

TDMS No. 99017 - 05

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

Date Report Requested: 12/30/2008

Test Type: CHRONIC

Diethylamine

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

F1_R2

C Number: C99017
Lock Date: 07/24/2006
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 2.1.0

Test Type: CHRONIC

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Disposition Summary				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	19	24	20	13
Natural Death	3	5	5	1
Survivors				
Terminal Sacrifice	28	21	25	36
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Esophagus	(50)	(50)	(50)	(50)
Intestine Large, Cecum	(49)	(47)	(49)	(50)
Intestine Small, Duodenum	(49)	(49)	(49)	(50)
Adenoma		1 (2%)		
Leiomyoma	1 (2%)			
Intestine Small, Ileum	(48)	(47)	(46)	(49)
Adenoma		1 (2%)		
Intestine Small, Jejunum	(48)	(47)	(48)	(50)
Liver	(50)	(50)	(50)	(50)
Fibrosarcoma, Metastatic, Mesentery			1 (2%)	
Fibrous Histiocytoma, Metastatic, Skin		1 (2%)		
Hepatocellular Adenoma			1 (2%)	
Hepatocellular Adenoma, Multiple			1 (2%)	
Mesentery	(10)	(13)	(16)	(10)
Fibrosarcoma			1 (6%)	
Pancreas	(49)	(50)	(50)	(50)
Salivary Glands	(50)	(50)	(50)	(50)
Stomach, Forestomach	(50)	(50)	(50)	(50)
Stomach, Glandular	(50)	(50)	(50)	(50)
Tongue	(0)	(0)	(1)	(0)
CARDIOVASCULAR SYSTEM				
Blood Vessel	(0)	(0)	(1)	(1)
Heart	(50)	(50)	(50)	(50)

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

Test Type: CHRONIC

Diethylamine

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	31 PPM	62.5 PPM	125 PPM
ENDOCRINE SYSTEM				
Adrenal Cortex	(50)	(50)	(50)	(50)
Adenoma	1 (2%)	6 (12%)	3 (6%)	3 (6%)
Adrenal Medulla	(50)	(50)	(50)	(49)
Ganglioneuroma				1 (2%)
Pheochromocytoma Benign	7 (14%)	3 (6%)	7 (14%)	8 (16%)
Pheochromocytoma Benign, Multiple				1 (2%)
Pheochromocytoma Complex	2 (4%)			
Pheochromocytoma Malignant	1 (2%)		2 (4%)	1 (2%)
Bilateral, Pheochromocytoma Benign		3 (6%)	2 (4%)	
Islets, Pancreatic	(50)	(50)	(50)	(50)
Adenoma	6 (12%)	8 (16%)	7 (14%)	2 (4%)
Carcinoma	1 (2%)	3 (6%)	2 (4%)	1 (2%)
Pituitary Gland	(50)	(48)	(50)	(50)
Ganglioneuroma	1 (2%)			
Pars Distalis, Adenoma	31 (62%)	32 (67%)	31 (62%)	26 (52%)
Thyroid Gland	(50)	(50)	(50)	(50)
C-cell, Adenoma	7 (14%)	5 (10%)	3 (6%)	9 (18%)
C-cell, Carcinoma	1 (2%)	3 (6%)	1 (2%)	
Follicular Cell, Adenoma		1 (2%)	1 (2%)	
GENERAL BODY SYSTEM				
Peritoneum	(0)	(1)	(1)	(1)
GENITAL SYSTEM				
Epididymis	(50)	(50)	(50)	(50)
Preputial Gland	(50)	(50)	(50)	(50)
Adenoma		1 (2%)	2 (4%)	
Carcinoma	1 (2%)	1 (2%)		
Prostate	(50)	(50)	(50)	(50)
Seminal Vesicle	(50)	(50)	(50)	(50)
Testes	(50)	(50)	(50)	(50)
Bilateral, Interstitial Cell, Adenoma	24 (48%)	23 (46%)	32 (64%)	25 (50%)
Interstitial Cell, Adenoma	11 (22%)	14 (28%)	7 (14%)	18 (36%)

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

Test Type: CHRONIC

Diethylamine

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	31 PPM	62.5 PPM	125 PPM
HEMATOPOIETIC SYSTEM				
Bone Marrow	(50)	(50)	(50)	(50)
Lymph Node	(10)	(5)	(10)	(10)
Lymph Node, Bronchial	(4)	(4)	(3)	(5)
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung	1 (25%)			
Basal Cell Carcinoma, Metastatic, Skin	1 (25%)			
Lymph Node, Mandibular	(0)	(0)	(1)	(1)
Lymph Node, Mediastinal	(30)	(24)	(35)	(29)
Basal Cell Carcinoma, Metastatic, Skin	1 (3%)			
Lymph Node, Mesenteric	(49)	(50)	(50)	(49)
Spleen	(50)	(50)	(50)	(50)
Fibrosarcoma, Metastatic, Mesentery			1 (2%)	
Thymus	(44)	(43)	(47)	(45)
Thymoma Malignant				1 (2%)
INTEGUMENTARY SYSTEM				
Mammary Gland	(50)	(50)	(50)	(49)
Adenoma		1 (2%)		
Carcinoma		1 (2%)		
Fibroadenoma	2 (4%)	1 (2%)	3 (6%)	1 (2%)
Fibroadenoma, Multiple		1 (2%)		
Skin	(50)	(50)	(50)	(50)
Basal Cell Carcinoma	1 (2%)	1 (2%)		
Keratoacanthoma		2 (4%)	2 (4%)	1 (2%)
Squamous Cell Carcinoma			1 (2%)	
Sebaceous Gland, Adenoma	1 (2%)	1 (2%)		
Subcutaneous Tissue, Fibroma	1 (2%)	4 (8%)	2 (4%)	
Subcutaneous Tissue, Fibrosarcoma		1 (2%)		
Subcutaneous Tissue, Fibrous	1 (2%)	1 (2%)		
Histiocytoma				
Subcutaneous Tissue, Lipoma		1 (2%)		1 (2%)
Subcutaneous Tissue, Osteosarcoma		1 (2%)		
Subcutaneous Tissue, Sarcoma		2 (4%)		
Subcutaneous Tissue, Schwannoma				1 (2%)
Benign				

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

Test Type: CHRONIC

Diethylamine

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	31 PPM	62.5 PPM	125 PPM
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Chordoma				1 (2%)
Fibrous Histiocytoma, Metastatic, Skin		1 (2%)		
Cranium, Squamous Cell Carcinoma, Metastatic, Skin			1 (2%)	
Tibia, Osteosarcoma				1 (2%)
Skeletal Muscle	(0)	(1)	(1)	(1)
Fibrous Histiocytoma, Metastatic, Skin		1 (100%)		
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
RESPIRATORY SYSTEM				
Larynx	(50)	(50)	(50)	(50)
Lung	(50)	(50)	(50)	(50)
Alveolar/Bronchiolar Adenoma		1 (2%)		
Alveolar/Bronchiolar Carcinoma	1 (2%)		1 (2%)	2 (4%)
Alveolar/Bronchiolar Carcinoma, Multiple		1 (2%)		
Basal Cell Carcinoma, Metastatic, Skin	1 (2%)			
Carcinoma, Metastatic, Mammary Gland		1 (2%)		
Carcinoma, Metastatic, Zymbal'S Gland				1 (2%)
Chordoma, Metastatic, Bone				1 (2%)
Fibrous Histiocytoma, Metastatic, Skin		1 (2%)		
Pheochromocytoma Malignant, Metastatic, Adrenal Medulla				1 (2%)
Squamous Cell Carcinoma, Metastatic, Skin			1 (2%)	
Nose	(49)	(50)	(50)	(50)
Pleura	(50)	(50)	(50)	(50)
Trachea	(50)	(50)	(50)	(50)
SPECIAL SENSES SYSTEM				

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

Test Type: CHRONIC

Diethylamine

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Eye	(49)	(50)	(50)	(50)
Harderian Gland	(50)	(50)	(50)	(50)
Zymbal's Gland	(1)	(3)	(0)	(2)
Adenoma	1 (100%)			
Carcinoma		3 (100%)		2 (100%)
URINARY SYSTEM				
Kidney	(50)	(50)	(50)	(50)
Lipoma		1 (2%)		
Urinary Bladder	(50)	(50)	(49)	(50)
Hemangiosarcoma	1 (2%)			
Transitional Epithelium, Papilloma	1 (2%)	1 (2%)		
SYSTEMIC LESIONS				
Multiple Organs	*(50)	*(50)	*(50)	*(50)
Histiocytic Sarcoma				2 (4%)
Leukemia Mononuclear	25 (50%)	18 (36%)	33 (66%)	24 (48%)
Mesothelioma Malignant		3 (6%)	1 (2%)	

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

* Number of animals with any tissue examined microscopically

Test Type: CHRONIC

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS MALE	CONTROL	31 PPM	62.5 PPM	125 PPM
-----------------------	---------	--------	----------	---------

Tumor Summary for Males

Total Animals with Primary Neoplasms (b)	49	50	50	49
Total Primary Neoplasms	130	151	146	132
Total Animals with Benign Neoplasms	44	48	49	48
Total Benign Neoplasms	95	112	104	97
Total Animals with Malignant Neoplasms	31	31	37	32
Total Malignant Neoplasms	35	39	42	35
Total Animals with Metastatic Neoplasms	2	2	2	3
Total Metastatic Neoplasms	4	5	4	3
Total Animals with Malignant Neoplasms Uncertain Primary Site				
Total Animals with Neoplasms Uncertain-Benign or Malignant				
Total Uncertain Neoplasms				

*** 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

Test Type: CHRONIC

Diethylamine

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Disposition Summary				
Animals Initially in Study	50	50	50	50
Early Deaths				
Moribund Sacrifice	17	15	18	15
Natural Death	2	4	2	
Survivors				
Moribund Sacrifice			1	1
Terminal Sacrifice	31	31	29	34
Animals Examined Microscopically	50	50	50	50
ALIMENTARY SYSTEM				
Intestine Large, Colon	(49)	(47)	(50)	(50)
Liver	(50)	(50)	(50)	(50)
Hepatocellular Adenoma	1 (2%)			
Mesentery	(16)	(15)	(18)	(10)
Carcinoma, Metastatic, Uncertain Primary Site	1 (6%)			
Pancreas	(50)	(50)	(50)	(50)
Stomach, Forestomach	(50)	(50)	(50)	(50)
Stomach, Glandular	(50)	(50)	(50)	(50)
Tongue	(0)	(2)	(0)	(1)
Squamous Cell Papilloma		1 (50%)		
CARDIOVASCULAR SYSTEM				
Heart	(50)	(50)	(50)	(50)
ENDOCRINE SYSTEM				
Adrenal Cortex	(50)	(50)	(50)	(50)
Adenoma	4 (8%)	5 (10%)	2 (4%)	6 (12%)
Bilateral, Adenoma		1 (2%)		
Adrenal Medulla	(50)	(50)	(50)	(50)
Pheochromocytoma Benign		1 (2%)	2 (4%)	1 (2%)
Pheochromocytoma Malignant		1 (2%)	1 (2%)	1 (2%)

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

Test Type: CHRONIC

Diethylamine

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Islets, Pancreatic	(50)	(50)	(50)	(50)
Adenoma	2 (4%)	1 (2%)	1 (2%)	1 (2%)
Carcinoma			3 (6%)	
Parathyroid Gland	(43)	(42)	(48)	(48)
Adenoma	1 (2%)			
Pituitary Gland	(50)	(50)	(50)	(50)
Carcinoma	2 (4%)	1 (2%)	1 (2%)	1 (2%)
Pars Distalis, Adenoma	29 (58%)	33 (66%)	36 (72%)	23 (46%)
Thyroid Gland	(50)	(50)	(50)	(50)
C-cell, Adenoma	4 (8%)	6 (12%)	3 (6%)	6 (12%)
C-cell, Carcinoma		1 (2%)		1 (2%)
Follicular Cell, Adenoma		1 (2%)		
GENERAL BODY SYSTEM				
Tissue NOS	(1)	(0)	(0)	(0)
Mediastinum, Carcinoma, Metastatic, Uncertain Primary Site	1 (100%)			
GENITAL SYSTEM				
Clitoral Gland	(50)	(50)	(50)	(50)
Adenoma	1 (2%)	2 (4%)	3 (6%)	2 (4%)
Carcinoma			1 (2%)	
Ovary	(50)	(50)	(50)	(50)
Granulosa Cell Tumor Malignant			1 (2%)	
Uterus	(50)	(50)	(50)	(50)
Adenoma	1 (2%)			1 (2%)
Polyp Stromal	8 (16%)	9 (18%)	7 (14%)	9 (18%)
Polyp Stromal, Multiple		2 (4%)		1 (2%)
Sarcoma Stromal		1 (2%)		
Cervix, Polyp Stromal			1 (2%)	
Endometrium, Deciduoma Benign		1 (2%)		
Vagina	(1)	(0)	(0)	(0)
HEMATOPOIETIC SYSTEM				
Bone Marrow	(50)	(50)	(50)	(50)
Lymph Node	(3)	(0)	(1)	(1)

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

Test Type: CHRONIC

Diethylamine

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Lymph Node, Bronchial	(4)	(1)	(5)	(7)
Lymph Node, Mandibular	(2)	(0)	(1)	(2)
Lymph Node, Mediastinal	(33)	(27)	(25)	(29)
Carcinoma, Metastatic, Thyroid Gland		1 (4%)		
Fibrosarcoma, Metastatic, Skin			1 (4%)	
Lymph Node, Mesenteric	(50)	(50)	(50)	(50)
Spleen	(50)	(50)	(50)	(50)
Thymus	(48)	(44)	(40)	(47)
Thymoma Nos	1 (2%)			
INTEGUMENTARY SYSTEM				
Mammary Gland	(50)	(50)	(50)	(50)
Adenoma	1 (2%)			
Carcinoma	7 (14%)	3 (6%)	1 (2%)	2 (4%)
Carcinoma, Multiple	1 (2%)		1 (2%)	
Fibroadenoma	18 (36%)	16 (32%)	17 (34%)	19 (38%)
Fibroadenoma, Multiple	9 (18%)	9 (18%)	8 (16%)	5 (10%)
Fibrosarcoma, Metastatic, Skin		1 (2%)		
Duct, Carcinoma	1 (2%)			
Skin	(50)	(50)	(50)	(50)
Basal Cell Adenoma				1 (2%)
Basal Cell Carcinoma		1 (2%)		
Fibrosarcoma		1 (2%)		
Keratoacanthoma	1 (2%)			
Neural Crest Tumor				1 (2%)
Subcutaneous Tissue, Fibroma	1 (2%)		1 (2%)	1 (2%)
Subcutaneous Tissue, Fibrosarcoma			1 (2%)	
MUSCULOSKELETAL SYSTEM				
Bone	(50)	(50)	(50)	(50)
Vertebra, Osteosarcoma			1 (2%)	
NERVOUS SYSTEM				
Brain	(50)	(50)	(50)	(50)
Carcinoma, Metastatic, Pituitary Gland	2 (4%)	1 (2%)	1 (2%)	1 (2%)
Granular Cell Tumor Malignant		1 (2%)		

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

Test Type: CHRONIC

Diethylamine

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	31 PPM	62.5 PPM	125 PPM
Spinal Cord Osteosarcoma, Metastatic, Bone	(0)	(0)	(1) 1 (100%)	(0)
RESPIRATORY SYSTEM				
Larynx Carcinoma, Metastatic, Thyroid Gland	(50)	(50) 1 (2%)	(50)	(50)
Lung Alveolar/Bronchiolar Carcinoma	(50)	(50)	(50)	(50) 1 (2%)
Carcinoma, Metastatic, Clitoral Gland			1 (2%)	
Carcinoma, Metastatic, Thyroid Gland		1 (2%)		1 (2%)
Carcinoma, Metastatic, Zymbal'S Gland		1 (2%)		
Nose	(50)	(49)	(50)	(50)
Pleura	(50)	(50)	(50)	(50)
SPECIAL SENSES SYSTEM				
Eye	(50)	(50)	(50)	(50)
Harderian Gland	(50)	(50)	(50)	(50)
Zymbal's Gland Carcinoma	(0)	(2) 2 (100%)	(0)	(0)
URINARY SYSTEM				
Kidney	(50)	(50)	(50)	(50)
Urinary Bladder	(50)	(50)	(50)	(50)
SYSTEMIC LESIONS				
Multiple Organs	*(50)	*(50)	*(50)	*(50)
Histiocytic Sarcoma				1 (2%)
Leukemia Mononuclear	15 (30%)	10 (20%)	15 (30%)	11 (22%)

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

* Number of animals with any tissue examined microscopically

Test Type: CHRONIC

Time Report Requested: 09:38:54

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 109-89-7

First Dose M/F: 08/25/03 / 08/25/03

Species/Strain: RATS/F 344/N

Lab: BNW

FISCHER 344 RATS FEMALE	CONTROL	31 PPM	62.5 PPM	125 PPM
-------------------------	---------	--------	----------	---------

Tumor Summary for Females

Total Animals with Primary Neoplasms (b)	48	48	48	46
Total Primary Neoplasms	108	110	107	95
Total Animals with Benign Neoplasms	43	45	46	40
Total Benign Neoplasms	81	88	81	76
Total Animals with Malignant Neoplasms	24	18	22	16
Total Malignant Neoplasms	26	22	26	18
Total Animals with Metastatic Neoplasms	3	4	4	2
Total Metastatic Neoplasms	4	6	4	2
Total Animals with Malignant Neoplasms Uncertain Primary Site	1			
Total Animals with Neoplasms Uncertain-Benign or Malignant	1			1
Total Uncertain Neoplasms	1			1

*** 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