

Experiment Number: 20614 - 01
Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Perfluorooctanoic Acid
CAS Number: 335-67-1

Date Report Requested: 07/25/2018
Time Report Requested: 16:26:26
First Dose M/F: 10/27/08 / 10/28/08
Lab: BAT

Custom Rpt (Litter-Based) -- 0-0, 150-300, 300-1000

NTP Study Number:	C20614		
Lock Date:	01/10/2012		
Cage Range:	ALL		
Date Range:	ALL		
Reasons For Removal:	25021 TSAC 25016 Aborted	25020 NATD	25019 MSAC
Removal Date Range:	ALL		
Treatment Groups:	Include 002 0/0 ppm	Include 006 150/300 ppm	Include 010 300/1000 ppm
Study Gender:	Both		
TDMSE Version:	2.5.0.0_sfh		
PWG Approval Date:	07/25/2018		

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SUMMARY OF STATISTICALLY SIGNIFICANT (P<=.05) RESULTS IN THE ANALYSIS OF PERFLUOROOCTANOIC ACID

FEMALE RATS

Organ

Adrenal Cortex

Bone Marrow

Intestine Large, Colon

Kidney

Kidney: Papilla

Kidney: Papilla, Urothelium

Liver

Liver: Bile Duct

Liver: Hepatocyte

Lung

Lung: Alveolus

Lymph Node, Mandibular

Lymph Node, Mesenteric

Pancreas: Acinus

Pituitary Gland: Pars Distalis

Spleen: Lymphoid Follicle

Stomach, Forestomach

Stomach, Forestomach: Epithelium

Stomach, Forestomach: Submucosa

Thyroid Gland: Follicular Cell

Uterus: Endometrium

Morphology

Vacuolization Cytoplasmic

Hyperplasia

Parasite Metazoan

Infarct

Nephropathy Chronic Progressive

Necrosis

Hyperplasia

Eosinophilic Focus

Extramedullary Hematopoiesis

Necrosis

Pigment

Hyperplasia

Cytoplasmic Alteration

Hypertrophy

Increased mitoses

Single Cell Death

Inflammation Granulomatous Focal

Infiltration Cellular Histiocyte

Atrophy Lymphoid

Atrophy Lymphoid

Atrophy

Hyperplasia

Atrophy

Ulcer

Hyperplasia

Inflammation Chronic

Hypertrophy

Hyperplasia Cystic

Metaplasia

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Adrenal Cortex Degeneration Cystic			
LESION RATES			
OVERALL (a)	11/50 (22%)	11/50 (22%)	7/50 (14%)
LITTERS (b)	9/32 (28%)	10/29 (34%)	6/30 (20%)
POLY-3 RATE (c)	11/38.60	11/42.40	7/38.97
POLY-3 PERCENT (g)	28.5%	26%	18%
TERMINAL (d)	6/23 (26%)	8/32 (25%)	3/23 (13%)
FIRST INCIDENCE	574	564	491
STATISTICAL TESTS			
POLY 3	P=0.172N	P=0.497N	P=0.200N
POLY 1.5	P=0.168N	P=0.541N	P=0.204N
POLY 6	P=0.187N	P=0.438N	P=0.203N
RAO-SCOTT	P=0.186N	P=0.492N	P=0.214N
LITTER C-A/FISHERS	P=0.237N	P=0.398	P=0.327N

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Adrenal Cortex Hypertrophy			
<hr/>			
LESION RATES			
OVERALL (a)	2/50 (4%)	5/50 (10%)	3/50 (6%)
LITTERS (b)	2/32 (6%)	5/29 (17%)	3/30 (10%)
POLY-3 RATE (c)	2/37.31	5/41.46	3/37.22
POLY-3 PERCENT (g)	5.4%	12.1%	8.1%
TERMINAL (d)	1/23 (4%)	4/32 (13%)	3/23 (13%)
FIRST INCIDENCE	589	739	744 (T)
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.549	P=0.259	P=0.499
POLY 1.5	P=0.555	P=0.239	P=0.501
POLY 6	P=0.534	P=0.290	P=0.492
RAO-SCOTT	P=0.518	P=0.241	P=0.459
LITTER C-A/FISHERS	P=0.533	P=0.173	P=0.469

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Adrenal Cortex			
Vacuolization Cytoplasmic			
LESION RATES			
OVERALL (a)	1/50 (2%)	0/50 (0%)	4/50 (8%)
LITTERS (b)	1/32 (3%)	0/29 (0%)	4/30 (13%)
POLY-3 RATE (c)	1/37.23	0/41.44	4/40.54
POLY-3 PERCENT (g)	2.7%	0%	9.9%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	0/23 (0%)
FIRST INCIDENCE	621	---	183
STATISTICAL TESTS			
POLY 3	P=0.055	P=0.479N	P=0.204
POLY 1.5	P=0.055	P=0.488N	P=0.197
POLY 6	P=0.052	P=0.465N	P=0.207
RAO-SCOTT	P=0.100	P=0.512N	P=0.251
LITTER C-A/FISHERS	P=0.048*	P=0.525N	P=0.158

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm

**Adrenal Cortex: Zona Fasciculata
Hyperplasia**

LESION RATES

OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)
LITTERS (b)	0/32 (0%)	2/29 (7%)	0/30 (0%)
POLY-3 RATE (c)	0/36.81	2/41.73	0/37.22
POLY-3 PERCENT (g)	0%	4.8%	0%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	0/23 (0%)
FIRST INCIDENCE	---	695	---

STATISTICAL TESTS

POLY 3	P=0.552N	P=0.266	(e)
POLY 1.5	P=0.552N	P=0.253	(e)
POLY 6	P=0.553N	P=0.286	(e)
RAO-SCOTT	P=0.586N	P=0.353	(e)
LITTER C-A/FISHERS	P=0.567N	P=0.222	(e)

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Adrenal Medulla Hyperplasia			
LESION RATES			
OVERALL (a)	7/50 (14%)	8/50 (16%)	8/50 (16%)
LITTERS (b)	6/32 (19%)	8/29 (28%)	8/30 (27%)
POLY-3 RATE (c)	7/38.11	8/42.33	8/38.01
POLY-3 PERCENT (g)	18.4%	18.9%	21.1%
TERMINAL (d)	4/23 (17%)	6/32 (19%)	6/23 (26%)
FIRST INCIDENCE	547	368	574
STATISTICAL TESTS			
POLY 3	P=0.456	P=0.589	P=0.498
POLY 1.5	P=0.471	P=0.552	P=0.502
POLY 6	P=0.430	P=0.590N	P=0.487
RAO-SCOTT	P=0.441	P=0.569	P=0.475
LITTER C-A/FISHERS	P=0.343	P=0.303	P=0.330

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Blood Vessel Inflammation			
LESION RATES			
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)
LITTERS (b)	0/32 (0%)	2/29 (7%)	0/30 (0%)
POLY-3 RATE (c)	0/36.81	2/41.44	0/37.22
POLY-3 PERCENT (g)	0%	4.8%	0%
TERMINAL (d)	0/23 (0%)	2/32 (6%)	0/23 (0%)
FIRST INCIDENCE	---	744 (T)	---
STATISTICAL TESTS			
POLY 3	P=0.552N	P=0.264	(e)
POLY 1.5	P=0.552N	P=0.252	(e)
POLY 6	P=0.553N	P=0.283	(e)
RAO-SCOTT	P=0.587N	P=0.354	(e)
LITTER C-A/FISHERS	P=0.567N	P=0.222	(e)

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Blood Vessel: Aorta			
Mineral			
LESION RATES			
OVERALL (a)	1/50 (2%)	2/50 (4%)	1/50 (2%)
LITTERS (b)	1/32 (3%)	2/29 (7%)	1/30 (3%)
POLY-3 RATE (c)	1/37.42	2/41.44	1/37.65
POLY-3 PERCENT (g)	2.7%	4.8%	2.7%
TERMINAL (d)	0/23 (0%)	2/32 (6%)	0/23 (0%)
FIRST INCIDENCE	543	744 (T)	617
STATISTICAL TESTS			
POLY 3	P=0.609N	P=0.536	P=0.760N
POLY 1.5	P=0.605N	P=0.520	P=0.760N
POLY 6	P=0.616N	P=0.559	P=0.762N
RAO-SCOTT	P=0.584N	P=0.508	P=0.715N
LITTER C-A/FISHERS	P=0.619N	P=0.463	P=0.738

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Bone Marrow Hyperplasia			
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LESION RATES			
OVERALL (a)	21/50 (42%)	22/50 (44%)	28/50 (56%)
LITTERS (b)	19/32 (59%)	18/29 (62%)	21/30 (70%)
POLY-3 RATE (c)	21/44.86	22/47.63	28/43.00
POLY-3 PERCENT (g)	46.8%	46.2%	65.1%
TERMINAL (d)	6/23 (26%)	9/32 (28%)	12/23 (52%)
FIRST INCIDENCE	312	322	472
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.038*	P=0.559N	P=0.059
POLY 1.5	P=0.050*	P=0.564	P=0.073
POLY 6	P=0.032*	P=0.506N	P=0.053
RAO-SCOTT	P=0.041*	P=0.555N	P=0.068
LITTER C-A/FISHERS	P=0.237	P=0.519	P=0.272

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TERMINAL SACRIFICE AT 107 WEEKS

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Brain Hemorrhage			
LESION RATES			
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	2/32 (6%)	0/29 (0%)	0/30 (0%)
POLY-3 RATE (c)	2/37.51	0/41.44	0/37.22
POLY-3 PERCENT (g)	5.3%	0%	0%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	0/23 (0%)
FIRST INCIDENCE	621	---	---
STATISTICAL TESTS			
POLY 3	P=0.201N	P=0.215N	P=0.238N
POLY 1.5	P=0.196N	P=0.225N	P=0.237N
POLY 6	P=0.209N	P=0.203N	P=0.242N
RAO-SCOTT	P=0.299N	P=0.340N	P=0.349N
LITTER C-A/FISHERS	P=0.198N	P=0.271N	P=0.262N

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Brain			
Necrosis			
LESION RATES			
OVERALL (a)	2/50 (4%)	1/50 (2%)	0/50 (0%)
LITTERS (b)	2/32 (6%)	1/29 (3%)	0/30 (0%)
POLY-3 RATE (c)	2/38.27	1/42.34	0/37.22
POLY-3 PERCENT (g)	5.2%	2.4%	0%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	0/23 (0%)
FIRST INCIDENCE	411	349	---
STATISTICAL TESTS			
POLY 3	P=0.196N	P=0.465N	P=0.243N
POLY 1.5	P=0.190N	P=0.480N	P=0.240N
POLY 6	P=0.204N	P=0.443N	P=0.247N
RAO-SCOTT	P=0.231N	P=0.490N	P=0.283N
LITTER C-A/FISHERS	P=0.192N	P=0.537N	P=0.262N

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Eye: Retina			
Degeneration			
<hr/>			
LESION RATES			
OVERALL (a)	1/50 (2%)	0/50 (0%)	2/50 (4%)
LITTERS (b)	1/32 (3%)	0/29 (0%)	2/30 (7%)
POLY-3 RATE (c)	1/37.59	0/41.44	2/37.22
POLY-3 PERCENT (g)	2.7%	0%	5.4%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	2/23 (9%)
FIRST INCIDENCE	452	---	744 (T)
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STATISTICAL TESTS			
POLY 3	P=0.301	P=0.481N	P=0.497
POLY 1.5	P=0.307	P=0.490N	P=0.499
POLY 6	P=0.291	P=0.467N	P=0.492
RAO-SCOTT	P=0.332	P=0.507N	P=0.500
LITTER C-A/FISHERS	P=0.301	P=0.525N	P=0.475

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Heart			
Cardiomyopathy			
LESION RATES			
OVERALL (a)	8/50 (16%)	13/50 (26%)	4/50 (8%)
LITTERS (b)	8/32 (25%)	11/29 (38%)	4/30 (13%)
POLY-3 RATE (c)	8/38.74	13/44.45	4/37.65
POLY-3 PERCENT (g)	20.7%	29.3%	10.6%
TERMINAL (d)	4/23 (17%)	8/32 (25%)	3/23 (13%)
FIRST INCIDENCE	411	295	617
STATISTICAL TESTS			
POLY 3	P=0.102N	P=0.258	P=0.185N
POLY 1.5	P=0.094N	P=0.216	P=0.181N
POLY 6	P=0.117N	P=0.323	P=0.191N
RAO-SCOTT	P=0.114N	P=0.267	P=0.192N
LITTER C-A/FISHERS	P=0.111N	P=0.208	P=0.201N

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Intestine Large, Colon			
Parasite Metazoan			
<hr/>			
LESION RATES			
OVERALL (a)	1/50 (2%)	8/50 (16%)	7/50 (14%)
LITTERS (b)	1/32 (3%)	7/29 (24%)	7/30 (23%)
POLY-3 RATE (c)	1/36.81	8/41.45	7/37.60
POLY-3 PERCENT (g)	2.7%	19.3%	18.6%
TERMINAL (d)	1/23 (4%)	7/32 (22%)	6/23 (26%)
FIRST INCIDENCE	744 (T)	742	634
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.088	P=0.024*	P=0.030*
POLY 1.5	P=0.089	P=0.020*	P=0.030*
POLY 6	P=0.084	P=0.032*	P=0.029*
RAO-SCOTT	P=0.097	P=0.036*	P=0.042*
LITTER C-A/FISHERS	P=0.056	P=0.018*	P=0.021*

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Islets, Pancreatic Hyperplasia			
LESION RATES			
OVERALL (a)	3/50 (6%)	0/50 (0%)	1/50 (2%)
LITTERS (b)	3/32 (9%)	0/29 (0%)	1/30 (3%)
POLY-3 RATE (c)	3/37.95	0/41.44	1/37.22
POLY-3 PERCENT (g)	7.9%	0%	2.7%
TERMINAL (d)	1/23 (4%)	0/32 (0%)	1/23 (4%)
FIRST INCIDENCE	547	---	744 (T)
STATISTICAL TESTS			
POLY 3	P=0.340N	P=0.103N	P=0.311N
POLY 1.5	P=0.331N	P=0.110N	P=0.307N
POLY 6	P=0.354N	P=0.094N	P=0.319N
RAO-SCOTT	P=0.367N	P=0.159N	P=0.349N
LITTER C-A/FISHERS	P=0.335N	P=0.138N	P=0.331N

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Date Report Requested: 07/25/2018
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First Dose M/F: 10/27/08 / 10/28/08
Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Kidney			
Accumulation, Hyaline Droplet			
LESION RATES			
OVERALL (a)	3/50 (6%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	3/32 (9%)	0/29 (0%)	0/30 (0%)
POLY-3 RATE (c)	3/37.31	0/41.44	0/37.22
POLY-3 PERCENT (g)	8%	0%	0%
TERMINAL (d)	2/23 (9%)	0/32 (0%)	0/23 (0%)
FIRST INCIDENCE	589	---	---
STATISTICAL TESTS			
POLY 3	P=0.099N	P=0.100N	P=0.118N
POLY 1.5	P=0.095N	P=0.108N	P=0.118N
POLY 6	P=0.105N	P=0.090N	P=0.119N
RAO-SCOTT	P=0.169N	P=0.189N	P=0.202N
LITTER C-A/FISHERS	P=0.098N	P=0.138N	P=0.131N

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Kidney			
Calculus Micro Observation Only			
LESION RATES			
OVERALL (a)	11/50 (22%)	12/50 (24%)	16/50 (32%)
LITTERS (b)	9/32 (28%)	12/29 (41%)	15/30 (50%)
POLY-3 RATE (c)	11/37.80	12/42.40	16/38.92
POLY-3 PERCENT (g)	29.1%	28.3%	41.1%
TERMINAL (d)	7/23 (30%)	8/32 (25%)	10/23 (44%)
FIRST INCIDENCE	638	634	574
STATISTICAL TESTS			
POLY 3	P=0.132	P=0.567N	P=0.188
POLY 1.5	P=0.140	P=0.571	P=0.187
POLY 6	P=0.117	P=0.489N	P=0.188
RAO-SCOTT	P=0.135	P=0.550N	P=0.189
LITTER C-A/FISHERS	P=0.067	P=0.207	P=0.066

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Kidney Infarct			
<hr/>			
LESION RATES			
OVERALL (a)	0/50 (0%)	0/50 (0%)	6/50 (12%)
LITTERS (b)	0/32 (0%)	0/29 (0%)	6/30 (20%)
POLY-3 RATE (c)	0/36.81	0/41.44	6/38.74
POLY-3 PERCENT (g)	0%	0%	15.5%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	3/23 (13%)
FIRST INCIDENCE	---	---	391
<hr/>			
STATISTICAL TESTS			
POLY 3	P<0.001**	(e)	P=0.017*
POLY 1.5	P<0.001**	(e)	P=0.017*
POLY 6	P<0.001**	(e)	P=0.017*
RAO-SCOTT	P=0.009**	(e)	P=0.057
LITTER C-A/FISHERS	P<0.001**	(e)	P=0.010**

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Kidney			
Nephropathy Chronic Progressive			
LESION RATES			
OVERALL (a)	37/50 (74%)	35/50 (70%)	46/50 (92%)
LITTERS (b)	26/32 (81%)	25/29 (86%)	30/30 (100%)
POLY-3 RATE (c)	37/46.42	35/45.50	46/47.82
POLY-3 PERCENT (g)	79.7%	76.9%	96.2%
TERMINAL (d)	16/23 (70%)	26/32 (81%)	23/23 (100%)
FIRST INCIDENCE	312	295	391
STATISTICAL TESTS			
POLY 3	P=0.005**	P=0.470N	P=0.009**
POLY 1.5	P=0.005**	P=0.447N	P=0.009**
POLY 6	P=0.006**	P=0.486N	P=0.009**
RAO-SCOTT	P=0.021*	P=0.490N	P=0.033*
LITTER C-A/FISHERS	P=0.016*	P=0.432	P=0.015*

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Kidney: Cortex Cyst			
LESION RATES			
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)
LITTERS (b)	0/32 (0%)	2/29 (7%)	0/30 (0%)
POLY-3 RATE (c)	0/36.81	2/41.44	0/37.22
POLY-3 PERCENT (g)	0%	4.8%	0%
TERMINAL (d)	0/23 (0%)	2/32 (6%)	0/23 (0%)
FIRST INCIDENCE	---	744 (T)	---
STATISTICAL TESTS			
POLY 3	P=0.552N	P=0.264	(e)
POLY 1.5	P=0.552N	P=0.252	(e)
POLY 6	P=0.553N	P=0.283	(e)
RAO-SCOTT	P=0.587N	P=0.354	(e)
LITTER C-A/FISHERS	P=0.567N	P=0.222	(e)

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Kidney: Papilla Necrosis			
LESION RATES			
OVERALL (a)	0/50 (0%)	0/50 (0%)	22/50 (44%)
LITTERS (b)	0/32 (0%)	0/29 (0%)	16/30 (53%)
POLY-3 RATE (c)	0/36.81	0/41.44	22/45.08
POLY-3 PERCENT (g)	0%	0%	48.8%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	8/23 (35%)
FIRST INCIDENCE	---	---	183
STATISTICAL TESTS			
POLY 3	P<0.001**	(e)	P<0.001**
POLY 1.5	P<0.001**	(e)	P<0.001**
POLY 6	P<0.001**	(e)	P<0.001**
RAO-SCOTT	P<0.001**	(e)	P<0.001**
LITTER C-A/FISHERS	P<0.001**	(e)	P<0.001**

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Kidney: Papilla, Urothelium Hyperplasia			
LESION RATES			
OVERALL (a)	4/50 (8%)	8/50 (16%)	45/50 (90%)
LITTERS (b)	4/32 (13%)	7/29 (24%)	28/30 (93%)
POLY-3 RATE (c)	4/37.59	8/41.81	45/47.35
POLY-3 PERCENT (g)	10.6%	19.1%	95%
TERMINAL (d)	3/23 (13%)	7/32 (22%)	23/23 (100%)
FIRST INCIDENCE	452	638	391
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.229	P<0.001**
POLY 1.5	P<0.001**	P=0.204	P<0.001**
POLY 6	P<0.001**	P=0.273	P<0.001**
RAO-SCOTT	P<0.001**	P=0.210	P<0.001**
LITTER C-A/FISHERS	P<0.001**	P=0.199	P<0.001**

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Kidney: Pelvis			
Inflammation Chronic			
LESION RATES			
OVERALL (a)	1/50 (2%)	0/50 (0%)	2/50 (4%)
LITTERS (b)	1/32 (3%)	0/29 (0%)	2/30 (7%)
POLY-3 RATE (c)	1/36.81	0/41.44	2/37.47
POLY-3 PERCENT (g)	2.7%	0%	5.3%
TERMINAL (d)	1/23 (4%)	0/32 (0%)	1/23 (4%)
FIRST INCIDENCE	744 (T)	---	676
STATISTICAL TESTS			
POLY 3	P=0.305	P=0.476N	P=0.506
POLY 1.5	P=0.310	P=0.487N	P=0.504
POLY 6	P=0.297	P=0.461N	P=0.507
RAO-SCOTT	P=0.341	P=0.503N	P=0.510
LITTER C-A/FISHERS	P=0.301	P=0.525N	P=0.475

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Kidney: Renal Tubule Mineral			
LESION RATES			
OVERALL (a)	5/50 (10%)	8/50 (16%)	8/50 (16%)
LITTERS (b)	5/32 (16%)	8/29 (28%)	7/30 (23%)
POLY-3 RATE (c)	5/37.72	8/43.40	8/39.78
POLY-3 PERCENT (g)	13.3%	18.4%	20.1%
TERMINAL (d)	3/23 (13%)	5/32 (16%)	3/23 (13%)
FIRST INCIDENCE	533	295	440
STATISTICAL TESTS			
POLY 3	P=0.314	P=0.371	P=0.307
POLY 1.5	P=0.310	P=0.333	P=0.296
POLY 6	P=0.312	P=0.422	P=0.317
RAO-SCOTT	P=0.304	P=0.362	P=0.298
LITTER C-A/FISHERS	P=0.372	P=0.204	P=0.328

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Liver			
Angiectasis			
<hr/>			
LESION RATES			
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	2/32 (6%)	0/29 (0%)	0/30 (0%)
POLY-3 RATE (c)	2/36.81	0/41.44	0/37.22
POLY-3 PERCENT (g)	5.4%	0%	0%
TERMINAL (d)	2/23 (9%)	0/32 (0%)	0/23 (0%)
FIRST INCIDENCE	744 (T)	---	---
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.203N	P=0.211N	P=0.234N
POLY 1.5	P=0.196N	P=0.223N	P=0.235N
POLY 6	P=0.213N	P=0.196N	P=0.234N
RAO-SCOTT	P=0.285N	P=0.320N	P=0.330N
LITTER C-A/FISHERS	P=0.198N	P=0.271N	P=0.262N

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Liver			
Basophilic Focus			
<hr/>			
LESION RATES			
OVERALL (a)	11/50 (22%)	12/50 (24%)	6/50 (12%)
LITTERS (b)	11/32 (34%)	10/29 (34%)	6/30 (20%)
POLY-3 RATE (c)	11/38.55	12/42.06	6/38.04
POLY-3 PERCENT (g)	28.5%	28.5%	15.8%
TERMINAL (d)	7/23 (30%)	9/32 (28%)	3/23 (13%)
FIRST INCIDENCE	452	622	624
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.104N	P=0.598N	P=0.139N
POLY 1.5	P=0.099N	P=0.553	P=0.139N
POLY 6	P=0.116N	P=0.533N	P=0.142N
RAO-SCOTT	P=0.108N	P=0.582N	P=0.142N
LITTER C-A/FISHERS	P=0.123N	P=0.602	P=0.163N

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Liver			
Clear Cell Focus			
<hr/>			
LESION RATES			
OVERALL (a)	11/50 (22%)	8/50 (16%)	5/50 (10%)
LITTERS (b)	11/32 (34%)	7/29 (24%)	5/30 (17%)
POLY-3 RATE (c)	11/38.04	8/41.82	5/37.63
POLY-3 PERCENT (g)	28.9%	19.1%	13.3%
TERMINAL (d)	8/23 (35%)	7/32 (22%)	4/23 (17%)
FIRST INCIDENCE	452	634	624
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.085N	P=0.221N	P=0.079N
POLY 1.5	P=0.081N	P=0.258N	P=0.080N
POLY 6	P=0.095N	P=0.174N	P=0.080N
RAO-SCOTT	P=0.083N	P=0.217N	P=0.081N
LITTER C-A/FISHERS	P=0.091N	P=0.277N	P=0.096N

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Liver			
Eosinophilic Focus			
<hr/>			
LESION RATES			
OVERALL (a)	8/50 (16%)	12/50 (24%)	2/50 (4%)
LITTERS (b)	7/32 (22%)	11/29 (38%)	2/30 (7%)
POLY-3 RATE (c)	8/37.93	12/41.54	2/37.72
POLY-3 PERCENT (g)	21.1%	28.9%	5.3%
TERMINAL (d)	5/23 (22%)	11/32 (34%)	1/23 (4%)
FIRST INCIDENCE	435	718	589
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.021N*	P=0.293	P=0.042N*
POLY 1.5	P=0.021N*	P=0.260	P=0.043N*
POLY 6	P=0.023N*	P=0.349	P=0.042N*
RAO-SCOTT	P=0.039N*	P=0.317	P=0.066N
LITTER C-A/FISHERS	P=0.043N*	P=0.137	P=0.089N

Experiment Number: 20614 - 01
Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Perfluorooctanoic Acid
CAS Number: 335-67-1

Date Report Requested: 07/25/2018
Time Report Requested: 16:26:26
First Dose M/F: 10/27/08 / 10/28/08
Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Liver			
Extramedullary Hematopoiesis			
<hr/>			
LESION RATES			
OVERALL (a)	13/50 (26%)	10/50 (20%)	1/50 (2%)
LITTERS (b)	13/32 (41%)	8/29 (28%)	1/30 (3%)
POLY-3 RATE (c)	13/39.77	10/44.45	1/37.76
POLY-3 PERCENT (g)	32.7%	22.5%	2.7%
TERMINAL (d)	6/23 (26%)	4/32 (13%)	0/23 (0%)
FIRST INCIDENCE	323	351	574
<hr/>			
STATISTICAL TESTS			
POLY 3	P<0.001N**	P=0.210N	P<0.001N**
POLY 1.5	P<0.001N**	P=0.253N	P<0.001N**
POLY 6	P<0.001N**	P=0.162N	P<0.001N**
RAO-SCOTT	P=0.002N**	P=0.227N	P=0.002N**
LITTER C-A/FISHERS	P<0.001N**	P=0.212N	P<0.001N**

Experiment Number: 20614 - 01
Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Perfluorooctanoic Acid
CAS Number: 335-67-1

Date Report Requested: 07/25/2018
Time Report Requested: 16:26:26
First Dose M/F: 10/27/08 / 10/28/08
Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Liver			
Hepatodiaphragmatic Nodule			
<hr/>			
LESION RATES			
OVERALL (a)	2/50 (4%)	0/50 (0%)	1/50 (2%)
LITTERS (b)	2/32 (6%)	0/29 (0%)	1/30 (3%)
POLY-3 RATE (c)	2/36.81	0/41.44	1/37.48
POLY-3 PERCENT (g)	5.4%	0%	2.7%
TERMINAL (d)	2/23 (9%)	0/32 (0%)	0/23 (0%)
FIRST INCIDENCE	744 (T)	---	673
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.548N	P=0.211N	P=0.494N
POLY 1.5	P=0.538N	P=0.223N	P=0.496N
POLY 6	P=0.563N	P=0.196N	P=0.493N
RAO-SCOTT	P=0.533N	P=0.256N	P=0.496N
LITTER C-A/FISHERS	P=0.541N	P=0.271N	P=0.525N

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Liver Inflammation Focal			
<hr/>			
LESION RATES			
OVERALL (a)	6/50 (12%)	6/50 (12%)	6/50 (12%)
LITTERS (b)	5/32 (16%)	6/29 (21%)	6/30 (20%)
POLY-3 RATE (c)	6/37.31	6/42.34	6/38.02
POLY-3 PERCENT (g)	16.1%	14.2%	15.8%
TERMINAL (d)	5/23 (22%)	5/32 (16%)	4/23 (17%)
FIRST INCIDENCE	589	349	617
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.574	P=0.530N	P=0.610N
POLY 1.5	P=0.581	P=0.569N	P=0.613N
POLY 6	P=0.561	P=0.477N	P=0.609N
RAO-SCOTT	P=0.560	P=0.512N	P=0.584N
LITTER C-A/FISHERS	P=0.444	P=0.427	P=0.452

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Liver Necrosis			
<hr/>			
LESION RATES			
OVERALL (a)	0/50 (0%)	4/50 (8%)	5/50 (10%)
LITTERS (b)	0/32 (0%)	4/29 (14%)	5/30 (17%)
POLY-3 RATE (c)	0/36.81	4/43.82	5/39.87
POLY-3 PERCENT (g)	0%	9.1%	12.5%
TERMINAL (d)	0/23 (0%)	1/32 (3%)	1/23 (4%)
FIRST INCIDENCE	---	322	393
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.064	P=0.086	P=0.037*
POLY 1.5	P=0.061	P=0.074	P=0.035*
POLY 6	P=0.066	P=0.102	P=0.038*
RAO-SCOTT	P=0.073	P=0.103	P=0.051
LITTER C-A/FISHERS	P=0.046*	P=0.046*	P=0.022*

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

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First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Liver Pigment			
LESION RATES			
OVERALL (a)	3/50 (6%)	10/50 (20%)	40/50 (80%)
LITTERS (b)	3/32 (9%)	9/29 (31%)	28/30 (93%)
POLY-3 RATE (c)	3/37.56	10/41.81	40/45.22
POLY-3 PERCENT (g)	8%	23.9%	88.5%
TERMINAL (d)	1/23 (4%)	9/32 (28%)	23/23 (100%)
FIRST INCIDENCE	625	638	391
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.051	P<0.001**
POLY 1.5	P<0.001**	P=0.043*	P<0.001**
POLY 6	P<0.001**	P=0.066	P<0.001**
RAO-SCOTT	P<0.001**	P=0.047*	P<0.001**
LITTER C-A/FISHERS	P<0.001**	P=0.035*	P<0.001**

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Liver: Bile Duct Cyst			
<hr/>			
LESION RATES			
OVERALL (a)	9/50 (18%)	5/50 (10%)	5/50 (10%)
LITTERS (b)	7/32 (22%)	5/29 (17%)	5/30 (17%)
POLY-3 RATE (c)	9/39.20	5/41.81	5/38.55
POLY-3 PERCENT (g)	23%	12%	13%
TERMINAL (d)	4/23 (17%)	4/32 (13%)	3/23 (13%)
FIRST INCIDENCE	411	638	440
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.225N	P=0.154N	P=0.195N
POLY 1.5	P=0.215N	P=0.171N	P=0.192N
POLY 6	P=0.246N	P=0.129N	P=0.205N
RAO-SCOTT	P=0.240N	P=0.177N	P=0.216N
LITTER C-A/FISHERS	P=0.404N	P=0.449N	P=0.423N

Experiment Number: 20614 - 01
Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Perfluorooctanoic Acid
CAS Number: 335-67-1

Date Report Requested: 07/25/2018
Time Report Requested: 16:26:26
First Dose M/F: 10/27/08 / 10/28/08
Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm

Liver: Bile Duct
Hyperplasia

LESION RATES

OVERALL (a)	16/50 (32%)	27/50 (54%)	27/50 (54%)
LITTERS (b)	12/32 (38%)	18/29 (62%)	22/30 (73%)
POLY-3 RATE (c)	16/37.59	27/44.08	27/40.28
POLY-3 PERCENT (g)	42.6%	61.3%	67%
TERMINAL (d)	13/23 (57%)	20/32 (63%)	20/23 (87%)
FIRST INCIDENCE	645	349	454

STATISTICAL TESTS

POLY 3	P=0.034*	P=0.064	P=0.017*
POLY 1.5	P=0.036*	P=0.037*	P=0.018*
POLY 6	P=0.028*	P=0.129	P=0.016*
RAO-SCOTT	P=0.048*	P=0.086	P=0.035*
LITTER C-A/FISHERS	P=0.007**	P=0.048*	P=0.005**

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Liver: Centrilobular Necrosis			
LESION RATES			
OVERALL (a)	0/50 (0%)	2/50 (4%)	3/50 (6%)
LITTERS (b)	0/32 (0%)	2/29 (7%)	3/30 (10%)
POLY-3 RATE (c)	0/36.81	2/41.57	3/38.17
POLY-3 PERCENT (g)	0%	4.8%	7.9%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	1/23 (4%)
FIRST INCIDENCE	---	714	472
STATISTICAL TESTS			
POLY 3	P=0.125	P=0.265	P=0.124
POLY 1.5	P=0.123	P=0.252	P=0.122
POLY 6	P=0.124	P=0.284	P=0.125
RAO-SCOTT	P=0.142	P=0.282	P=0.146
LITTER C-A/FISHERS	P=0.110	P=0.222	P=0.107

Experiment Number: 20614 - 01
 Test Type: CHRONIC
 Route: DOSED FEED
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Perfluorooctanoic Acid
 CAS Number: 335-67-1

Date Report Requested: 07/25/2018
 Time Report Requested: 16:26:26
 First Dose M/F: 10/27/08 / 10/28/08
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
 TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Liver: Hepatocyte Cytoplasmic Alteration			
LESION RATES			
OVERALL (a)	0/50 (0%)	17/50 (34%)	49/50 (98%)
LITTERS (b)	0/32 (0%)	14/29 (48%)	30/30 (100%)
POLY-3 RATE (c)	0/36.81	17/43.53	49/49.74
POLY-3 PERCENT (g)	0%	39.1%	98.5%
TERMINAL (d)	0/23 (0%)	12/32 (38%)	23/23 (100%)
FIRST INCIDENCE	---	322	183
STATISTICAL TESTS			
POLY 3	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P<0.001**
RAO-SCOTT	P<0.001**	P<0.001**	P<0.001**
LITTER C-A/FISHERS	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20614 - 01
 Test Type: CHRONIC
 Route: DOSED FEED
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Perfluorooctanoic Acid
 CAS Number: 335-67-1

Date Report Requested: 07/25/2018
 Time Report Requested: 16:26:26
 First Dose M/F: 10/27/08 / 10/28/08
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
 TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Liver: Hepatocyte Hypertrophy			
LESION RATES			
OVERALL (a)	0/50 (0%)	16/50 (32%)	49/50 (98%)
LITTERS (b)	0/32 (0%)	15/29 (52%)	30/30 (100%)
POLY-3 RATE (c)	0/36.81	16/43.91	49/49.74
POLY-3 PERCENT (g)	0%	36.4%	98.5%
TERMINAL (d)	0/23 (0%)	11/32 (34%)	23/23 (100%)
FIRST INCIDENCE	---	322	183
STATISTICAL TESTS			
POLY 3	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P<0.001**
RAO-SCOTT	P<0.001**	P<0.001**	P<0.001**
LITTER C-A/FISHERS	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Liver: Hepatocyte Increased mitoses			
<hr/>			
LESION RATES			
OVERALL (a)	2/50 (4%)	5/50 (10%)	10/50 (20%)
LITTERS (b)	2/32 (6%)	5/29 (17%)	9/30 (30%)
POLY-3 RATE (c)	2/38.11	5/41.66	10/38.98
POLY-3 PERCENT (g)	5.3%	12%	25.7%
TERMINAL (d)	0/23 (0%)	3/32 (9%)	5/23 (22%)
FIRST INCIDENCE	312	714	574
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.008**	P=0.252	P=0.013*
POLY 1.5	P=0.008**	P=0.234	P=0.013*
POLY 6	P=0.008**	P=0.283	P=0.013*
RAO-SCOTT	P=0.015*	P=0.267	P=0.024*
LITTER C-A/FISHERS	P=0.014*	P=0.173	P=0.016*

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Liver: Hepatocyte			
Single Cell Death			
<hr/>			
LESION RATES			
OVERALL (a)	0/50 (0%)	5/50 (10%)	32/50 (64%)
LITTERS (b)	0/32 (0%)	4/29 (14%)	24/30 (80%)
POLY-3 RATE (c)	0/36.81	5/42.42	32/45.31
POLY-3 PERCENT (g)	0%	11.8%	70.6%
TERMINAL (d)	0/23 (0%)	3/32 (9%)	13/23 (57%)
FIRST INCIDENCE	---	368	393
<hr/>			
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.044*	P<0.001**
POLY 1.5	P<0.001**	P=0.038*	P<0.001**
POLY 6	P<0.001**	P=0.054	P<0.001**
RAO-SCOTT	P<0.001**	P=0.038*	P<0.001**
LITTER C-A/FISHERS	P<0.001**	P=0.046*	P<0.001**

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Liver: Oval Cell Hyperplasia			
<hr/>			
LESION RATES			
OVERALL (a)	1/50 (2%)	0/50 (0%)	3/50 (6%)
LITTERS (b)	1/32 (3%)	0/29 (0%)	2/30 (7%)
POLY-3 RATE (c)	1/37.41	0/41.44	3/37.48
POLY-3 PERCENT (g)	2.7%	0%	8%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	2/23 (9%)
FIRST INCIDENCE	547	---	673
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.125	P=0.480N	P=0.305
POLY 1.5	P=0.129	P=0.489N	P=0.306
POLY 6	P=0.118	P=0.466N	P=0.301
RAO-SCOTT	P=0.247	P=0.631N	P=0.419
LITTER C-A/FISHERS	P=0.301	P=0.525N	P=0.475

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

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First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Lung			
Inflammation Chronic			
<hr/>			
LESION RATES			
OVERALL (a)	2/50 (4%)	7/50 (14%)	7/50 (14%)
LITTERS (b)	2/32 (6%)	7/29 (24%)	7/30 (23%)
POLY-3 RATE (c)	2/37.06	7/41.44	7/37.90
POLY-3 PERCENT (g)	5.4%	16.9%	18.5%
TERMINAL (d)	1/23 (4%)	7/32 (22%)	6/23 (26%)
FIRST INCIDENCE	676	744 (T)	508
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.123	P=0.106	P=0.080
POLY 1.5	P=0.126	P=0.093	P=0.081
POLY 6	P=0.115	P=0.127	P=0.077
RAO-SCOTT	P=0.115	P=0.102	P=0.078
LITTER C-A/FISHERS	P=0.102	P=0.053	P=0.060

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Lung			
Inflammation Granulomatous Focal			
<hr/>			
LESION RATES			
OVERALL (a)	1/50 (2%)	1/50 (2%)	5/50 (10%)
LITTERS (b)	1/32 (3%)	1/29 (3%)	5/30 (17%)
POLY-3 RATE (c)	1/36.81	1/41.44	5/38.42
POLY-3 PERCENT (g)	2.7%	2.4%	13%
TERMINAL (d)	1/23 (4%)	1/32 (3%)	1/23 (4%)
FIRST INCIDENCE	744 (T)	744 (T)	589
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.036*	P=0.734N	P=0.109
POLY 1.5	P=0.037*	P=0.746N	P=0.106
POLY 6	P=0.035*	P=0.716N	P=0.113
RAO-SCOTT	P=0.054	P=0.708N	P=0.132
LITTER C-A/FISHERS	P=0.033*	P=0.729	P=0.084

Experiment Number: 20614 - 01
Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Perfluorooctanoic Acid
CAS Number: 335-67-1

Date Report Requested: 07/25/2018
Time Report Requested: 16:26:26
First Dose M/F: 10/27/08 / 10/28/08
Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Lung: Alveolus Infiltration Cellular Histiocyte			
LESION RATES			
OVERALL (a)	36/50 (72%)	31/50 (62%)	42/50 (84%)
LITTERS (b)	28/32 (88%)	22/29 (76%)	28/30 (93%)
POLY-3 RATE (c)	36/45.48	31/43.97	42/44.74
POLY-3 PERCENT (g)	79.2%	70.5%	93.9%
TERMINAL (d)	18/23 (78%)	24/32 (75%)	22/23 (96%)
FIRST INCIDENCE	274	368	454
STATISTICAL TESTS			
POLY 3	P=0.013*	P=0.232N	P=0.026*
POLY 1.5	P=0.017*	P=0.227N	P=0.039*
POLY 6	P=0.013*	P=0.222N	P=0.025*
RAO-SCOTT	P=0.033*	P=0.270N	P=0.061
LITTER C-A/FISHERS	P=0.222	P=0.199N	P=0.367

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Lymph Node, Mandibular Atrophy Lymphoid			
LESION RATES			
OVERALL (a)	4/48 (8%)	1/49 (2%)	10/48 (21%)
LITTERS (b)	4/32 (13%)	1/29 (3%)	9/30 (30%)
POLY-3 RATE (c)	4/37.11	1/40.44	10/42.12
POLY-3 PERCENT (g)	10.8%	2.5%	23.7%
TERMINAL (d)	0/23 (0%)	1/31 (3%)	1/23 (4%)
FIRST INCIDENCE	673	744 (T)	391
STATISTICAL TESTS			
POLY 3	P=0.014*	P=0.152N	P=0.110
POLY 1.5	P=0.013*	P=0.162N	P=0.097
POLY 6	P=0.014*	P=0.139N	P=0.121
RAO-SCOTT	P=0.033*	P=0.179N	P=0.140
LITTER C-A/FISHERS	P=0.019*	P=0.209N	P=0.083

Experiment Number: 20614 - 01
Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Perfluorooctanoic Acid
CAS Number: 335-67-1

Date Report Requested: 07/25/2018
Time Report Requested: 16:26:26
First Dose M/F: 10/27/08 / 10/28/08
Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Lymph Node, Mandibular Infiltration Cellular Plasma Cell			
LESION RATES			
OVERALL (a)	0/48 (0%)	2/49 (4%)	0/48 (0%)
LITTERS (b)	0/32 (0%)	2/29 (7%)	0/30 (0%)
POLY-3 RATE (c)	0/36.37	2/40.44	0/36.55
POLY-3 PERCENT (g)	0%	5%	0%
TERMINAL (d)	0/23 (0%)	2/31 (7%)	0/23 (0%)
FIRST INCIDENCE	---	744 (T)	---
STATISTICAL TESTS			
POLY 3	P=0.555N	P=0.261	(e)
POLY 1.5	P=0.555N	P=0.251	(e)
POLY 6	P=0.558N	P=0.277	(e)
RAO-SCOTT	P=0.588N	P=0.348	(e)
LITTER C-A/FISHERS	P=0.567N	P=0.222	(e)

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Lymph Node, Mesenteric Atrophy Lymphoid			
LESION RATES			
OVERALL (a)	4/49 (8%)	2/50 (4%)	10/48 (21%)
LITTERS (b)	3/32 (9%)	2/29 (7%)	10/30 (33%)
POLY-3 RATE (c)	4/38.57	2/41.86	10/42.59
POLY-3 PERCENT (g)	10.4%	4.8%	23.5%
TERMINAL (d)	0/23 (0%)	1/32 (3%)	0/23 (0%)
FIRST INCIDENCE	452	622	393
STATISTICAL TESTS			
POLY 3	P=0.020*	P=0.299N	P=0.101
POLY 1.5	P=0.018*	P=0.314N	P=0.088
POLY 6	P=0.020*	P=0.276N	P=0.114
RAO-SCOTT	P=0.033*	P=0.301N	P=0.116
LITTER C-A/FISHERS	P=0.005**	P=0.548N	P=0.022*

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Mammary Gland			
Galactocele			
<hr/>			
LESION RATES			
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)
LITTERS (b)	0/32 (0%)	2/29 (7%)	0/30 (0%)
POLY-3 RATE (c)	0/36.81	2/42.49	0/37.22
POLY-3 PERCENT (g)	0%	4.7%	0%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	0/23 (0%)
FIRST INCIDENCE	---	533	---
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.552N	P=0.270	(e)
POLY 1.5	P=0.552N	P=0.255	(e)
POLY 6	P=0.554N	P=0.293	(e)
RAO-SCOTT	P=0.591N	P=0.364	(e)
LITTER C-A/FISHERS	P=0.567N	P=0.222	(e)

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Mammary Gland Hyperplasia			
LESION RATES			
OVERALL (a)	13/50 (26%)	13/50 (26%)	15/50 (30%)
LITTERS (b)	13/32 (41%)	11/29 (38%)	13/30 (43%)
POLY-3 RATE (c)	13/38.56	13/42.13	15/39.08
POLY-3 PERCENT (g)	33.7%	30.9%	38.4%
TERMINAL (d)	7/23 (30%)	11/32 (34%)	8/23 (35%)
FIRST INCIDENCE	547	589	589
STATISTICAL TESTS			
POLY 3	P=0.345	P=0.486N	P=0.422
POLY 1.5	P=0.357	P=0.533N	P=0.420
POLY 6	P=0.325	P=0.423N	P=0.422
RAO-SCOTT	P=0.346	P=0.476N	P=0.414
LITTER C-A/FISHERS	P=0.457	P=0.519N	P=0.516

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Nose Inflammation			
LESION RATES			
OVERALL (a)	3/50 (6%)	1/50 (2%)	3/50 (6%)
LITTERS (b)	3/32 (9%)	1/29 (3%)	3/30 (10%)
POLY-3 RATE (c)	3/37.59	1/41.81	3/37.90
POLY-3 PERCENT (g)	8%	2.4%	7.9%
TERMINAL (d)	2/23 (9%)	0/32 (0%)	1/23 (4%)
FIRST INCIDENCE	452	638	617
STATISTICAL TESTS			
POLY 3	P=0.517	P=0.267N	P=0.660N
POLY 1.5	P=0.524	P=0.285N	P=0.660N
POLY 6	P=0.504	P=0.243N	P=0.660N
RAO-SCOTT	P=0.511	P=0.273N	P=0.633N
LITTER C-A/FISHERS	P=0.510	P=0.345N	P=0.633

Experiment Number: 20614 - 01
Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Perfluorooctanoic Acid
CAS Number: 335-67-1

Date Report Requested: 07/25/2018
Time Report Requested: 16:26:26
First Dose M/F: 10/27/08 / 10/28/08
Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Ovary Atrophy			
<hr/>			
LESION RATES			
OVERALL (a)	35/50 (70%)	40/50 (80%)	31/50 (62%)
LITTERS (b)	24/32 (75%)	25/29 (86%)	23/30 (77%)
POLY-3 RATE (c)	35/44.34	40/46.78	31/44.78
POLY-3 PERCENT (g)	78.9%	85.5%	69.2%
TERMINAL (d)	17/23 (74%)	27/32 (84%)	16/23 (70%)
FIRST INCIDENCE	312	322	391
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.091N	P=0.282	P=0.198N
POLY 1.5	P=0.100N	P=0.219	P=0.219N
POLY 6	P=0.104N	P=0.377	P=0.200N
RAO-SCOTT	P=0.108N	P=0.292	P=0.211N
LITTER C-A/FISHERS	P=0.556N	P=0.220	P=0.558

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Ovary Cyst			
<hr/>			
LESION RATES			
OVERALL (a)	16/50 (32%)	16/50 (32%)	23/50 (46%)
LITTERS (b)	15/32 (47%)	14/29 (48%)	20/30 (67%)
POLY-3 RATE (c)	16/39.07	16/45.00	23/41.78
POLY-3 PERCENT (g)	41%	35.6%	55.1%
TERMINAL (d)	9/23 (39%)	8/32 (25%)	12/23 (52%)
FIRST INCIDENCE	592	349	457
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.069	P=0.389N	P=0.139
POLY 1.5	P=0.072	P=0.469N	P=0.127
POLY 6	P=0.061	P=0.298N	P=0.149
RAO-SCOTT	P=0.077	P=0.379N	P=0.144
LITTER C-A/FISHERS	P=0.066	P=0.558	P=0.094

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Pancreas: Acinus Atrophy			
LESION RATES			
OVERALL (a)	0/50 (0%)	4/50 (8%)	1/50 (2%)
LITTERS (b)	0/32 (0%)	4/29 (14%)	1/30 (3%)
POLY-3 RATE (c)	0/36.81	4/41.44	1/37.22
POLY-3 PERCENT (g)	0%	9.7%	2.7%
TERMINAL (d)	0/23 (0%)	4/32 (13%)	1/23 (4%)
FIRST INCIDENCE	---	744 (T)	744 (T)
STATISTICAL TESTS			
POLY 3	P=0.648	P=0.076	P=0.502
POLY 1.5	P=0.645	P=0.069	P=0.502
POLY 6	P=0.648	P=0.088	P=0.501
RAO-SCOTT	P=0.613	P=0.107	P=0.488
LITTER C-A/FISHERS	P=0.619	P=0.046*	P=0.484

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm

Pituitary Gland: Pars Distalis
Hyperplasia

LESION RATES

OVERALL (a)	14/50 (28%)	26/50 (52%)	7/50 (14%)
LITTERS (b)	12/32 (38%)	19/29 (66%)	6/30 (20%)
POLY-3 RATE (c)	14/38.84	26/43.68	7/37.94
POLY-3 PERCENT (g)	36.1%	59.5%	18.5%
TERMINAL (d)	10/23 (44%)	19/32 (59%)	5/23 (22%)
FIRST INCIDENCE	312	533	634

STATISTICAL TESTS

POLY 3	P=0.010N**	P=0.023*	P=0.065N
POLY 1.5	P=0.010N**	P=0.015*	P=0.066N
POLY 6	P=0.013N*	P=0.047*	P=0.065N
RAO-SCOTT	P=0.017N*	P=0.031*	P=0.072N
LITTER C-A/FISHERS	P=0.031N*	P=0.026*	P=0.108N

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Spleen			
Extramedullary Hematopoiesis			
LESION RATES			
OVERALL (a)	34/50 (68%)	36/50 (72%)	28/50 (56%)
LITTERS (b)	26/32 (81%)	24/29 (83%)	22/30 (73%)
POLY-3 RATE (c)	34/43.45	36/47.50	28/41.15
POLY-3 PERCENT (g)	78.3%	75.8%	68.1%
TERMINAL (d)	20/23 (87%)	22/32 (69%)	16/23 (70%)
FIRST INCIDENCE	312	322	472
STATISTICAL TESTS			
POLY 3	P=0.164N	P=0.488N	P=0.188N
POLY 1.5	P=0.127N	P=0.585	P=0.172N
POLY 6	P=0.213N	P=0.332N	P=0.203N
RAO-SCOTT	P=0.183N	P=0.490N	P=0.217N
LITTER C-A/FISHERS	P=0.256N	P=0.573	P=0.330N

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Spleen Pigment			
<hr/>			
LESION RATES			
OVERALL (a)	30/50 (60%)	30/50 (60%)	31/50 (62%)
LITTERS (b)	24/32 (75%)	23/29 (79%)	23/30 (77%)
POLY-3 RATE (c)	30/44.24	30/45.80	31/45.74
POLY-3 PERCENT (g)	67.8%	65.5%	67.8%
TERMINAL (d)	14/23 (61%)	22/32 (69%)	15/23 (65%)
FIRST INCIDENCE	274	295	183
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.538	P=0.496N	P=0.591N
POLY 1.5	P=0.520	P=0.538N	P=0.564
POLY 6	P=0.538	P=0.437N	P=0.583N
RAO-SCOTT	P=0.532	P=0.487N	P=0.578N
LITTER C-A/FISHERS	P=0.552	P=0.463	P=0.558

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm

Spleen: Lymphoid Follicle Atrophy

LESION RATES

OVERALL (a)	7/50 (14%)	8/50 (16%)	20/50 (40%)
LITTERS (b)	6/32 (19%)	7/29 (24%)	18/30 (60%)
POLY-3 RATE (c)	7/39.38	8/44.37	20/46.67
POLY-3 PERCENT (g)	17.8%	18%	42.9%
TERMINAL (d)	0/23 (0%)	3/32 (9%)	3/23 (13%)
FIRST INCIDENCE	452	295	183

STATISTICAL TESTS

POLY 3	P=0.002**	P=0.600	P=0.010**
POLY 1.5	P<0.001**	P=0.562	P=0.006**
POLY 6	P=0.002**	P=0.581N	P=0.014*
RAO-SCOTT	P=0.003**	P=0.583	P=0.011*
LITTER C-A/FISHERS	P<0.001**	P=0.420	P<0.001**

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

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First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Spleen: Lymphoid Follicle Hyperplasia			
LESION RATES			
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)
LITTERS (b)	0/32 (0%)	2/29 (7%)	0/30 (0%)
POLY-3 RATE (c)	0/36.81	2/42.07	0/37.22
POLY-3 PERCENT (g)	0%	4.8%	0%
TERMINAL (d)	0/23 (0%)	1/32 (3%)	0/23 (0%)
FIRST INCIDENCE	---	533	---
STATISTICAL TESTS			
POLY 3	P=0.551N	P=0.268	(e)
POLY 1.5	P=0.552N	P=0.254	(e)
POLY 6	P=0.554N	P=0.288	(e)
RAO-SCOTT	P=0.585N	P=0.352	(e)
LITTER C-A/FISHERS	P=0.567N	P=0.222	(e)

Experiment Number: 20614 - 01
Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Perfluorooctanoic Acid
CAS Number: 335-67-1

Date Report Requested: 07/25/2018
Time Report Requested: 16:26:26
First Dose M/F: 10/27/08 / 10/28/08
Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Stomach, Forestomach Ulcer			
LESION RATES			
OVERALL (a)	2/50 (4%)	1/50 (2%)	11/50 (22%)
LITTERS (b)	2/32 (6%)	1/29 (3%)	9/30 (30%)
POLY-3 RATE (c)	2/37.66	1/41.54	11/41.35
POLY-3 PERCENT (g)	5.3%	2.4%	26.6%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	2/23 (9%)
FIRST INCIDENCE	547	718	393
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.466N	P=0.010**
POLY 1.5	P<0.001**	P=0.481N	P=0.009**
POLY 6	P<0.001**	P=0.444N	P=0.012*
RAO-SCOTT	P=0.004**	P=0.491N	P=0.031*
LITTER C-A/FISHERS	P=0.002**	P=0.537N	P=0.016*

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Stomach, Forestomach: Epithelium Hyperplasia			
LESION RATES			
OVERALL (a)	4/50 (8%)	3/50 (6%)	21/50 (42%)
LITTERS (b)	4/32 (13%)	3/29 (10%)	17/30 (57%)
POLY-3 RATE (c)	4/38.53	3/42.11	21/43.93
POLY-3 PERCENT (g)	10.4%	7.1%	47.8%
TERMINAL (d)	1/23 (4%)	1/32 (3%)	5/23 (22%)
FIRST INCIDENCE	382	564	393
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.451N	P<0.001**
POLY 1.5	P<0.001**	P=0.474N	P<0.001**
POLY 6	P<0.001**	P=0.417N	P<0.001**
RAO-SCOTT	P<0.001**	P=0.447N	P<0.001**
LITTER C-A/FISHERS	P<0.001**	P=0.557N	P<0.001**

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

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First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Stomach, Forestomach: Submucosa Inflammation Chronic			
LESION RATES			
OVERALL (a)	3/50 (6%)	2/50 (4%)	18/50 (36%)
LITTERS (b)	3/32 (9%)	2/29 (7%)	15/30 (50%)
POLY-3 RATE (c)	3/38.53	2/42.44	18/43.38
POLY-3 PERCENT (g)	7.8%	4.7%	41.5%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	5/23 (22%)
FIRST INCIDENCE	382	351	393
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.456N	P<0.001**
POLY 1.5	P<0.001**	P=0.475N	P<0.001**
POLY 6	P<0.001**	P=0.429N	P<0.001**
RAO-SCOTT	P<0.001**	P=0.461N	P=0.002**
LITTER C-A/FISHERS	P<0.001**	P=0.548N	P<0.001**

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

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First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Stomach, Glandular: Mucosa Mineral			
LESION RATES			
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)
LITTERS (b)	0/32 (0%)	0/29 (0%)	2/30 (7%)
POLY-3 RATE (c)	0/36.81	0/41.44	2/39.00
POLY-3 PERCENT (g)	0%	0%	5.1%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	0/23 (0%)
FIRST INCIDENCE	---	---	183
STATISTICAL TESTS			
POLY 3	P=0.093	(e)	P=0.250
POLY 1.5	P=0.093	(e)	P=0.247
POLY 6	P=0.091	(e)	P=0.251
RAO-SCOTT	P=0.178	(e)	P=0.340
LITTER C-A/FISHERS	P=0.087	(e)	P=0.230

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Stomach, Glandular: Submucosa Inflammation Chronic			
LESION RATES			
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)
LITTERS (b)	0/32 (0%)	0/29 (0%)	2/30 (7%)
POLY-3 RATE (c)	0/36.81	0/41.44	2/37.63
POLY-3 PERCENT (g)	0%	0%	5.3%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	1/23 (4%)
FIRST INCIDENCE	---	---	624
STATISTICAL TESTS			
POLY 3	P=0.089	(e)	P=0.241
POLY 1.5	P=0.090	(e)	P=0.240
POLY 6	P=0.087	(e)	P=0.242
RAO-SCOTT	P=0.171	(e)	P=0.332
LITTER C-A/FISHERS	P=0.087	(e)	P=0.230

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Thymus Atrophy			
<hr/>			
LESION RATES			
OVERALL (a)	42/49 (86%)	45/50 (90%)	46/47 (98%)
LITTERS (b)	28/32 (88%)	27/29 (93%)	29/29 (100%)
POLY-3 RATE (c)	42/45.12	45/48.17	46/46.29
POLY-3 PERCENT (g)	93.1%	93.4%	99.4%
TERMINAL (d)	21/22 (96%)	29/32 (91%)	21/21 (100%)
FIRST INCIDENCE	323	322	391
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.088	P=0.645	P=0.105
POLY 1.5	P=0.057	P=0.524	P=0.065
POLY 6	P=0.127	P=0.583N	P=0.171
RAO-SCOTT	P=0.135	P=0.638	P=0.178
LITTER C-A/FISHERS	P=0.058	P=0.384	P=0.069

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

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First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Thyroid Gland: C-Cell Hyperplasia			
LESION RATES			
OVERALL (a)	10/50 (20%)	6/50 (12%)	11/50 (22%)
LITTERS (b)	9/32 (28%)	6/29 (21%)	10/30 (33%)
POLY-3 RATE (c)	10/38.65	6/41.44	11/37.22
POLY-3 PERCENT (g)	25.9%	14.5%	29.6%
TERMINAL (d)	6/23 (26%)	6/32 (19%)	11/23 (48%)
FIRST INCIDENCE	452	744 (T)	744 (T)
STATISTICAL TESTS			
POLY 3	P=0.293	P=0.158N	P=0.459
POLY 1.5	P=0.322	P=0.178N	P=0.482
POLY 6	P=0.249	P=0.132N	P=0.417
RAO-SCOTT	P=0.292	P=0.163N	P=0.445
LITTER C-A/FISHERS	P=0.324	P=0.355N	P=0.433

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

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First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Thyroid Gland: Follicular Cell Hypertrophy			
LESION RATES			
OVERALL (a)	4/50 (8%)	9/50 (18%)	19/50 (38%)
LITTERS (b)	4/32 (13%)	7/29 (24%)	17/30 (57%)
POLY-3 RATE (c)	4/38.72	9/43.95	19/42.13
POLY-3 PERCENT (g)	10.3%	20.5%	45.1%
TERMINAL (d)	1/23 (4%)	5/32 (16%)	9/23 (39%)
FIRST INCIDENCE	312	349	391
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.168	P<0.001**
POLY 1.5	P<0.001**	P=0.143	P<0.001**
POLY 6	P<0.001**	P=0.207	P<0.001**
RAO-SCOTT	P<0.001**	P=0.175	P<0.001**
LITTER C-A/FISHERS	P<0.001**	P=0.199	P<0.001**

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
<hr/>			
Uterus Dilation			
<hr/>			
LESION RATES			
OVERALL (a)	2/50 (4%)	0/50 (0%)	3/50 (6%)
LITTERS (b)	2/32 (6%)	0/29 (0%)	3/30 (10%)
POLY-3 RATE (c)	2/37.22	0/41.44	3/37.32
POLY-3 PERCENT (g)	5.4%	0%	8%
TERMINAL (d)	1/23 (4%)	0/32 (0%)	2/23 (9%)
FIRST INCIDENCE	625	---	718
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.284	P=0.214N	P=0.501
POLY 1.5	P=0.292	P=0.224N	P=0.502
POLY 6	P=0.271	P=0.200N	P=0.497
RAO-SCOTT	P=0.319	P=0.259N	P=0.503
LITTER C-A/FISHERS	P=0.284	P=0.271N	P=0.469

Experiment Number: 20614 - 01
Test Type: CHRONIC
Route: DOSED FEED
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Perfluorooctanoic Acid
CAS Number: 335-67-1

Date Report Requested: 07/25/2018
Time Report Requested: 16:26:26
First Dose M/F: 10/27/08 / 10/28/08
Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Uterus Inflammation			
LESION RATES			
OVERALL (a)	0/50 (0%)	3/50 (6%)	1/50 (2%)
LITTERS (b)	0/32 (0%)	3/29 (10%)	1/30 (3%)
POLY-3 RATE (c)	0/36.81	3/41.54	1/37.90
POLY-3 PERCENT (g)	0%	7.2%	2.6%
TERMINAL (d)	0/23 (0%)	2/32 (6%)	0/23 (0%)
FIRST INCIDENCE	---	718	508
STATISTICAL TESTS			
POLY 3	P=0.609	P=0.141	P=0.506
POLY 1.5	P=0.602	P=0.131	P=0.504
POLY 6	P=0.613	P=0.158	P=0.507
RAO-SCOTT	P=0.580	P=0.178	P=0.499
LITTER C-A/FISHERS	P=0.573	P=0.102	P=0.484

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 16:26:26

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Uterus			
Inflammation Chronic			
LESION RATES			
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)
LITTERS (b)	2/32 (6%)	0/29 (0%)	0/30 (0%)
POLY-3 RATE (c)	2/37.34	0/41.44	0/37.22
POLY-3 PERCENT (g)	5.4%	0%	0%
TERMINAL (d)	0/23 (0%)	0/32 (0%)	0/23 (0%)
FIRST INCIDENCE	625	---	---
STATISTICAL TESTS			
POLY 3	P=0.202N	P=0.214N	P=0.237N
POLY 1.5	P=0.196N	P=0.224N	P=0.236N
POLY 6	P=0.210N	P=0.201N	P=0.240N
RAO-SCOTT	P=0.295N	P=0.334N	P=0.343N
LITTER C-A/FISHERS	P=0.198N	P=0.271N	P=0.262N

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

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Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Uterus: Endometrium Hyperplasia Cystic			
LESION RATES			
OVERALL (a)	20/50 (40%)	31/50 (62%)	18/50 (36%)
LITTERS (b)	16/32 (50%)	22/29 (76%)	16/30 (53%)
POLY-3 RATE (c)	20/40.87	31/45.18	18/39.75
POLY-3 PERCENT (g)	48.9%	68.6%	45.3%
TERMINAL (d)	10/23 (44%)	22/32 (69%)	12/23 (52%)
FIRST INCIDENCE	312	322	391
STATISTICAL TESTS			
POLY 3	P=0.233N	P=0.044*	P=0.457N
POLY 1.5	P=0.201N	P=0.029*	P=0.434N
POLY 6	P=0.301N	P=0.077	P=0.504N
RAO-SCOTT	P=0.245N	P=0.054	P=0.447N
LITTER C-A/FISHERS	P=0.497N	P=0.034*	P=0.497

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	150/300 ppm	300/1000 ppm
Uterus: Endometrium Metaplasia			
LESION RATES			
OVERALL (a)	18/50 (36%)	21/50 (42%)	11/50 (22%)
LITTERS (b)	15/32 (47%)	16/29 (55%)	10/30 (33%)
POLY-3 RATE (c)	18/39.96	21/43.55	11/39.04
POLY-3 PERCENT (g)	45.1%	48.2%	28.2%
TERMINAL (d)	9/23 (39%)	17/32 (53%)	7/23 (30%)
FIRST INCIDENCE	574	322	472
STATISTICAL TESTS			
POLY 3	P=0.051N	P=0.471	P=0.087N
POLY 1.5	P=0.045N*	P=0.419	P=0.084N
POLY 6	P=0.068N	P=0.530	P=0.101N
RAO-SCOTT	P=0.056N	P=0.462	P=0.093N
LITTER C-A/FISHERS	P=0.126N	P=0.348	P=0.204N

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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LEGEND

- (a) Number of tumor-bearing animals/number of animals examined at site.
- (b) Number of litters with tumor-bearing animals/number of litters examined at site
- (c) Number of tumor-bearing animals/Poly-3 number
- (d) Observed incidence at terminal kill.
- (e) Value of statistic cannot be computed.
- (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.
- (g) Poly-3 adjusted lifetime tumor incidence.
- (I) Interim sacrifice
- (T) Terminal sacrifice
- # Tumor rates based on numbers of animals necropsied.
- * To the right of any statistical result, indicates significance at ($P \leq 0.05$).
- ** To the right of any statistical result, indicates significance at ($P \leq 0.01$).
- N Indicates a negative trend for all tests
The Rao-Scott statistic performs the Poly-3 test with an adjustment for within-litter correlation.
The Litter C-A/Fishers statistic compares directly the litter incidence rates.

*** END OF REPORT ***