

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: 16:09:11
First Dose M/F: 10/27/08 / 10/28/08
Lab: BAT

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

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 004 0/300 ppm	Include 008 0/1000 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 PERFLUOROOCCTANOIC ACID

FEMALE RATS

Organ

Adrenal Cortex
Adrenal Medulla
Bone Marrow
Intestine Large, Colon
Kidney

Kidney: Papilla
Kidney: Papilla, Urothelium
Kidney: Pelvis
Kidney: Renal Tubule
Liver

Liver: Bile Duct

Liver: Centrilobular
Liver: Hepatocyte

Lung
Lung: Alveolus
Lymph Node, Mesenteric
Mesentery
Spleen
Stomach, Forestomach
Stomach, Forestomach: Epithelium
Stomach, Forestomach: Submucosa
Thymus
Thyroid Gland: C-Cell
Thyroid Gland: Follicular Cell
Urinary Bladder

Morphology

Vacuolization Cytoplasmic
Hyperplasia
Hyperplasia
Parasite Metazoan
Calculus Micro Observation Only
Infarct
Necrosis
Hyperplasia
Inflammation Chronic
Mineral
Eosinophilic Focus
Extramedullary Hematopoiesis
Necrosis
Pigment
Cyst
Hyperplasia
Necrosis
Cytoplasmic Alteration
Hypertrophy
Single Cell Death
Inflammation Chronic
Infiltration Cellular Histiocyte
Atrophy Lymphoid
Hemorrhage
Pigment
Ulcer
Hyperplasia
Inflammation Chronic
Atrophy
Hyperplasia
Hypertrophy
Inflammation

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SUMMARY OF STATISTICALLY SIGNIFICANT ($P \leq .05$) RESULTS IN THE ANALYSIS OF PERFLUOROOCTANOIC ACID

Uterus

Uterus: Endometrium

Inflammation

Metaplasia

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

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Adrenal Cortex Degeneration Cystic			
LESION RATES			
OVERALL (a)	11/50 (22%)	8/50 (16%)	9/49 (18%)
LITTERS (b)	9/32 (28%)	7/29 (24%)	8/31 (26%)
POLY-3 RATE (c)	11/38.60	8/42.42	9/37.36
POLY-3 PERCENT (g)	28.5%	18.9%	24.1%
TERMINAL (d)	6/23 (26%)	6/28 (21%)	6/23 (26%)
FIRST INCIDENCE	574	643	669
STATISTICAL TESTS			
POLY 3	P=0.485N	P=0.222N	P=0.430N
POLY 1.5	P=0.480N	P=0.248N	P=0.436N
POLY 6	P=0.477N	P=0.201N	P=0.412N
RAO-SCOTT	P=0.477N	P=0.242N	P=0.429N
LITTER C-A/FISHERS	P=0.521N	P=0.476N	P=0.531N

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

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Adrenal Cortex Hypertrophy			
LESION RATES			
OVERALL (a)	2/50 (4%)	2/50 (4%)	0/49 (0%)
LITTERS (b)	2/32 (6%)	2/29 (7%)	0/31 (0%)
POLY-3 RATE (c)	2/37.31	2/41.88	0/36.88
POLY-3 PERCENT (g)	5.4%	4.8%	0%
TERMINAL (d)	1/23 (4%)	2/28 (7%)	0/23 (0%)
FIRST INCIDENCE	589	744 (T)	---
STATISTICAL TESTS			
POLY 3	P=0.180N	P=0.652N	P=0.239N
POLY 1.5	P=0.182N	P=0.667N	P=0.243N
POLY 6	P=0.176N	P=0.637N	P=0.232N
RAO-SCOTT	P=0.203N	P=0.638N	P=0.258N
LITTER C-A/FISHERS	P=0.174N	P=0.655	P=0.254N

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Adrenal Cortex			
Vacuolization Cytoplasmic			
LESION RATES			
OVERALL (a)	1/50 (2%)	1/50 (2%)	5/49 (10%)
LITTERS (b)	1/32 (3%)	1/29 (3%)	5/31 (16%)
POLY-3 RATE (c)	1/37.23	1/42.84	5/41.59
POLY-3 PERCENT (g)	2.7%	2.3%	12%
TERMINAL (d)	0/23 (0%)	0/28 (0%)	0/23 (0%)
FIRST INCIDENCE	621	250	225
STATISTICAL TESTS			
POLY 3	P=0.042*	P=0.729N	P=0.128
POLY 1.5	P=0.040*	P=0.739N	P=0.116
POLY 6	P=0.045*	P=0.718N	P=0.141
RAO-SCOTT	P=0.074	P=0.714N	P=0.164
LITTER C-A/FISHERS	P=0.037*	P=0.729	P=0.091

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Adrenal Medulla Hyperplasia			
LESION RATES			
OVERALL (a)	7/50 (14%)	14/50 (28%)	12/49 (24%)
LITTERS (b)	6/32 (19%)	12/29 (41%)	11/31 (35%)
POLY-3 RATE (c)	7/38.11	14/42.56	12/37.55
POLY-3 PERCENT (g)	18.4%	32.9%	32%
TERMINAL (d)	4/23 (17%)	11/28 (39%)	7/23 (30%)
FIRST INCIDENCE	547	643	669
STATISTICAL TESTS			
POLY 3	P=0.190	P=0.106	P=0.132
POLY 1.5	P=0.188	P=0.091	P=0.129
POLY 6	P=0.212	P=0.122	P=0.148
RAO-SCOTT	P=0.187	P=0.113	P=0.137
LITTER C-A/FISHERS	P=0.179	P=0.049*	P=0.113

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Bone Marrow Atrophy			
LESION RATES			
OVERALL (a)	1/50 (2%)	0/50 (0%)	4/50 (8%)
LITTERS (b)	1/32 (3%)	0/29 (0%)	4/31 (13%)
POLY-3 RATE (c)	1/37.15	0/41.88	4/39.83
POLY-3 PERCENT (g)	2.7%	0%	10%
TERMINAL (d)	0/23 (0%)	0/28 (0%)	0/23 (0%)
FIRST INCIDENCE	647	---	66
STATISTICAL TESTS			
POLY 3	P=0.052	P=0.476N	P=0.199
POLY 1.5	P=0.052	P=0.485N	P=0.190
POLY 6	P=0.054	P=0.468N	P=0.212
RAO-SCOTT	P=0.100	P=0.522N	P=0.252
LITTER C-A/FISHERS	P=0.052	P=0.525N	P=0.167

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Bone Marrow Hyperplasia			
LESION RATES			
OVERALL (a)	21/50 (42%)	20/50 (40%)	29/50 (58%)
LITTERS (b)	19/32 (59%)	18/29 (62%)	24/31 (77%)
POLY-3 RATE (c)	21/44.86	20/47.35	29/44.23
POLY-3 PERCENT (g)	46.8%	42.2%	65.6%
TERMINAL (d)	6/23 (26%)	7/28 (25%)	11/23 (48%)
FIRST INCIDENCE	312	250	253
STATISTICAL TESTS			
POLY 3	P=0.025*	P=0.408N	P=0.053
POLY 1.5	P=0.025*	P=0.431N	P=0.051
POLY 6	P=0.029*	P=0.395N	P=0.063
RAO-SCOTT	P=0.026*	P=0.402N	P=0.055
LITTER C-A/FISHERS	P=0.078	P=0.519	P=0.102

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Brain Hemorrhage			
LESION RATES			
OVERALL (a)	2/50 (4%)	0/50 (0%)	1/49 (2%)
LITTERS (b)	2/32 (6%)	0/29 (0%)	1/31 (3%)
POLY-3 RATE (c)	2/37.51	0/41.88	1/36.91
POLY-3 PERCENT (g)	5.3%	0%	2.7%
TERMINAL (d)	0/23 (0%)	0/28 (0%)	0/23 (0%)
FIRST INCIDENCE	621	---	737
STATISTICAL TESTS			
POLY 3	P=0.554N	P=0.213N	P=0.506N
POLY 1.5	P=0.549N	P=0.221N	P=0.510N
POLY 6	P=0.557N	P=0.206N	P=0.497N
RAO-SCOTT	P=0.548N	P=0.272N	P=0.516N
LITTER C-A/FISHERS	P=0.531N	P=0.271N	P=0.512N

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Brain Necrosis			
LESION RATES			
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/49 (0%)
LITTERS (b)	2/32 (6%)	0/29 (0%)	0/31 (0%)
POLY-3 RATE (c)	2/38.27	0/41.88	0/36.88
POLY-3 PERCENT (g)	5.2%	0%	0%
TERMINAL (d)	0/23 (0%)	0/28 (0%)	0/23 (0%)
FIRST INCIDENCE	411	---	---
STATISTICAL TESTS			
POLY 3	P=0.203N	P=0.217N	P=0.245N
POLY 1.5	P=0.200N	P=0.224N	P=0.246N
POLY 6	P=0.206N	P=0.210N	P=0.239N
RAO-SCOTT	P=0.303N	P=0.345N	P=0.357N
LITTER C-A/FISHERS	P=0.193N	P=0.271N	P=0.254N

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Eye: Retina Degeneration			
LESION RATES			
OVERALL (a)	1/50 (2%)	5/50 (10%)	1/50 (2%)
LITTERS (b)	1/32 (3%)	4/29 (14%)	1/31 (3%)
POLY-3 RATE (c)	1/37.59	5/42.08	1/36.88
POLY-3 PERCENT (g)	2.7%	11.9%	2.7%
TERMINAL (d)	0/23 (0%)	3/28 (11%)	1/23 (4%)
FIRST INCIDENCE	452	695	744 (T)
STATISTICAL TESTS			
POLY 3	P=0.446N	P=0.128	P=0.757
POLY 1.5	P=0.453N	P=0.118	P=0.754
POLY 6	P=0.428N	P=0.140	P=0.759N
RAO-SCOTT	P=0.480N	P=0.202	P=0.743
LITTER C-A/FISHERS	P=0.484N	P=0.148	P=0.746

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

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Heart			
Cardiomyopathy			
LESION RATES			
OVERALL (a)	8/50 (16%)	5/50 (10%)	4/48 (8%)
LITTERS (b)	8/32 (25%)	4/29 (14%)	4/31 (13%)
POLY-3 RATE (c)	8/38.74	5/42.76	4/37.41
POLY-3 PERCENT (g)	20.7%	11.7%	10.7%
TERMINAL (d)	4/23 (17%)	2/28 (7%)	2/23 (9%)
FIRST INCIDENCE	411	638	484
STATISTICAL TESTS			
POLY 3	P=0.205N	P=0.211N	P=0.188N
POLY 1.5	P=0.208N	P=0.235N	P=0.200N
POLY 6	P=0.193N	P=0.185N	P=0.167N
RAO-SCOTT	P=0.204N	P=0.218N	P=0.193N
LITTER C-A/FISHERS	P=0.189N	P=0.220N	P=0.184N

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Intestine Large, Colon			
Parasite Metazoan			
<hr/>			
LESION RATES			
OVERALL (a)	1/50 (2%)	7/49 (14%)	2/49 (4%)
LITTERS (b)	1/32 (3%)	7/29 (24%)	2/31 (6%)
POLY-3 RATE (c)	1/36.81	7/42.10	2/36.88
POLY-3 PERCENT (g)	2.7%	16.6%	5.4%
TERMINAL (d)	1/23 (4%)	3/27 (11%)	2/23 (9%)
FIRST INCIDENCE	744 (T)	470	744 (T)
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.533N	P=0.046*	P=0.501
POLY 1.5	P=0.547N	P=0.038*	P=0.493
POLY 6	P=0.505N	P=0.055	P=0.515
RAO-SCOTT	P=0.542N	P=0.058	P=0.472
LITTER C-A/FISHERS	P=0.542N	P=0.018*	P=0.488

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Islets, Pancreatic Hyperplasia			
LESION RATES			
OVERALL (a)	3/50 (6%)	0/50 (0%)	1/49 (2%)
LITTERS (b)	3/32 (9%)	0/29 (0%)	1/31 (3%)
POLY-3 RATE (c)	3/37.95	0/41.88	1/37.15
POLY-3 PERCENT (g)	7.9%	0%	2.7%
TERMINAL (d)	1/23 (4%)	0/28 (0%)	0/23 (0%)
FIRST INCIDENCE	547	---	669
STATISTICAL TESTS			
POLY 3	P=0.345N	P=0.101N	P=0.312N
POLY 1.5	P=0.341N	P=0.107N	P=0.316N
POLY 6	P=0.347N	P=0.096N	P=0.301N
RAO-SCOTT	P=0.371N	P=0.158N	P=0.351N
LITTER C-A/FISHERS	P=0.325N	P=0.138N	P=0.319N

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Kidney			
Accumulation, Hyaline Droplet			
LESION RATES			
OVERALL (a)	3/50 (6%)	1/50 (2%)	1/49 (2%)
LITTERS (b)	3/32 (9%)	1/29 (3%)	1/31 (3%)
POLY-3 RATE (c)	3/37.31	1/41.88	1/37.20
POLY-3 PERCENT (g)	8%	2.4%	2.7%
TERMINAL (d)	2/23 (9%)	1/28 (4%)	0/23 (0%)
FIRST INCIDENCE	589	744 (T)	652
STATISTICAL TESTS			
POLY 3	P=0.307N	P=0.264N	P=0.305N
POLY 1.5	P=0.306N	P=0.279N	P=0.313N
POLY 6	P=0.304N	P=0.251N	P=0.290N
RAO-SCOTT	P=0.309N	P=0.282N	P=0.313N
LITTER C-A/FISHERS	P=0.291N	P=0.345N	P=0.319N

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TERMINAL SACRIFICE AT 107 WEEKS**

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Kidney			
Calculus Micro Observation Only			
LESION RATES			
OVERALL (a)	11/50 (22%)	14/50 (28%)	19/49 (39%)
LITTERS (b)	9/32 (28%)	12/29 (41%)	16/31 (52%)
POLY-3 RATE (c)	11/37.80	14/42.44	19/39.52
POLY-3 PERCENT (g)	29.1%	33%	48.1%
TERMINAL (d)	7/23 (30%)	10/28 (36%)	10/23 (44%)
FIRST INCIDENCE	638	676	351
STATISTICAL TESTS			
POLY 3	P=0.044*	P=0.446	P=0.063
POLY 1.5	P=0.040*	P=0.401	P=0.053
POLY 6	P=0.057	P=0.491	P=0.086
RAO-SCOTT	P=0.055	P=0.439	P=0.076
LITTER C-A/FISHERS	P=0.050*	P=0.207	P=0.049*

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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Kidney Infarct			
<hr/>			
LESION RATES			
OVERALL (a)	0/50 (0%)	2/50 (4%)	5/49 (10%)
LITTERS (b)	0/32 (0%)	2/29 (7%)	5/31 (16%)
POLY-3 RATE (c)	0/36.81	2/42.62	5/37.25
POLY-3 PERCENT (g)	0%	4.7%	13.4%
TERMINAL (d)	0/23 (0%)	0/28 (0%)	2/23 (9%)
FIRST INCIDENCE	---	574	695
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.017*	P=0.271	P=0.030*
POLY 1.5	P=0.017*	P=0.258	P=0.029*
POLY 6	P=0.019*	P=0.286	P=0.034*
RAO-SCOTT	P=0.033*	P=0.308	P=0.056
LITTER C-A/FISHERS	P=0.019*	P=0.222	P=0.024*

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: 16:09:11

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	0/300 ppm	0/1000 ppm
Kidney			
Nephropathy Chronic Progressive			
LESION RATES			
OVERALL (a)	37/50 (74%)	38/50 (76%)	37/49 (76%)
LITTERS (b)	26/32 (81%)	25/29 (86%)	26/31 (84%)
POLY-3 RATE (c)	37/46.42	38/46.11	37/44.59
POLY-3 PERCENT (g)	79.7%	82.4%	83%
TERMINAL (d)	16/23 (70%)	25/28 (89%)	19/23 (83%)
FIRST INCIDENCE	312	470	253
STATISTICAL TESTS			
POLY 3	P=0.426	P=0.473	P=0.446
POLY 1.5	P=0.441	P=0.497	P=0.462
POLY 6	P=0.435	P=0.416	P=0.444
RAO-SCOTT	P=0.436	P=0.479	P=0.453
LITTER C-A/FISHERS	P=0.521	P=0.432	P=0.523

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: 16:09:11

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	0/300 ppm	0/1000 ppm
Kidney: Cortex Cyst			
LESION RATES			
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/49 (0%)
LITTERS (b)	0/32 (0%)	2/29 (7%)	0/31 (0%)
POLY-3 RATE (c)	0/36.81	2/42.42	0/36.88
POLY-3 PERCENT (g)	0%	4.7%	0%
TERMINAL (d)	0/23 (0%)	1/28 (4%)	0/23 (0%)
FIRST INCIDENCE	---	574	---
STATISTICAL TESTS			
POLY 3	P=0.553N	P=0.270	(e)
POLY 1.5	P=0.561N	P=0.257	(e)
POLY 6	P=0.538N	P=0.284	(e)
RAO-SCOTT	P=0.596N	P=0.365	(e)
LITTER C-A/FISHERS	P=0.558N	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: 16:09:11

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	0/300 ppm	0/1000 ppm
Kidney: Papilla Necrosis			
LESION RATES			
OVERALL (a)	0/50 (0%)	0/50 (0%)	12/49 (24%)
LITTERS (b)	0/32 (0%)	0/29 (0%)	9/31 (29%)
POLY-3 RATE (c)	0/36.81	0/41.88	12/41.44
POLY-3 PERCENT (g)	0%	0%	29%
TERMINAL (d)	0/23 (0%)	0/28 (0%)	6/23 (26%)
FIRST INCIDENCE	---	---	253
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=0.010**
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: 16:09:11
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	0/300 ppm	0/1000 ppm
Kidney: Papilla, Urothelium Hyperplasia			
LESION RATES			
OVERALL (a)	4/50 (8%)	21/50 (42%)	40/49 (82%)
LITTERS (b)	4/32 (13%)	20/29 (69%)	28/31 (90%)
POLY-3 RATE (c)	4/37.59	21/45.61	40/44.56
POLY-3 PERCENT (g)	10.6%	46.1%	89.8%
TERMINAL (d)	3/23 (13%)	9/28 (32%)	23/23 (100%)
FIRST INCIDENCE	452	470	225
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: 16:09:11

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	0/300 ppm	0/1000 ppm
Kidney: Pelvis Dilation			
LESION RATES			
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/49 (4%)
LITTERS (b)	0/32 (0%)	0/29 (0%)	2/31 (6%)
POLY-3 RATE (c)	0/36.81	0/41.88	2/37.58
POLY-3 PERCENT (g)	0%	0%	5.3%
TERMINAL (d)	0/23 (0%)	0/28 (0%)	0/23 (0%)
FIRST INCIDENCE	---	---	505
STATISTICAL TESTS			
POLY 3	P=0.088	(e)	P=0.241
POLY 1.5	P=0.087	(e)	P=0.235
POLY 6	P=0.092	(e)	P=0.252
RAO-SCOTT	P=0.170	(e)	P=0.331
LITTER C-A/FISHERS	P=0.092	(e)	P=0.238

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: 16:09:11
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	0/300 ppm	0/1000 ppm
Kidney: Pelvis Inflammation Chronic			
LESION RATES			
OVERALL (a)	1/50 (2%)	0/50 (0%)	4/49 (8%)
LITTERS (b)	1/32 (3%)	0/29 (0%)	4/31 (13%)
POLY-3 RATE (c)	1/36.81	0/41.88	4/36.88
POLY-3 PERCENT (g)	2.7%	0%	10.9%
TERMINAL (d)	1/23 (4%)	0/28 (0%)	4/23 (17%)
FIRST INCIDENCE	744 (T)	---	744 (T)
STATISTICAL TESTS			
POLY 3	P=0.045*	P=0.474N	P=0.177
POLY 1.5	P=0.046*	P=0.484N	P=0.171
POLY 6	P=0.046*	P=0.464N	P=0.188
RAO-SCOTT	P=0.085	P=0.519N	P=0.228
LITTER C-A/FISHERS	P=0.052	P=0.525N	P=0.167

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: 16:09:11

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	0/300 ppm	0/1000 ppm
Kidney: Renal Tubule Mineral			
LESION RATES			
OVERALL (a)	5/50 (10%)	6/50 (12%)	16/49 (33%)
LITTERS (b)	5/32 (16%)	5/29 (17%)	15/31 (48%)
POLY-3 RATE (c)	5/37.72	6/42.42	16/40.12
POLY-3 PERCENT (g)	13.3%	14.1%	39.9%
TERMINAL (d)	3/23 (13%)	3/28 (11%)	9/23 (39%)
FIRST INCIDENCE	533	659	253
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.583	P=0.006**
POLY 1.5	P<0.001**	P=0.553	P=0.005**
POLY 6	P<0.001**	P=0.614	P=0.009**
RAO-SCOTT	P<0.001**	P=0.557	P=0.007**
LITTER C-A/FISHERS	P<0.001**	P=0.568	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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Liver			
Angiectasis			
<hr/>			
LESION RATES			
OVERALL (a)	2/50 (4%)	1/50 (2%)	1/49 (2%)
LITTERS (b)	2/32 (6%)	1/29 (3%)	1/31 (3%)
POLY-3 RATE (c)	2/36.81	1/41.90	1/37.53
POLY-3 PERCENT (g)	5.4%	2.4%	2.7%
TERMINAL (d)	2/23 (9%)	0/28 (0%)	0/23 (0%)
FIRST INCIDENCE	744 (T)	737	522
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.476N	P=0.455N	P=0.493N
POLY 1.5	P=0.476N	P=0.471N	P=0.503N
POLY 6	P=0.471N	P=0.437N	P=0.476N
RAO-SCOTT	P=0.452N	P=0.439N	P=0.467N
LITTER C-A/FISHERS	P=0.463N	P=0.537N	P=0.512N

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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Liver			
Basophilic Focus			
<hr/>			
LESION RATES			
OVERALL (a)	11/50 (22%)	8/50 (16%)	6/49 (12%)
LITTERS (b)	11/32 (34%)	7/29 (24%)	6/31 (19%)
POLY-3 RATE (c)	11/38.55	8/42.27	6/38.39
POLY-3 PERCENT (g)	28.5%	18.9%	15.6%
TERMINAL (d)	7/23 (30%)	6/28 (21%)	3/23 (13%)
FIRST INCIDENCE	452	638	484
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.147N	P=0.223N	P=0.135N
POLY 1.5	P=0.154N	P=0.250N	P=0.147N
POLY 6	P=0.133N	P=0.199N	P=0.116N
RAO-SCOTT	P=0.140N	P=0.217N	P=0.131N
LITTER C-A/FISHERS	P=0.142N	P=0.277N	P=0.145N

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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Liver			
Clear Cell Focus			
<hr/>			
LESION RATES			
OVERALL (a)	11/50 (22%)	9/50 (18%)	8/49 (16%)
LITTERS (b)	11/32 (34%)	9/29 (31%)	8/31 (26%)
POLY-3 RATE (c)	11/38.04	9/42.50	8/36.88
POLY-3 PERCENT (g)	28.9%	21.2%	21.7%
TERMINAL (d)	8/23 (35%)	7/28 (25%)	8/23 (35%)
FIRST INCIDENCE	452	638	744 (T)
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.345N	P=0.292N	P=0.324N
POLY 1.5	P=0.343N	P=0.331N	P=0.333N
POLY 6	P=0.337N	P=0.252N	P=0.301N
RAO-SCOTT	P=0.324N	P=0.277N	P=0.303N
LITTER C-A/FISHERS	P=0.290N	P=0.499N	P=0.321N

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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Liver			
Eosinophilic Focus			
<hr/>			
LESION RATES			
OVERALL (a)	8/50 (16%)	1/50 (2%)	6/49 (12%)
LITTERS (b)	7/32 (22%)	1/29 (3%)	5/31 (16%)
POLY-3 RATE (c)	8/37.93	1/42.25	6/36.88
POLY-3 PERCENT (g)	21.1%	2.4%	16.3%
TERMINAL (d)	5/23 (22%)	0/28 (0%)	6/23 (26%)
FIRST INCIDENCE	435	638	744 (T)
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.594	P=0.009N**	P=0.406N
POLY 1.5	P=0.586N	P=0.011N*	P=0.414N
POLY 6	P=0.594	P=0.007N**	P=0.385N
RAO-SCOTT	P=0.576N	P=0.032N*	P=0.432N
LITTER C-A/FISHERS	P=0.511N	P=0.037N*	P=0.398N

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: 16:09:11
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	0/300 ppm	0/1000 ppm
<hr/>			
Liver			
Extramedullary Hematopoiesis			
<hr/>			
LESION RATES			
OVERALL (a)	13/50 (26%)	7/50 (14%)	2/49 (4%)
LITTERS (b)	13/32 (41%)	7/29 (24%)	2/31 (6%)
POLY-3 RATE (c)	13/39.77	7/43.48	2/37.84
POLY-3 PERCENT (g)	32.7%	16.1%	5.3%
TERMINAL (d)	6/23 (26%)	4/28 (14%)	0/23 (0%)
FIRST INCIDENCE	323	250	505
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.003N**	P=0.062N	P=0.002N**
POLY 1.5	P=0.003N**	P=0.073N	P=0.002N**
POLY 6	P=0.002N**	P=0.054N	P<0.001N**
RAO-SCOTT	P=0.003N**	P=0.065N	P=0.003N**
LITTER C-A/FISHERS	P=0.002N**	P=0.136N	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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Liver			
Hepatodiaphragmatic Nodule			
<hr/>			
LESION RATES			
OVERALL (a)	2/50 (4%)	1/50 (2%)	0/49 (0%)
LITTERS (b)	2/32 (6%)	1/29 (3%)	0/31 (0%)
POLY-3 RATE (c)	2/36.81	1/41.88	0/36.88
POLY-3 PERCENT (g)	5.4%	2.4%	0%
TERMINAL (d)	2/23 (9%)	1/28 (4%)	0/23 (0%)
FIRST INCIDENCE	744 (T)	744 (T)	---
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.194N	P=0.455N	P=0.236N
POLY 1.5	P=0.193N	P=0.471N	P=0.241N
POLY 6	P=0.192N	P=0.438N	P=0.226N
RAO-SCOTT	P=0.219N	P=0.468N	P=0.264N
LITTER C-A/FISHERS	P=0.186N	P=0.537N	P=0.254N

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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Liver Inflammation Focal			
<hr/>			
LESION RATES			
OVERALL (a)	6/50 (12%)	10/50 (20%)	7/49 (14%)
LITTERS (b)	5/32 (16%)	9/29 (31%)	7/31 (23%)
POLY-3 RATE (c)	6/37.31	10/42.99	7/37.57
POLY-3 PERCENT (g)	16.1%	23.3%	18.6%
TERMINAL (d)	5/23 (22%)	8/28 (29%)	6/23 (26%)
FIRST INCIDENCE	589	470	505
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.554	P=0.300	P=0.505
POLY 1.5	P=0.540	P=0.264	P=0.488
POLY 6	P=0.580N	P=0.341	P=0.537
RAO-SCOTT	P=0.531	P=0.295	P=0.484
LITTER C-A/FISHERS	P=0.433	P=0.130	P=0.352

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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Liver Necrosis			
<hr/>			
LESION RATES			
OVERALL (a)	0/50 (0%)	1/50 (2%)	8/49 (16%)
LITTERS (b)	0/32 (0%)	1/29 (3%)	7/31 (23%)
POLY-3 RATE (c)	0/36.81	1/42.60	8/39.94
POLY-3 PERCENT (g)	0%	2.4%	20%
TERMINAL (d)	0/23 (0%)	0/28 (0%)	1/23 (4%)
FIRST INCIDENCE	---	484	253
<hr/>			
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.529	P=0.005**
POLY 1.5	P<0.001**	P=0.518	P=0.004**
POLY 6	P<0.001**	P=0.540	P=0.006**
RAO-SCOTT	P=0.004**	P=0.589	P=0.025*
LITTER C-A/FISHERS	P<0.001**	P=0.475	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: 16:09:11
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	0/300 ppm	0/1000 ppm
Liver Pigment			
LESION RATES			
OVERALL (a)	3/50 (6%)	5/50 (10%)	43/49 (88%)
LITTERS (b)	3/32 (9%)	5/29 (17%)	28/31 (90%)
POLY-3 RATE (c)	3/37.56	5/42.71	43/45.87
POLY-3 PERCENT (g)	8%	11.7%	93.7%
TERMINAL (d)	1/23 (4%)	1/28 (4%)	22/23 (96%)
FIRST INCIDENCE	625	676	253
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.428	P<0.001**
POLY 1.5	P<0.001**	P=0.402	P<0.001**
POLY 6	P<0.001**	P=0.458	P<0.001**
RAO-SCOTT	P<0.001**	P=0.398	P<0.001**
LITTER C-A/FISHERS	P<0.001**	P=0.298	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: 16:09:11

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	0/300 ppm	0/1000 ppm
Liver: Bile Duct Cyst			
LESION RATES			
OVERALL (a)	9/50 (18%)	6/50 (12%)	2/49 (4%)
LITTERS (b)	7/32 (22%)	6/29 (21%)	2/31 (6%)
POLY-3 RATE (c)	9/39.20	6/42.62	2/36.88
POLY-3 PERCENT (g)	23%	14.1%	5.4%
TERMINAL (d)	4/23 (17%)	5/28 (18%)	2/23 (9%)
FIRST INCIDENCE	411	470	744 (T)
STATISTICAL TESTS			
POLY 3	P=0.030N*	P=0.225N	P=0.029N*
POLY 1.5	P=0.029N*	P=0.245N	P=0.030N*
POLY 6	P=0.029N*	P=0.210N	P=0.028N*
RAO-SCOTT	P=0.045N*	P=0.255N	P=0.049N*
LITTER C-A/FISHERS	P=0.061N	P=0.580N	P=0.081N

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: 16:09:11

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	0/300 ppm	0/1000 ppm
Liver: Bile Duct Hyperplasia			
LESION RATES			
OVERALL (a)	16/50 (32%)	25/50 (50%)	22/49 (45%)
LITTERS (b)	12/32 (38%)	19/29 (66%)	17/31 (55%)
POLY-3 RATE (c)	16/37.59	25/44.43	22/38.32
POLY-3 PERCENT (g)	42.6%	56.3%	57.4%
TERMINAL (d)	13/23 (57%)	17/28 (61%)	16/23 (70%)
FIRST INCIDENCE	645	484	438
STATISTICAL TESTS			
POLY 3	P=0.178	P=0.147	P=0.132
POLY 1.5	P=0.171	P=0.098	P=0.119
POLY 6	P=0.204	P=0.224	P=0.166
RAO-SCOTT	P=0.177	P=0.157	P=0.144
LITTER C-A/FISHERS	P=0.210	P=0.026*	P=0.130

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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Liver: Centrilobular Necrosis			
<hr/>			
LESION RATES			
OVERALL (a)	0/50 (0%)	4/50 (8%)	3/49 (6%)
LITTERS (b)	0/32 (0%)	4/29 (14%)	3/31 (10%)
POLY-3 RATE (c)	0/36.81	4/43.38	3/37.53
POLY-3 PERCENT (g)	0%	9.2%	8%
TERMINAL (d)	0/23 (0%)	1/28 (4%)	1/23 (4%)
FIRST INCIDENCE	---	250	575
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.232	P=0.084	P=0.121
POLY 1.5	P=0.219	P=0.075	P=0.116
POLY 6	P=0.256	P=0.094	P=0.130
RAO-SCOTT	P=0.226	P=0.100	P=0.133
LITTER C-A/FISHERS	P=0.220	P=0.046*	P=0.113

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: 16:09:11
 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	0/300 ppm	0/1000 ppm
Liver: Hepatocyte Cytoplasmic Alteration			
LESION RATES			
OVERALL (a)	0/50 (0%)	9/50 (18%)	49/49 (100%)
LITTERS (b)	0/32 (0%)	9/29 (31%)	31/31 (100%)
POLY-3 RATE (c)	0/36.81	9/44.55	49/49.00
POLY-3 PERCENT (g)	0%	20.2%	100%
TERMINAL (d)	0/23 (0%)	2/28 (7%)	23/23 (100%)
FIRST INCIDENCE	---	250	225
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.004**	P<0.001**
POLY 1.5	P<0.001**	P=0.003**	P<0.001**
POLY 6	P<0.001**	P=0.006**	P<0.001**
RAO-SCOTT	P<0.001**	P=0.005**	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: 16:09:11
 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	0/300 ppm	0/1000 ppm
Liver: Hepatocyte Hypertrophy			
LESION RATES			
OVERALL (a)	0/50 (0%)	11/50 (22%)	48/49 (98%)
LITTERS (b)	0/32 (0%)	11/29 (38%)	31/31 (100%)
POLY-3 RATE (c)	0/36.81	11/45.30	48/48.82
POLY-3 PERCENT (g)	0%	24.3%	98.3%
TERMINAL (d)	0/23 (0%)	3/28 (11%)	23/23 (100%)
FIRST INCIDENCE	---	250	225
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=0.002**	P<0.001**
RAO-SCOTT	P<0.001**	P=0.002**	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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Liver: Hepatocyte Increased mitoses			
<hr/>			
LESION RATES			
OVERALL (a)	2/50 (4%)	3/50 (6%)	4/49 (8%)
LITTERS (b)	2/32 (6%)	3/29 (10%)	4/31 (13%)
POLY-3 RATE (c)	2/38.11	3/43.89	4/38.87
POLY-3 PERCENT (g)	5.3%	6.8%	10.3%
TERMINAL (d)	0/23 (0%)	0/28 (0%)	1/23 (4%)
FIRST INCIDENCE	312	470	484
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.292	P=0.564	P=0.345
POLY 1.5	P=0.283	P=0.540	P=0.331
POLY 6	P=0.309	P=0.589	P=0.369
RAO-SCOTT	P=0.280	P=0.541	P=0.327
LITTER C-A/FISHERS	P=0.290	P=0.452	P=0.321

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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Liver: Hepatocyte			
Single Cell Death			
<hr/>			
LESION RATES			
OVERALL (a)	0/50 (0%)	4/50 (8%)	29/49 (59%)
LITTERS (b)	0/32 (0%)	4/29 (14%)	22/31 (71%)
POLY-3 RATE (c)	0/36.81	4/44.07	29/46.95
POLY-3 PERCENT (g)	0%	9.1%	61.8%
TERMINAL (d)	0/23 (0%)	0/28 (0%)	11/23 (48%)
FIRST INCIDENCE	---	470	225
<hr/>			
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.086	P<0.001**
POLY 1.5	P<0.001**	P=0.076	P<0.001**
POLY 6	P<0.001**	P=0.099	P<0.001**
RAO-SCOTT	P<0.001**	P=0.085	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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Liver: Oval Cell Hyperplasia			
<hr/>			
LESION RATES			
OVERALL (a)	1/50 (2%)	0/50 (0%)	2/49 (4%)
LITTERS (b)	1/32 (3%)	0/29 (0%)	2/31 (6%)
POLY-3 RATE (c)	1/37.41	0/41.88	2/36.89
POLY-3 PERCENT (g)	2.7%	0%	5.4%
TERMINAL (d)	0/23 (0%)	0/28 (0%)	1/23 (4%)
FIRST INCIDENCE	547	---	741
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.297	P=0.478N	P=0.495
POLY 1.5	P=0.298	P=0.485N	P=0.490
POLY 6	P=0.300	P=0.470N	P=0.506
RAO-SCOTT	P=0.330	P=0.503N	P=0.499
LITTER C-A/FISHERS	P=0.311	P=0.525N	P=0.488

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: 16:09:11

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	0/300 ppm	0/1000 ppm
Lung			
Inflammation Chronic			
<hr/>			
LESION RATES			
OVERALL (a)	2/50 (4%)	2/50 (4%)	7/48 (15%)
LITTERS (b)	2/32 (6%)	1/29 (3%)	6/31 (19%)
POLY-3 RATE (c)	2/37.06	2/42.46	7/36.42
POLY-3 PERCENT (g)	5.4%	4.7%	19.2%
TERMINAL (d)	1/23 (4%)	0/28 (0%)	7/23 (30%)
FIRST INCIDENCE	676	638	744 (T)
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.022*	P=0.644N	P=0.070
POLY 1.5	P=0.022*	P=0.663N	P=0.067
POLY 6	P=0.023*	P=0.624N	P=0.078
RAO-SCOTT	P=0.050*	P=0.644N	P=0.117
LITTER C-A/FISHERS	P=0.043*	P=0.537N	P=0.118

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: 16:09:11

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	0/300 ppm	0/1000 ppm
Lung			
Inflammation Granulomatous Focal			
<hr/>			
LESION RATES			
OVERALL (a)	1/50 (2%)	1/50 (2%)	3/48 (6%)
LITTERS (b)	1/32 (3%)	1/29 (3%)	3/31 (10%)
POLY-3 RATE (c)	1/36.81	1/42.23	3/36.55
POLY-3 PERCENT (g)	2.7%	2.4%	8.2%
TERMINAL (d)	1/23 (4%)	0/28 (0%)	1/23 (4%)
FIRST INCIDENCE	744 (T)	643	718
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.183	P=0.729N	P=0.301
POLY 1.5	P=0.181	P=0.741N	P=0.292
POLY 6	P=0.191	P=0.716N	P=0.319
RAO-SCOTT	P=0.214	P=0.712N	P=0.322
LITTER C-A/FISHERS	P=0.195	P=0.729	P=0.294

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: 16:09:11

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	0/300 ppm	0/1000 ppm
Lung: Alveolus Infiltration Cellular Histiocyte			
LESION RATES			
OVERALL (a)	36/50 (72%)	33/50 (66%)	40/48 (83%)
LITTERS (b)	28/32 (88%)	22/29 (76%)	27/31 (87%)
POLY-3 RATE (c)	36/45.48	33/46.65	40/44.22
POLY-3 PERCENT (g)	79.2%	70.8%	90.5%
TERMINAL (d)	18/23 (78%)	20/28 (71%)	20/23 (87%)
FIRST INCIDENCE	274	470	253
STATISTICAL TESTS			
POLY 3	P=0.050*	P=0.235N	P=0.102
POLY 1.5	P=0.043*	P=0.270N	P=0.083
POLY 6	P=0.077	P=0.212N	P=0.162
RAO-SCOTT	P=0.075	P=0.263N	P=0.135
LITTER C-A/FISHERS	P=0.494	P=0.199N	P=0.628N

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: 16:09:11
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	0/300 ppm	0/1000 ppm
Lymph Node, Mandibular Atrophy Lymphoid			
LESION RATES			
OVERALL (a)	4/48 (8%)	2/49 (4%)	8/45 (18%)
LITTERS (b)	4/32 (13%)	2/29 (7%)	7/30 (23%)
POLY-3 RATE (c)	4/37.11	2/41.44	8/38.46
POLY-3 PERCENT (g)	10.8%	4.8%	20.8%
TERMINAL (d)	0/23 (0%)	1/28 (4%)	1/22 (5%)
FIRST INCIDENCE	673	643	225
STATISTICAL TESTS			
POLY 3	P=0.061	P=0.286N	P=0.189
POLY 1.5	P=0.057	P=0.301N	P=0.170
POLY 6	P=0.067	P=0.272N	P=0.215
RAO-SCOTT	P=0.098	P=0.314N	P=0.223
LITTER C-A/FISHERS	P=0.110	P=0.384N	P=0.217

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: 16:09:11

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	0/300 ppm	0/1000 ppm
Lymph Node, Mesenteric Atrophy Lymphoid			
LESION RATES			
OVERALL (a)	4/49 (8%)	3/48 (6%)	8/48 (17%)
LITTERS (b)	3/32 (9%)	3/29 (10%)	8/31 (26%)
POLY-3 RATE (c)	4/38.57	3/40.63	8/41.09
POLY-3 PERCENT (g)	10.4%	7.4%	19.5%
TERMINAL (d)	0/23 (0%)	1/27 (4%)	1/23 (4%)
FIRST INCIDENCE	452	643	225
STATISTICAL TESTS			
POLY 3	P=0.100	P=0.471N	P=0.205
POLY 1.5	P=0.093	P=0.486N	P=0.188
POLY 6	P=0.112	P=0.455N	P=0.231
RAO-SCOTT	P=0.128	P=0.472N	P=0.227
LITTER C-A/FISHERS	P=0.043*	P=0.616	P=0.082

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: 16:09:11

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	0/300 ppm	0/1000 ppm
Mammary Gland Hyperplasia			
LESION RATES			
OVERALL (a)	13/50 (26%)	15/50 (30%)	19/48 (40%)
LITTERS (b)	13/32 (41%)	13/29 (45%)	17/31 (55%)
POLY-3 RATE (c)	13/38.56	15/43.44	19/37.79
POLY-3 PERCENT (g)	33.7%	34.5%	50.3%
TERMINAL (d)	7/23 (30%)	11/28 (39%)	14/23 (61%)
FIRST INCIDENCE	547	533	351
STATISTICAL TESTS			
POLY 3	P=0.069	P=0.562	P=0.101
POLY 1.5	P=0.071	P=0.509	P=0.098
POLY 6	P=0.070	P=0.581N	P=0.111
RAO-SCOTT	P=0.067	P=0.544	P=0.099
LITTER C-A/FISHERS	P=0.162	P=0.471	P=0.190

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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Mesentery Hemorrhage			
<hr/>			
LESION RATES			
OVERALL (a)	0/2 (0%)	0/0 (0%)	2/2 (100%)
LITTERS (b)	0/2 (0%)	0/0 (0%)	2/2 (100%)
POLY-3 RATE (c)	0/0.87	0/0.00	2/2.00
POLY-3 PERCENT (g)	0%	0%	100%
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	---	695
<hr/>			
STATISTICAL TESTS			
POLY 3	(e)	(e)	P=0.018*
POLY 1.5	(e)	(e)	P<0.001**
POLY 6	(e)	(e)	P=0.998
RAO-SCOTT	P=0.169	(e)	P=0.169
LITTER C-A/FISHERS	P=0.159	(e)	P=0.167

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	0/300 ppm	0/1000 ppm
<hr/>			
Nose			
Inflammation			
<hr/>			
LESION RATES			
OVERALL (a)	3/50 (6%)	1/50 (2%)	0/50 (0%)
LITTERS (b)	3/32 (9%)	1/29 (3%)	0/31 (0%)
POLY-3 RATE (c)	3/37.59	1/42.62	0/36.88
POLY-3 PERCENT (g)	8%	2.4%	0%
TERMINAL (d)	2/23 (9%)	0/28 (0%)	0/23 (0%)
FIRST INCIDENCE	452	470	---
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.104N	P=0.261N	P=0.121N
POLY 1.5	P=0.103N	P=0.277N	P=0.124N
POLY 6	P=0.104N	P=0.245N	P=0.114N
RAO-SCOTT	P=0.141N	P=0.311N	P=0.169N
LITTER C-A/FISHERS	P=0.097N	P=0.345N	P=0.125N

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	0/300 ppm	0/1000 ppm
Ovary Atrophy			
LESION RATES			
OVERALL (a)	35/50 (70%)	32/49 (65%)	28/49 (57%)
LITTERS (b)	24/32 (75%)	23/29 (79%)	20/31 (65%)
POLY-3 RATE (c)	35/44.34	32/46.19	28/41.92
POLY-3 PERCENT (g)	78.9%	69.3%	66.8%
TERMINAL (d)	17/23 (74%)	16/27 (59%)	13/23 (57%)
FIRST INCIDENCE	312	250	351
STATISTICAL TESTS			
POLY 3	P=0.163N	P=0.200N	P=0.140N
POLY 1.5	P=0.158N	P=0.253N	P=0.146N
POLY 6	P=0.158N	P=0.167N	P=0.129N
RAO-SCOTT	P=0.186N	P=0.231N	P=0.171N
LITTER C-A/FISHERS	P=0.179N	P=0.463	P=0.264N

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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Ovary			
Cyst			
<hr/>			
LESION RATES			
OVERALL (a)	16/50 (32%)	20/49 (41%)	16/49 (33%)
LITTERS (b)	15/32 (47%)	16/29 (55%)	13/31 (42%)
POLY-3 RATE (c)	16/39.07	20/44.11	16/39.53
POLY-3 PERCENT (g)	41%	45.3%	40.5%
TERMINAL (d)	9/23 (39%)	13/27 (48%)	11/23 (48%)
FIRST INCIDENCE	592	250	351
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.495N	P=0.427	P=0.576N
POLY 1.5	P=0.508N	P=0.363	P=0.580
POLY 6	P=0.473N	P=0.477	P=0.546N
RAO-SCOTT	P=0.493N	P=0.423	P=0.560N
LITTER C-A/FISHERS	P=0.340N	P=0.348	P=0.444N

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: 16:09:11
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	0/300 ppm	0/1000 ppm
Pancreas: Acinus Atrophy			
LESION RATES			
OVERALL (a)	0/50 (0%)	3/50 (6%)	2/49 (4%)
LITTERS (b)	0/32 (0%)	3/29 (10%)	2/31 (6%)
POLY-3 RATE (c)	0/36.81	3/41.88	2/37.68
POLY-3 PERCENT (g)	0%	7.2%	5.3%
TERMINAL (d)	0/23 (0%)	3/28 (11%)	0/23 (0%)
FIRST INCIDENCE	---	744 (T)	540
STATISTICAL TESTS			
POLY 3	P=0.352	P=0.143	P=0.242
POLY 1.5	P=0.337	P=0.134	P=0.235
POLY 6	P=0.381	P=0.153	P=0.254
RAO-SCOTT	P=0.354	P=0.178	P=0.266
LITTER C-A/FISHERS	P=0.335	P=0.102	P=0.238

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: 16:09:11

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	0/300 ppm	0/1000 ppm
Pituitary Gland: Pars Distalis Hyperplasia			
LESION RATES			
OVERALL (a)	14/50 (28%)	18/50 (36%)	13/49 (27%)
LITTERS (b)	12/32 (38%)	16/29 (55%)	11/31 (35%)
POLY-3 RATE (c)	14/38.84	18/43.46	13/37.32
POLY-3 PERCENT (g)	36.1%	41.4%	34.8%
TERMINAL (d)	10/23 (44%)	14/28 (50%)	11/23 (48%)
FIRST INCIDENCE	312	470	652
STATISTICAL TESTS			
POLY 3	P=0.462N	P=0.391	P=0.552N
POLY 1.5	P=0.458N	P=0.339	P=0.558N
POLY 6	P=0.441N	P=0.448	P=0.523N
RAO-SCOTT	P=0.453N	P=0.383	P=0.532N
LITTER C-A/FISHERS	P=0.367N	P=0.130	P=0.538N

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: 16:09:11
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	0/300 ppm	0/1000 ppm
Spleen			
Extramedullary Hematopoiesis			
LESION RATES			
OVERALL (a)	34/50 (68%)	33/50 (66%)	29/49 (59%)
LITTERS (b)	26/32 (81%)	25/29 (86%)	24/31 (77%)
POLY-3 RATE (c)	34/43.45	33/48.17	29/42.59
POLY-3 PERCENT (g)	78.3%	68.5%	68.1%
TERMINAL (d)	20/23 (87%)	18/28 (64%)	15/23 (65%)
FIRST INCIDENCE	312	250	253
STATISTICAL TESTS			
POLY 3	P=0.234N	P=0.197N	P=0.193N
POLY 1.5	P=0.247N	P=0.292N	P=0.230N
POLY 6	P=0.191N	P=0.125N	P=0.135N
RAO-SCOTT	P=0.236N	P=0.209N	P=0.205N
LITTER C-A/FISHERS	P=0.372N	P=0.432	P=0.474N

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: 16:09:11

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	0/300 ppm	0/1000 ppm
<hr/>			
Spleen Pigment			
<hr/>			
LESION RATES			
OVERALL (a)	30/50 (60%)	21/50 (42%)	25/49 (51%)
LITTERS (b)	24/32 (75%)	18/29 (62%)	21/31 (68%)
POLY-3 RATE (c)	30/44.24	21/43.48	25/44.33
POLY-3 PERCENT (g)	67.8%	48.3%	56.4%
TERMINAL (d)	14/23 (61%)	14/28 (50%)	10/23 (44%)
FIRST INCIDENCE	274	574	225
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.275N	P=0.043N*	P=0.178N
POLY 1.5	P=0.300N	P=0.047N*	P=0.201N
POLY 6	P=0.247N	P=0.040N*	P=0.155N
RAO-SCOTT	P=0.279N	P=0.049N*	P=0.182N
LITTER C-A/FISHERS	P=0.409N	P=0.208N	P=0.360N

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: 16:09:11

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	0/300 ppm	0/1000 ppm
Spleen: Lymphoid Follicle Atrophy			
LESION RATES			
OVERALL (a)	7/50 (14%)	9/50 (18%)	13/49 (27%)
LITTERS (b)	6/32 (19%)	9/29 (31%)	11/31 (35%)
POLY-3 RATE (c)	7/39.38	9/43.05	13/42.31
POLY-3 PERCENT (g)	17.8%	20.9%	30.7%
TERMINAL (d)	0/23 (0%)	4/28 (14%)	1/23 (4%)
FIRST INCIDENCE	452	643	225
STATISTICAL TESTS			
POLY 3	P=0.100	P=0.468	P=0.133
POLY 1.5	P=0.090	P=0.442	P=0.117
POLY 6	P=0.114	P=0.492	P=0.153
RAO-SCOTT	P=0.120	P=0.467	P=0.152
LITTER C-A/FISHERS	P=0.122	P=0.208	P=0.113

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	0/300 ppm	0/1000 ppm
Spleen: Lymphoid Follicle Hyperplasia			
LESION RATES			
OVERALL (a)	0/50 (0%)	2/50 (4%)	1/49 (2%)
LITTERS (b)	0/32 (0%)	2/29 (7%)	1/31 (3%)
POLY-3 RATE (c)	0/36.81	2/42.42	1/37.20
POLY-3 PERCENT (g)	0%	4.7%	2.7%
TERMINAL (d)	0/23 (0%)	1/28 (4%)	0/23 (0%)
FIRST INCIDENCE	---	574	652
STATISTICAL TESTS			
POLY 3	P=0.539	P=0.270	P=0.502
POLY 1.5	P=0.526	P=0.257	P=0.497
POLY 6	P=0.562	P=0.284	P=0.512
RAO-SCOTT	P=0.516	P=0.293	P=0.485
LITTER C-A/FISHERS	P=0.525	P=0.222	P=0.492

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

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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	0/300 ppm	0/1000 ppm
Stomach, Forestomach Ulcer			
LESION RATES			
OVERALL (a)	2/50 (4%)	2/50 (4%)	9/49 (18%)
LITTERS (b)	2/32 (6%)	2/29 (7%)	9/31 (29%)
POLY-3 RATE (c)	2/37.66	2/41.88	9/38.49
POLY-3 PERCENT (g)	5.3%	4.8%	23.4%
TERMINAL (d)	0/23 (0%)	2/28 (7%)	2/23 (9%)
FIRST INCIDENCE	547	744 (T)	522
STATISTICAL TESTS			
POLY 3	P=0.004**	P=0.656N	P=0.025*
POLY 1.5	P=0.004**	P=0.669N	P=0.023*
POLY 6	P=0.005**	P=0.643N	P=0.030*
RAO-SCOTT	P=0.009**	P=0.634N	P=0.037*
LITTER C-A/FISHERS	P=0.005**	P=0.655	P=0.019*

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

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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	0/300 ppm	0/1000 ppm
Stomach, Forestomach: Epithelium Hyperplasia			
LESION RATES			
OVERALL (a)	4/50 (8%)	5/50 (10%)	22/49 (45%)
LITTERS (b)	4/32 (13%)	5/29 (17%)	21/31 (68%)
POLY-3 RATE (c)	4/38.53	5/42.09	22/42.89
POLY-3 PERCENT (g)	10.4%	11.9%	51.3%
TERMINAL (d)	1/23 (4%)	4/28 (14%)	7/23 (30%)
FIRST INCIDENCE	382	687	225
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.556	P<0.001**
POLY 1.5	P<0.001**	P=0.536	P<0.001**
POLY 6	P<0.001**	P=0.576	P<0.001**
RAO-SCOTT	P<0.001**	P=0.528	P<0.001**
LITTER C-A/FISHERS	P<0.001**	P=0.435	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	0/300 ppm	0/1000 ppm
Stomach, Forestomach: Submucosa Inflammation Chronic			
LESION RATES			
OVERALL (a)	3/50 (6%)	2/50 (4%)	16/49 (33%)
LITTERS (b)	3/32 (9%)	2/29 (7%)	16/31 (52%)
POLY-3 RATE (c)	3/38.53	2/41.88	16/40.91
POLY-3 PERCENT (g)	7.8%	4.8%	39.1%
TERMINAL (d)	0/23 (0%)	2/28 (7%)	4/23 (17%)
FIRST INCIDENCE	382	744 (T)	284
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.462N	P<0.001**
POLY 1.5	P<0.001**	P=0.475N	P<0.001**
POLY 6	P<0.001**	P=0.449N	P<0.001**
RAO-SCOTT	P<0.001**	P=0.438N	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

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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	0/300 ppm	0/1000 ppm
Stomach, Glandular: Mucosa Mineral			
LESION RATES			
OVERALL (a)	0/50 (0%)	1/50 (2%)	2/49 (4%)
LITTERS (b)	0/32 (0%)	1/29 (3%)	2/31 (6%)
POLY-3 RATE (c)	0/36.81	1/42.09	2/38.54
POLY-3 PERCENT (g)	0%	2.4%	5.2%
TERMINAL (d)	0/23 (0%)	0/28 (0%)	0/23 (0%)
FIRST INCIDENCE	---	687	379
STATISTICAL TESTS			
POLY 3	P=0.191	P=0.527	P=0.247
POLY 1.5	P=0.184	P=0.517	P=0.239
POLY 6	P=0.203	P=0.537	P=0.259
RAO-SCOTT	P=0.216	P=0.528	P=0.271
LITTER C-A/FISHERS	P=0.182	P=0.475	P=0.238

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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Lab: BAT

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

DOSE	Females		
	0/0 ppm	0/300 ppm	0/1000 ppm
Thymus Atrophy			
LESION RATES			
OVERALL (a)	42/49 (86%)	46/48 (96%)	46/47 (98%)
LITTERS (b)	28/32 (88%)	28/28 (100%)	31/31 (100%)
POLY-3 RATE (c)	42/45.12	46/47.50	46/47.00
POLY-3 PERCENT (g)	93.1%	96.9%	97.9%
TERMINAL (d)	21/22 (96%)	27/28 (96%)	22/23 (96%)
FIRST INCIDENCE	323	250	225
STATISTICAL TESTS			
POLY 3	P=0.232	P=0.343	P=0.248
POLY 1.5	P=0.122	P=0.220	P=0.125
POLY 6	P=0.385	P=0.472	P=0.416
RAO-SCOTT	P=0.264	P=0.372	P=0.286
LITTER C-A/FISHERS	P=0.048*	P=0.074	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: 16:09:11

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	0/300 ppm	0/1000 ppm
Thyroid Gland: C-Cell Hyperplasia			
LESION RATES			
OVERALL (a)	10/50 (20%)	4/50 (8%)	7/48 (15%)
LITTERS (b)	9/32 (28%)	4/29 (14%)	6/31 (19%)
POLY-3 RATE (c)	10/38.65	4/41.90	7/36.51
POLY-3 PERCENT (g)	25.9%	9.6%	19.2%
TERMINAL (d)	6/23 (26%)	3/28 (11%)	6/23 (26%)
FIRST INCIDENCE	452	737	721
STATISTICAL TESTS			
POLY 3	P=0.447N	P=0.048N*	P=0.337N
POLY 1.5	P=0.443N	P=0.055N	P=0.343N
POLY 6	P=0.440N	P=0.042N*	P=0.319N
RAO-SCOTT	P=0.436N	P=0.061N	P=0.337N
LITTER C-A/FISHERS	P=0.346N	P=0.146N	P=0.302N

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: 16:09:11
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	0/300 ppm	0/1000 ppm
Thyroid Gland: Follicular Cell Hypertrophy			
LESION RATES			
OVERALL (a)	4/50 (8%)	8/50 (16%)	28/48 (58%)
LITTERS (b)	4/32 (13%)	6/29 (21%)	24/31 (77%)
POLY-3 RATE (c)	4/38.72	8/44.10	28/44.04
POLY-3 PERCENT (g)	10.3%	18.1%	63.6%
TERMINAL (d)	1/23 (4%)	2/28 (7%)	15/23 (65%)
FIRST INCIDENCE	312	470	225
STATISTICAL TESTS			
POLY 3	P<0.001**	P=0.244	P<0.001**
POLY 1.5	P<0.001**	P=0.216	P<0.001**
POLY 6	P<0.001**	P=0.280	P<0.001**
RAO-SCOTT	P<0.001**	P=0.230	P<0.001**
LITTER C-A/FISHERS	P<0.001**	P=0.303	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	0/300 ppm	0/1000 ppm
Urinary Bladder Inflammation			
LESION RATES			
OVERALL (a)	0/50 (0%)	0/49 (0%)	4/48 (8%)
LITTERS (b)	0/32 (0%)	0/29 (0%)	4/31 (13%)
POLY-3 RATE (c)	0/36.81	0/40.88	4/36.76
POLY-3 PERCENT (g)	0%	0%	10.9%
TERMINAL (d)	0/23 (0%)	0/27 (0%)	3/23 (13%)
FIRST INCIDENCE	---	---	438
STATISTICAL TESTS			
POLY 3	P=0.008**	(e)	P=0.059
POLY 1.5	P=0.008**	(e)	P=0.056
POLY 6	P=0.008**	(e)	P=0.064
RAO-SCOTT	P=0.034*	(e)	P=0.124
LITTER C-A/FISHERS	P=0.010**	(e)	P=0.053

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	0/300 ppm	0/1000 ppm
<hr/>			
Uterus Dilation			
<hr/>			
LESION RATES			
OVERALL (a)	2/50 (4%)	3/49 (6%)	3/49 (6%)
LITTERS (b)	2/32 (6%)	3/29 (10%)	3/31 (10%)
POLY-3 RATE (c)	2/37.22	3/41.23	3/37.39
POLY-3 PERCENT (g)	5.4%	7.3%	8%
TERMINAL (d)	1/23 (4%)	2/27 (7%)	1/23 (4%)
FIRST INCIDENCE	625	643	652
<hr/>			
STATISTICAL TESTS			
POLY 3	P=0.466	P=0.547	P=0.502
POLY 1.5	P=0.457	P=0.527	P=0.492
POLY 6	P=0.485	P=0.567	P=0.523
RAO-SCOTT	P=0.440	P=0.516	P=0.466
LITTER C-A/FISHERS	P=0.466	P=0.452	P=0.485

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	0/300 ppm	0/1000 ppm
Uterus Inflammation			
LESION RATES			
OVERALL (a)	0/50 (0%)	1/49 (2%)	4/49 (8%)
LITTERS (b)	0/32 (0%)	1/29 (3%)	3/31 (10%)
POLY-3 RATE (c)	0/36.81	1/41.23	4/37.71
POLY-3 PERCENT (g)	0%	2.4%	10.6%
TERMINAL (d)	0/23 (0%)	0/27 (0%)	0/23 (0%)
FIRST INCIDENCE	---	643	669
STATISTICAL TESTS			
POLY 3	P=0.025*	P=0.523	P=0.062
POLY 1.5	P=0.024*	P=0.513	P=0.058
POLY 6	P=0.028*	P=0.533	P=0.070
RAO-SCOTT	P=0.090	P=0.641	P=0.163
LITTER C-A/FISHERS	P=0.070	P=0.475	P=0.113

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	0/300 ppm	0/1000 ppm
Uterus			
Inflammation Chronic			
LESION RATES			
OVERALL (a)	2/50 (4%)	0/49 (0%)	0/49 (0%)
LITTERS (b)	2/32 (6%)	0/29 (0%)	0/31 (0%)
POLY-3 RATE (c)	2/37.34	0/40.88	0/36.88
POLY-3 PERCENT (g)	5.4%	0%	0%
TERMINAL (d)	0/23 (0%)	0/27 (0%)	0/23 (0%)
FIRST INCIDENCE	625	---	---
STATISTICAL TESTS			
POLY 3	P=0.204N	P=0.217N	P=0.239N
POLY 1.5	P=0.201N	P=0.225N	P=0.243N
POLY 6	P=0.207N	P=0.210N	P=0.232N
RAO-SCOTT	P=0.296N	P=0.336N	P=0.345N
LITTER C-A/FISHERS	P=0.193N	P=0.271N	P=0.254N

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: 16:09:11

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	0/300 ppm	0/1000 ppm
Uterus: Endometrium Hyperplasia Cystic			
LESION RATES			
OVERALL (a)	20/50 (40%)	22/49 (45%)	18/49 (37%)
LITTERS (b)	16/32 (50%)	17/29 (59%)	15/31 (48%)
POLY-3 RATE (c)	20/40.87	22/43.15	18/39.69
POLY-3 PERCENT (g)	48.9%	51%	45.4%
TERMINAL (d)	10/23 (44%)	14/27 (52%)	11/23 (48%)
FIRST INCIDENCE	312	484	379
STATISTICAL TESTS			
POLY 3	P=0.400N	P=0.512	P=0.460N
POLY 1.5	P=0.400N	P=0.468	P=0.468N
POLY 6	P=0.392N	P=0.549	P=0.446N
RAO-SCOTT	P=0.402N	P=0.507	P=0.455N
LITTER C-A/FISHERS	P=0.448N	P=0.338	P=0.549N

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

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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	0/300 ppm	0/1000 ppm
Uterus: Endometrium Metaplasia			
LESION RATES			
OVERALL (a)	18/50 (36%)	17/49 (35%)	10/49 (20%)
LITTERS (b)	15/32 (47%)	15/29 (52%)	10/31 (32%)
POLY-3 RATE (c)	18/39.96	17/43.75	10/38.86
POLY-3 PERCENT (g)	45.1%	38.9%	25.7%
TERMINAL (d)	9/23 (39%)	9/27 (33%)	6/23 (26%)
FIRST INCIDENCE	574	470	379
STATISTICAL TESTS			
POLY 3	P=0.049N*	P=0.361N	P=0.055N
POLY 1.5	P=0.050N*	P=0.414N	P=0.060N
POLY 6	P=0.047N*	P=0.324N	P=0.051N
RAO-SCOTT	P=0.049N*	P=0.354N	P=0.058N
LITTER C-A/FISHERS	P=0.115N	P=0.452	P=0.177N

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Perfluorooctanoic Acid

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Lab: BAT

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 ***