

**Experiment Number:** 20209 - 01

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

**Date Report Requested:** 07/23/2014

**Test Type:** 90-DAY

Pentabromodiphenyl oxide (technical) (DE 71)

**Time Report Requested:** 13:18:30

**Route:** GAVAGE

**CAS Number:** 32534-81-9

**First Dose M/F:** 07/20/04 / 07/19/04

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

**Lab:** SRI

F1\_Rev.1\_R2

**NTP Study Number:** C20209  
**Lock Date:** 12/07/2005  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 3.0.2.0\_001  
**PWG Approval Date:** NONE

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Species/Strain: RATS/F 344/N

Lab: SRI

FISCHER 344 RATS MALE	0 MG/KG	0.01 MG/KG	5 MG/KG	50 MG/KG	100 MG/KG	500 MG/KG
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**Disposition Summary**

Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	10	10	10	10	10

## ALIMENTARY SYSTEM

Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(0)	(9)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(0)	(10)
Liver	(10)	(10)	(10)	(10)	(10)	(10)
Hepatodiaphragmatic Nodule			1	1		1
Necrosis, Focal				1 [1.0]	2 [1.0]	1 [1.0]
Hepatocyte, Hypertrophy			9 [1.0]	10 [2.7]	10 [3.4]	10 [3.7]
Hepatocyte, Vacuolization Cytoplasmic				10 [1.2]	10 [2.0]	10 [1.7]
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Necrosis						1 [1.0]
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(10)	(10)	(10)	(10)	(10)
Erosion			1 [1.0]	2 [1.5]	3 [1.7]	4 [1.5]

## CARDIOVASCULAR SYSTEM

Blood Vessel	(1)	(0)	(0)	(0)	(0)	(1)
Heart	(10)	(0)	(0)	(0)	(0)	(10)
Cardiomyopathy	3 [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)

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Species/Strain: RATS/F 344/N

Lab: SRI

FISCHER 344 RATS MALE	0 MG/KG	0.01 MG/KG	5 MG/KG	50 MG/KG	100 MG/KG	500 MG/KG
<b>ENDOCRINE SYSTEM</b>						
Adrenal Cortex	(10)	(0)	(0)	(0)	(2)	(10)
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(10)	(0)	(0)	(0)	(0)	(10)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Pars Distalis, Cyst	1					
Thyroid Gland	(10)	(9)	(10)	(10)	(10)	(10)
Follicle, Hypertrophy					1 [1.0]	9 [1.0]
<b>GENERAL BODY SYSTEM</b>						
None						
<b>GENITAL SYSTEM</b>						
Epididymis	(10)	(10)	(10)	(10)	(10)	(10)
Hypospermia						9 [1.9]
Preputial Gland	(10)	(0)	(0)	(0)	(0)	(10)
Prostate	(10)	(0)	(0)	(0)	(0)	(10)
Seminal Vesicle	(10)	(0)	(0)	(0)	(0)	(10)
Testes	(10)	(10)	(10)	(10)	(10)	(10)
<b>HEMATOPOIETIC SYSTEM</b>						
Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Hyperplasia						2 [1.5]
Lymph Node	(0)	(1)	(0)	(1)	(1)	(0)
Mediastinal, Hemorrhage				1 [2.0]	1 [2.0]	
Mediastinal, Hyperplasia, Lymphoid				1 [2.0]	1 [4.0]	
Pancreatic, Hemorrhage		1 [3.0]				
Pancreatic, Hyperplasia, Lymphoid		1 [1.0]				
Lymph Node, Mandibular	(0)	(0)	(0)	(0)	(0)	(1)

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Species/Strain: RATS/F 344/N

Lab: SRI

FISCHER 344 RATS MALE	0 MG/KG	0.01 MG/KG	5 MG/KG	50 MG/KG	100 MG/KG	500 MG/KG
Lymph Node, Mesenteric	(10)	(10)	(10)	(10)	(10)	(10)
Spleen	(10)	(0)	(0)	(0)	(0)	(10)
Thymus	(10)	(10)	(10)	(10)	(10)	(9)
Hemorrhage	1 [1.0]				1 [2.0]	
<b>INTEGUMENTARY SYSTEM</b>						
Mammary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Skin	(10)	(0)	(0)	(0)	(0)	(10)
<b>MUSCULOSKELETAL SYSTEM</b>						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
<b>NERVOUS SYSTEM</b>						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>						
Lung	(10)	(10)	(10)	(10)	(10)	(10)
Hemorrhage					1 [1.0]	
Infiltration Cellular, Histiocyte					1 [1.0]	1 [1.0]
Inflammation, Chronic	2 [1.0]					
Alveolar Epithelium, Hyperplasia						1 [2.0]
Nose	(10)	(0)	(0)	(0)	(0)	(10)
Trachea	(10)	(0)	(0)	(0)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>						
Eye	(10)	(0)	(0)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic	1 [2.0]					

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Species/Strain: RATS/F 344/N

Lab: SRI

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FISCHER 344 RATS MALE	0 MG/KG	0.01 MG/KG	5 MG/KG	50 MG/KG	100 MG/KG	500 MG/KG
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URINARY SYSTEM						
Kidney	(10)	(0)	(0)	(0)	(0)	(10)
Nephropathy	1 [1.0]					2 [1.0]
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)

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

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Species/Strain: RATS/F 344/N

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FISCHER 344 RATS FEMALE	0 MG/KG	0.01 MG/KG	5 MG/KG	50 MG/KG	100 MG/KG	500 MG/KG
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**Disposition Summary**

Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	10	10	10	10	10

## ALIMENTARY SYSTEM

Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(0)	(10)
Liver	(10)	(10)	(10)	(10)	(10)	(10)
Basophilic Focus						1
Hepatodiaphragmatic Nodule					1	
Necrosis, Focal	1 [1.0]			1 [1.0]		
Hepatocyte, Hypertrophy		2 [1.0]	5 [1.4]	10 [2.2]	10 [3.1]	10 [4.0]
Hepatocyte, Vacuolization Cytoplasmic				3 [1.0]	10 [1.1]	10 [1.0]
Mesentery	(0)	(1)	(0)	(0)	(0)	(0)
Fat, Necrosis		1 [2.0]				
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(10)	(10)	(10)	(10)	(10)
Erosion						3 [1.0]
Glands, Dilatation		1 [1.0]			1 [1.0]	

## CARDIOVASCULAR SYSTEM

Heart	(10)	(0)	(0)	(0)	(0)	(10)
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FISCHER 344 RATS FEMALE	0 MG/KG	0.01 MG/KG	5 MG/KG	50 MG/KG	100 MG/KG	500 MG/KG
Cardiomyopathy	1 [1.0]					
<b>ENDOCRINE SYSTEM</b>						
Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Accessory Adrenal Cortical Nodule	1 [1.0]					
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(10)	(0)	(0)	(0)	(0)	(9)
Pituitary Gland	(9)	(0)	(0)	(0)	(0)	(10)
Pars Distalis, Cyst						1
Thyroid Gland	(10)	(0)	(10)	(10)	(10)	(10)
Follicle, Hypertrophy				8 [1.0]	9 [1.4]	10 [2.9]
<b>GENERAL BODY SYSTEM</b>						
None						
<b>GENITAL SYSTEM</b>						
Clitoral Gland	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic						2 [2.0]
Ovary	(10)	(10)	(10)	(10)	(10)	(10)
Uterus	(10)	(10)	(10)	(10)	(10)	(10)
<b>HEMATOPOIETIC SYSTEM</b>						
Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Lymph Node	(0)	(0)	(2)	(1)	(2)	(0)
Mediastinal, Hemorrhage			1 [3.0]	1 [2.0]	2 [1.5]	
Mediastinal, Hyperplasia, Lymphoid			1 [1.0]	1 [3.0]	2 [3.0]	
Pancreatic, Hemorrhage			1 [3.0]		1 [2.0]	
Pancreatic, Pigmentation			1 [2.0]		1 [1.0]	

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FISCHER 344 RATS FEMALE	0 MG/KG	0.01 MG/KG	5 MG/KG	50 MG/KG	100 MG/KG	500 MG/KG
Lymph Node, Mesenteric	(10)	(9)	(10)	(10)	(10)	(10)
Spleen	(10)	(0)	(0)	(0)	(0)	(10)
Thymus	(10)	(10)	(10)	(10)	(9)	(10)
Atrophy						4 [1.3]
Hemorrhage			1 [2.0]			
<b>INTEGUMENTARY SYSTEM</b>						
Mammary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Skin	(10)	(0)	(0)	(0)	(0)	(10)
<b>MUSCULOSKELETAL SYSTEM</b>						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
<b>NERVOUS SYSTEM</b>						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>						
Lung	(10)	(10)	(10)	(10)	(10)	(10)
Hemorrhage		2 [1.0]			1 [1.0]	
Infiltration Cellular, Histiocyte					1 [1.0]	1 [1.0]
Inflammation, Chronic						2 [1.0]
Nose	(10)	(0)	(0)	(0)	(0)	(10)
Trachea	(10)	(0)	(0)	(0)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>						
Eye	(10)	(0)	(0)	(0)	(1)	(10)
Developmental Malformation					1	
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)

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

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FISCHER 344 RATS FEMALE	0 MG/KG	0.01 MG/KG	5 MG/KG	50 MG/KG	100 MG/KG	500 MG/KG
<hr/>						
URINARY SYSTEM						
Kidney	(10)	(0)	(0)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear Cell						1 [1.0]
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)

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

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

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