

Experiment Number: 91070 - 01

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

Date Report Requested: 02/06/2018

Test Type: 28-DAY

Perfluorooctanoic Acid

Time Report Requested: 12:35:28

Route: GAVAGE

CAS Number: 335-67-1

First Dose M/F: 01/31/12 / 02/01/12

Species/Strain: RATS/HSD

Lab: BAT

PFOA_Final 1

NTP Study Number: C91070B
Lock Date: 04/25/2016
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 3.0.2.3_002
PWG Approval Date: NONE

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Harlan Sprague Dawley RATS MALE	0 mg/kg/d M	0.625 mg/kg/d M	1.25 mg/kg/d M	2.5 mg/kg/d M	5 mg/kg/d M	10 mg/kg/d M
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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)
Infiltration Cellular, Mixed Cell	4 [1.0]		3 [1.0]			1 [1.0]
Hepatocyte, Cytoplasmic Alteration		4 [1.0]	9 [1.0]	10 [1.3]	10 [2.2]	10 [2.6]
Hepatocyte, Hypertrophy			6 [1.0]	10 [1.8]	10 [2.5]	10 [3.2]
Hepatocyte, Necrosis, Focal					1 [1.0]	
Pancreas	(10)	(10)	(10)	(10)	(10)	(10)
Infiltration Cellular, Mixed Cell						1 [1.0]
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(1)	(0)	(0)	(0)	(10)
Mucosa, Hyperplasia		1 [2.0]				
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)

CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(0)	(0)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(0)	(0)	(10)
Cardiomyopathy	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)

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ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(10)	(0)	(0)	(0)	(0)	(8)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Thyroid Gland	(10)	(10)	(10)	(10)	(10)	(10)
Follicular Cell, Hypertrophy						3 [1.0]
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Epididymis	(10)	(0)	(0)	(10)	(10)	(10)
Hypospermia					1 [2.0]	1 [2.0]
Duct, Exfoliated Germ Cell					1 [2.0]	1 [2.0]
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)
Germinal Epithelium, Degeneration					1 [2.0]	1 [1.0]
Sertoli Cell, Vacuolization Cytoplasmic						1 [1.0]
HEMATOPOIETIC SYSTEM						
Bone Marrow	(10)	(10)	(10)	(9)	(10)	(10)
Angiectasis			1 [2.0]			
Hemorrhage						1 [1.0]
Hypocellularity	1 [1.0]				2 [1.0]	6 [1.0]
Lymph Node, Mandibular	(10)	(0)	(0)	(0)	(0)	(9)
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(0)	(10)
Spleen	(10)	(10)	(10)	(10)	(10)	(10)

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Thymus	(10)	(10)	(10)	(10)	(10)	(10)
INTEGUMENTARY SYSTEM						
Mammary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Skin	(10)	(0)	(0)	(0)	(0)	(10)
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
NERVOUS SYSTEM						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
RESPIRATORY SYSTEM						
Lung	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Granulomatous	1 [1.0]					
Inflammation, Histiocytic	1 [1.0]					
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Respiratory Epithelium, Hyperplasia		4 [1.3]	2 [1.0]	3 [1.3]	5 [1.4]	4 [1.3]
Respiratory Epithelium, Inflammation, Chronic Active		5 [1.0]	3 [1.0]	2 [1.0]	5 [1.0]	4 [1.0]
Trachea	(10)	(0)	(0)	(0)	(0)	(10)
SPECIAL SENSES SYSTEM						
Eye	(10)	(0)	(0)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
URINARY SYSTEM						

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Kidney	(10)	(10)	(10)	(10)	(10)	(10)
Nephropathy, Chronic Progressive	9 [1.0]	9 [1.0]	3 [1.3]	6 [1.0]	9 [1.0]	6 [1.0]
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)

*** END OF MALE ***

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Harlan Sprague Dawley RATS FEMALE	0 mg/kg/d F	6.25mg/kg/d F	12.5mg/kg/d F	25 mg/kg/d F	50 mg/kg/d F	100 mg/kg/d F
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Disposition Summary

Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Natural Death						1
Survivors						
Terminal Sacrifice	10	10	10	10	10	9
Animals Examined Microscopically	10	10	10	10	10	10

ALIMENTARY SYSTEM

Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Fibrosis						1 [2.0]
Inflammation, Histiocytic						1 [1.0]
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)
Clear Cell Focus			1			
Infiltration Cellular, Mixed Cell	1 [1.0]	1 [1.0]	1 [1.0]	1 [1.0]	1 [1.0]	
Hepatocyte, Cytoplasmic Alteration				10 [1.0]	10 [1.0]	10 [1.9]
Hepatocyte, Hypertrophy					2 [1.5]	10 [2.0]
Pancreas	(10)	(10)	(10)	(10)	(10)	(10)
Inflammation, Chronic Active	1 [1.0]					
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(10)	(10)	(10)	(10)	(10)
Mucosa, Hyperplasia						1 [2.0]
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)

CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(0)	(0)	(0)	(0)	(10)
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Heart	(10)	(0)	(0)	(0)	(0)	(10)
ENDOCRINE SYSTEM						
Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(7)	(0)	(0)	(0)	(0)	(10)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Thyroid Gland	(10)	(10)	(10)	(10)	(10)	(10)
Follicular Cell, Atrophy						1 [3.0]
Follicular Cell, Hypertrophy					1 [1.0]	8 [1.0]
GENERAL BODY SYSTEM						
None						
GENITAL SYSTEM						
Clitoral Gland	(10)	(0)	(0)	(0)	(0)	(10)
Ovary	(10)	(10)	(10)	(10)	(10)	(10)
Uterus	(10)	(0)	(1)	(0)	(0)	(10)
Cyst			1			
HEMATOPOIETIC SYSTEM						
Bone Marrow	(10)	(10)	(10)	(10)	(10)	(10)
Hypocellularity					1 [1.0]	1 [2.0]
Lymph Node, Mandibular	(10)	(0)	(0)	(0)	(0)	(8)
Lymph Node, Mesenteric	(9)	(0)	(0)	(0)	(0)	(10)
Atrophy						1 [2.0]
Infiltration Cellular, Histiocyte						1 [4.0]
Lymphocyte, Apoptosis						1 [3.0]
Spleen	(10)	(10)	(10)	(10)	(10)	(10)

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White Pulp, Atrophy						1 [4.0]
Thymus	(10)	(9)	(10)	(10)	(10)	(10)
Atrophy						1 [4.0]
INTEGUMENTARY SYSTEM						
Mammary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Skin	(10)	(0)	(0)	(0)	(0)	(10)
MUSCULOSKELETAL SYSTEM						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
NERVOUS SYSTEM						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
RESPIRATORY SYSTEM						
Lung	(10)	(0)	(0)	(0)	(0)	(10)
Fibrosis, Focal						1 [1.0]
Infiltration Cellular, Mixed Cell						2 [1.0]
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Olfactory Epithelium, Degeneration				2 [1.0]	8 [1.4]	9 [1.8]
Olfactory Epithelium, Hyperplasia				2 [1.0]	8 [1.1]	
Olfactory Epithelium, Inflammation, Suppurative					1 [1.0]	6 [1.5]
Respiratory Epithelium, Hyperplasia			4 [1.0]		3 [1.0]	8 [1.6]
Respiratory Epithelium, Inflammation, Chronic Active			4 [1.0]	1 [1.0]	6 [1.0]	9 [1.4]
Trachea	(10)	(0)	(0)	(0)	(0)	(10)

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SPECIAL SENSES SYSTEM						
Eye	(10)	(0)	(0)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
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URINARY SYSTEM						
Kidney	(10)	(10)	(10)	(10)	(10)	(10)
Nephropathy, Chronic Progressive	5 [1.0]	3 [1.0]	2 [1.0]	1 [1.0]	5 [1.0]	4 [1.0]
Renal Tubule, Necrosis						1 [2.0]
Renal Tubule, Regeneration						1 [1.0]
Urinary Bladder	(10)	(0)	(0)	(0)	(0)	(10)

*** END OF REPORT ***

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

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