			1 (2%)	
<b>GENERAL BODY SYSTEM</b>				
None				
<b>GENITAL SYSTEM</b>				
Epididymis	(50)	(50)	(50)	(50)
Penis	(0)	(0)	(1)	(0)
Preputial Gland	(50)	(50)	(50)	(50)

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Species/Strain: RATS/F 344

Lab: BAT

FISCHER 344 RATS MALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
Adenoma	2 (4%)	3 (6%)	2 (4%)	1 (2%)
Carcinoma			1 (2%)	
Prostate	(50)	(50)	(50)	(50)
Seminal Vesicle	(50)	(50)	(50)	(50)
Testes	(50)	(50)	(50)	(50)
Bilateral, Interstitial Cell, Adenoma	18 (36%)	21 (42%)	17 (34%)	19 (38%)
Interstitial Cell, Adenoma	12 (24%)	8 (16%)	14 (28%)	14 (28%)
<b>HEMATOPOIETIC SYSTEM</b>				
Bone Marrow	(50)	(50)	(50)	(50)
Lymph Node	(4)	(0)	(6)	(5)
Deep Cervical, Rhabdomyosarcoma, Metastatic, Skeletal Muscle			1 (17%)	
Mediastinal, Rhabdomyosarcoma, Metastatic, Skeletal Muscle			1 (17%)	
Mediastinal, Sarcoma			1 (17%)	
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Rhabdomyosarcoma, Metastatic, Skeletal Muscle			1 (2%)	
Spleen	(50)	(50)	(49)	(50)
Hemangioma		1 (2%)		
Hemangiosarcoma				1 (2%)
Sarcoma	1 (2%)			
Thymus	(49)	(50)	(50)	(48)
Schwannoma Malignant, Metastatic, Skin			1 (2%)	
<b>INTEGUMENTARY SYSTEM</b>				
Mammary Gland	(49)	(50)	(50)	(50)
Adenoma			1 (2%)	
Carcinoma			1 (2%)	
Fibroadenoma	3 (6%)	1 (2%)		1 (2%)
Skin	(50)	(50)	(50)	(50)
Basal Cell Adenoma		2 (4%)		
Basal Cell Carcinoma		1 (2%)		
Squamous Cell Papilloma			1 (2%)	
Trichoepithelioma	1 (2%)		1 (2%)	1 (2%)
Dermis, Fibroma				1 (2%)

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Species/Strain: RATS/F 344

Lab: BAT

FISCHER 344 RATS MALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
Epidermis, Squamous Cell Carcinoma	1 (2%)			
Site Of Application - Epidermis, Basal Cell Adenoma		1 (2%)		
Subcutaneous Tissue, Fibroma	1 (2%)		2 (4%)	
Subcutaneous Tissue, Fibrosarcoma	2 (4%)			
Subcutaneous Tissue, Hemangioma			1 (2%)	
Subcutaneous Tissue, Lipoma			1 (2%)	
Subcutaneous Tissue, Schwannoma Malignant	1 (2%)		1 (2%)	
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone	(50)	(50)	(50)	(50)
Fibrosarcoma		1 (2%)		
Osteosarcoma			1 (2%)	
Skeletal Muscle	(1)	(0)	(1)	(0)
Hemangiosarcoma	1 (100%)			
Rhabdomyosarcoma			1 (100%)	
<b>NERVOUS SYSTEM</b>				
Brain	(50)	(50)	(50)	(50)
Astrocytoma Malignant				1 (2%)
Glioma Malignant				1 (2%)
Cranial Nerve, Schwannoma Malignant	1 (2%)			
Spinal Cord	(1)	(1)	(0)	(0)
Astrocytoma Malignant	1 (100%)			
<b>RESPIRATORY SYSTEM</b>				
Lung	(50)	(50)	(50)	(50)
Alveolar/Bronchiolar Adenoma	3 (6%)	1 (2%)	3 (6%)	
Alveolar/Bronchiolar Adenoma, Multiple	1 (2%)			
Alveolar/Bronchiolar Carcinoma	1 (2%)	1 (2%)	1 (2%)	
Carcinoma, Metastatic, Mammary Gland			1 (2%)	
Carcinoma, Metastatic, Thyroid Gland			1 (2%)	
Hemangiosarcoma, Metastatic, Skeletal Muscle	1 (2%)			
Hemangiosarcoma, Metastatic, Spleen				1 (2%)

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Species/Strain: RATS/F 344

Lab: BAT

FISCHER 344 RATS MALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
Nose	(50)	(49)	(50)	(49)
Trachea	(50)	(50)	(50)	(50)
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(50)	(50)	(50)	(50)
Harderian Gland	(50)	(50)	(50)	(50)
Adenoma		1 (2%)		
Zymbal's Gland	(1)	(0)	(0)	(1)
Adenoma	1 (100%)			
Carcinoma				1 (100%)
<b>URINARY SYSTEM</b>				
Kidney	(50)	(50)	(50)	(50)
Carcinoma, Metastatic, Thyroid Gland			1 (2%)	
Hemangiosarcoma			1 (2%)	
Lipoma	1 (2%)			
Urinary Bladder	(50)	(50)	(50)	(50)
<b>SYSTEMIC LESIONS</b>				
Multiple Organs	*(50)	*(50)	*(50)	*(50)
Histiocytic Sarcoma	1 (2%)			
Leukemia Granulocytic				1 (2%)
Leukemia Mononuclear	17 (34%)	14 (28%)	19 (38%)	12 (24%)
Mesothelioma Malignant	2 (4%)	3 (6%)	2 (4%)	1 (2%)

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

\* Number of animals with any tissue examined microscopically

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Species/Strain: RATS/F 344

Lab: BAT

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FISCHER 344 RATS MALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
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**Tumor Summary for Males**

<b>Total Animals with Primary Neoplasms (b)</b>	49	47	49	49
<b>Total Primary Neoplasms</b>	127	108	120	109
<b>Total Animals with Benign Neoplasms</b>	49	45	47	46
<b>Total Benign Neoplasms</b>	96	87	89	89
<b>Total Animals with Malignant Neoplasms</b>	26	18	26	19
<b>Total Malignant Neoplasms</b>	31	21	31	20
<b>Total Animals with Metastatic Neoplasms</b>	2	1	5	1
<b>Total Metastatic Neoplasms</b>	2	1	10	1
<b>Total Animals with Malignant Neoplasms Uncertain Primary Site</b>				
<b>Total Animals with Neoplasms Uncertain-Benign or Malignant</b>				
<b>Total Uncertain Neoplasms</b>				

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

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

b - Primary tumors: all tumors except metastatic tumors

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CAS Number: 111-91-1

First Dose M/F: 09/16/02 / 09/17/02

Species/Strain: RATS/F 344

Lab: BAT

FISCHER 344 RATS FEMALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
<b>Disposition Summary</b>				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	19	18	15	19
Natural Death	12	2	7	13
Survivors				
Terminal Sacrifice	19	30	28	18
Animals Examined Microscopically	50	50	50	50
<b>ALIMENTARY SYSTEM</b>				
Esophagus	(50)	(50)	(50)	(50)
Periesophageal Tissue, Lipoma	1 (2%)			
Intestine Large, Cecum	(50)	(50)	(50)	(50)
Lipoma			1 (2%)	
Intestine Large, Colon	(50)	(50)	(50)	(50)
Intestine Large, Rectum	(50)	(50)	(50)	(50)
Adenoma	1 (2%)			
Intestine Small, Duodenum	(50)	(50)	(50)	(50)
Liver	(50)	(50)	(50)	(50)
Hepatocellular Carcinoma				1 (2%)
Mesentery	(13)	(13)	(17)	(6)
Leiomyosarcoma, Metastatic, Uterus		1 (8%)		
Oral Mucosa	(1)	(0)	(0)	(0)
Squamous Cell Papilloma	1 (100%)			
Pancreas	(50)	(50)	(50)	(50)
Stomach, Forestomach	(50)	(50)	(50)	(50)
Stomach, Glandular	(50)	(50)	(50)	(50)
Tongue	(0)	(0)	(0)	(1)
Squamous Cell Papilloma				1 (100%)
<b>CARDIOVASCULAR SYSTEM</b>				
Heart	(50)	(50)	(50)	(50)
Schwannoma Benign		1 (2%)		

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



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Species/Strain: RATS/F 344

Lab: BAT

FISCHER 344 RATS FEMALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
<b>ENDOCRINE SYSTEM</b>				
Adrenal Cortex	(50)	(50)	(50)	(50)
Adenoma			2 (4%)	
Adrenal Medulla	(50)	(50)	(50)	(50)
Pheochromocytoma Benign	1 (2%)	1 (2%)		2 (4%)
Pheochromocytoma Complex		1 (2%)		
Islets, Pancreatic	(50)	(50)	(50)	(50)
Adenoma		1 (2%)		
Carcinoma	1 (2%)			
Parathyroid Gland	(43)	(46)	(48)	(50)
Adenoma			1 (2%)	
Pituitary Gland	(50)	(50)	(50)	(50)
Pars Distalis, Adenoma	20 (40%)	23 (46%)	22 (44%)	17 (34%)
Pars Distalis, Adenoma, Multiple	2 (4%)	5 (10%)	2 (4%)	1 (2%)
Pars Intermedia, Adenoma	1 (2%)			
Thyroid Gland	(50)	(50)	(50)	(50)
Bilateral, C-cell, Adenoma	1 (2%)			
C-cell, Adenoma	5 (10%)	9 (18%)	11 (22%)	2 (4%)
C-cell, Adenoma, Multiple		2 (4%)		
C-cell, Carcinoma			1 (2%)	
Follicle, Adenoma	1 (2%)	1 (2%)		
Follicle, Carcinoma	1 (2%)			
<b>GENERAL BODY SYSTEM</b>				
None				
<b>GENITAL SYSTEM</b>				
Clitoral Gland	(50)	(50)	(50)	(50)
Adenoma	2 (4%)	4 (8%)	5 (10%)	3 (6%)
Carcinoma			2 (4%)	1 (2%)
Ovary	(50)	(50)	(50)	(50)
Granulosa Cell Tumor Malignant	1 (2%)			
Uterus	(50)	(50)	(50)	(50)
Adenoma		1 (2%)		
Leiomyosarcoma		1 (2%)		
Polyp Stromal	5 (10%)	5 (10%)	8 (16%)	4 (8%)

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Lab: BAT

FISCHER 344 RATS FEMALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
Sarcoma Stromal Bilateral, Polyp Stromal	1 (2%)	1 (2%)	1 (2%)	2 (4%) 1 (2%)
Vagina Polyp	(0)	(0)	(0)	(1) 1 (100%)
<b>HEMATOPOIETIC SYSTEM</b>				
Bone Marrow	(50)	(50)	(50)	(49)
Lymph Node Deep Cervical, Carcinoma, Metastatic, Thyroid Gland	(3)	(1)	(5) 1 (20%)	(1)
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Spleen	(50)	(50)	(50)	(50)
Thymus	(49)	(50)	(50)	(49)
<b>INTEGUMENTARY SYSTEM</b>				
Mammary Gland Adenoma	(50)	(50) 1 (2%)	(50)	(50) 1 (2%)
Carcinoma	1 (2%)	2 (4%)	1 (2%)	
Fibroadenoma	12 (24%)	18 (36%)	12 (24%)	14 (28%)
Fibroadenoma, Multiple	4 (8%)	4 (8%)	6 (12%)	2 (4%)
Skin Subcutaneous Tissue, Fibroma	(50)	(50)	(50)	(49)
Subcutaneous Tissue, Fibrosarcoma	2 (4%)	1 (2%) 1 (2%)		
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone Osteosarcoma	(50)	(50)	(50) 1 (2%)	(50)
<b>NERVOUS SYSTEM</b>				
Brain Oligodendroglioma Malignant	(50) 1 (2%)	(50)	(50)	(50)
<b>RESPIRATORY SYSTEM</b>				

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Lab: BAT

FISCHER 344 RATS FEMALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
Lung	(50)	(50)	(50)	(50)
Alveolar/Bronchiolar Adenoma			3 (6%)	2 (4%)
Nose	(49)	(49)	(50)	(49)
Trachea	(50)	(50)	(50)	(50)
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(50)	(50)	(50)	(50)
Harderian Gland	(50)	(50)	(50)	(50)
Lacrimal Gland	(0)	(1)	(0)	(0)
Zymbal's Gland	(0)	(0)	(0)	(1)
Carcinoma				1 (100%)
<b>URINARY SYSTEM</b>				
Kidney	(50)	(50)	(50)	(50)
Lipoma			1 (2%)	
Sarcoma	1 (2%)			
Urinary Bladder	(50)	(50)	(49)	(50)
<b>SYSTEMIC LESIONS</b>				
Multiple Organs	*(50)	*(50)	*(50)	*(50)
Histiocytic Sarcoma	1 (2%)		1 (2%)	
Leukemia Mononuclear	12 (24%)	9 (18%)	12 (24%)	13 (26%)

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

\* Number of animals with any tissue examined microscopically

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FISCHER 344 RATS FEMALE	0 MG/KG	75 MG/KG	150 MG/KG	300 MG/KG
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**Tumor Summary for Females**

<b>Total Animals with Primary Neoplasms (b)</b>	44	43	45	34
<b>Total Primary Neoplasms</b>	79	92	93	69
<b>Total Animals with Benign Neoplasms</b>	37	41	41	31
<b>Total Benign Neoplasms</b>	59	77	74	51
<b>Total Animals with Malignant Neoplasms</b>	19	15	18	16
<b>Total Malignant Neoplasms</b>	20	15	19	18
<b>Total Animals with Metastatic Neoplasms</b>		1	1	
<b>Total Metastatic Neoplasms</b>		1	1	
<b>Total Animals with Malignant Neoplasms Uncertain Primary Site</b>				
<b>Total Animals with Neoplasms Uncertain-Benign or Malignant</b>				
<b>Total Uncertain Neoplasms</b>				

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

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

b - Primary tumors: all tumors except metastatic tumors