

**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:** 07/26/2018  
**Time Report Requested:** 20:21:31  
**First Dose M/F:** 10/27/08 / 10/28/08  
**Lab:** BAT

Male SSACs 0-150, 150-150

**NTP Study Number:** C20614  
**Lock Date:** 01/10/2012  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** 25017 SSAC  
**Removal Date Range:** ALL  
**Treatment Groups:** Include 003 0/150 ppm                      Include 005 150/150 ppm  
**Study Gender:** Both  
**TDMSE Version:** 2.5.0.0\_sfh  
**PWG Approval Date:** 07/25/2018

**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

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

**MALE RATS**

**Organ**

Liver

**Morphology**

Necrosis

Experiment Number: 20614 - 01

Test Type: CHRONIC

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Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

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**Males**

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| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

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**Adrenal Cortex  
Hypertrophy**

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**LESION RATES**

|                           |            |           |
|---------------------------|------------|-----------|
| <b>OVERALL (a)</b>        | 1/10 (10%) | 0/10 (0%) |
| <b>POLY-3 RATE (b)</b>    | 1/10.00    | 0/10.00   |
| <b>POLY-3 PERCENT (g)</b> | 10%        | 0%        |
| <b>INT SACRIFICE 1</b>    | 1/10 (10%) | 0/10 (0%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)   | 0/0 (0%)  |
| <b>FIRST INCIDENCE</b>    | 109 (I)    | ---       |

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**STATISTICAL TESTS**

|                           |          |
|---------------------------|----------|
| <b>POLY 3</b>             | P=0.500N |
| <b>POLY 1.5</b>           | P=0.500N |
| <b>POLY 6</b>             | P=0.500N |
| <b>COCH-ARM / FISHERS</b> | P=0.500N |
| <b>MAX-ISO-POLY-3</b>     | P=0.158N |

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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: 07/26/2018

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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)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

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**Kidney  
Mineral**

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**LESION RATES**

|                           |           |            |
|---------------------------|-----------|------------|
| <b>OVERALL (a)</b>        | 0/10 (0%) | 1/10 (10%) |
| <b>POLY-3 RATE (b)</b>    | 0/10.00   | 1/10.00    |
| <b>POLY-3 PERCENT (g)</b> | 0%        | 10%        |
| <b>INT SACRIFICE 1</b>    | 0/10 (0%) | 1/10 (10%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)  | 0/0 (0%)   |
| <b>FIRST INCIDENCE</b>    | ---       | 109 (l)    |

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**STATISTICAL TESTS**

|                           |         |
|---------------------------|---------|
| <b>POLY 3</b>             | P=0.500 |
| <b>POLY 1.5</b>           | P=0.500 |
| <b>POLY 6</b>             | P=0.500 |
| <b>COCH-ARM / FISHERS</b> | P=0.500 |
| <b>MAX-ISO-POLY-3</b>     | P=0.158 |

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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)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

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**Kidney**  
**Nephropathy Chronic Progressive**

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**LESION RATES**

|                           |            |            |
|---------------------------|------------|------------|
| <b>OVERALL (a)</b>        | 4/10 (40%) | 7/10 (70%) |
| <b>POLY-3 RATE (b)</b>    | 4/10.00    | 7/10.00    |
| <b>POLY-3 PERCENT (g)</b> | 40%        | 70%        |
| <b>INT SACRIFICE 1</b>    | 4/10 (40%) | 7/10 (70%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)   | 0/0 (0%)   |
| <b>FIRST INCIDENCE</b>    | 109 (I)    | 109 (I)    |

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**STATISTICAL TESTS**

|                           |         |
|---------------------------|---------|
| <b>POLY 3</b>             | P=0.186 |
| <b>POLY 1.5</b>           | P=0.186 |
| <b>POLY 6</b>             | P=0.186 |
| <b>COCH-ARM / FISHERS</b> | P=0.185 |
| <b>MAX-ISO-POLY-3</b>     | P=0.089 |

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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: 07/26/2018

Time Report Requested: 20:21:31

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

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

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| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

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**Kidney: Pelvis  
Dilation**

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**LESION RATES**

|                           |           |            |
|---------------------------|-----------|------------|
| <b>OVERALL (a)</b>        | 0/10 (0%) | 1/10 (10%) |
| <b>POLY-3 RATE (b)</b>    | 0/10.00   | 1/10.00    |
| <b>POLY-3 PERCENT (g)</b> | 0%        | 10%        |
| <b>INT SACRIFICE 1</b>    | 0/10 (0%) | 1/10 (10%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)  | 0/0 (0%)   |
| <b>FIRST INCIDENCE</b>    | ---       | 109 (l)    |

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**STATISTICAL TESTS**

|                           |         |
|---------------------------|---------|
| <b>POLY 3</b>             | P=0.500 |
| <b>POLY 1.5</b>           | P=0.500 |
| <b>POLY 6</b>             | P=0.500 |
| <b>COCH-ARM / FISHERS</b> | P=0.500 |
| <b>MAX-ISO-POLY-3</b>     | P=0.158 |

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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: 07/26/2018

Time Report Requested: 20:21:31

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

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

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**Kidney: Renal Tubule  
Mineral**

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**LESION RATES**

|                           |            |            |
|---------------------------|------------|------------|
| <b>OVERALL (a)</b>        | 4/10 (40%) | 1/10 (10%) |
| <b>POLY-3 RATE (b)</b>    | 4/10.00    | 1/10.00    |
| <b>POLY-3 PERCENT (g)</b> | 40%        | 10%        |
| <b>INT SACRIFICE 1</b>    | 4/10 (40%) | 1/10 (10%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)   | 0/0 (0%)   |
| <b>FIRST INCIDENCE</b>    | 109 (I)    | 109 (I)    |

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**STATISTICAL TESTS**

|                           |          |
|---------------------------|----------|
| <b>POLY 3</b>             | P=0.148N |
| <b>POLY 1.5</b>           | P=0.148N |
| <b>POLY 6</b>             | P=0.148N |
| <b>COCH-ARM / FISHERS</b> | P=0.152N |
| <b>MAX-ISO-POLY-3</b>     | P=0.058N |

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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: 07/26/2018

Time Report Requested: 20:21:31

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

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

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Liver

Clear Cell Focus

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**LESION RATES**

|                           |            |           |
|---------------------------|------------|-----------|
| <b>OVERALL (a)</b>        | 1/10 (10%) | 0/10 (0%) |
| <b>POLY-3 RATE (b)</b>    | 1/10.00    | 0/10.00   |
| <b>POLY-3 PERCENT (g)</b> | 10%        | 0%        |
| <b>INT SACRIFICE 1</b>    | 1/10 (10%) | 0/10 (0%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)   | 0/0 (0%)  |
| <b>FIRST INCIDENCE</b>    | 109 (I)    | ---       |

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**STATISTICAL TESTS**

|                           |          |
|---------------------------|----------|
| <b>POLY 3</b>             | P=0.500N |
| <b>POLY 1.5</b>           | P=0.500N |
| <b>POLY 6</b>             | P=0.500N |
| <b>COCH-ARM / FISHERS</b> | P=0.500N |
| <b>MAX-ISO-POLY-3</b>     | P=0.158N |

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

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Perfluorooctanoic Acid  
CAS Number: 335-67-1

Date Report Requested: 07/26/2018  
Time Report Requested: 20:21:31  
First Dose M/F: 10/27/08 / 10/28/08  
Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

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**Males**

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| DOSE | 0/150 ppm | 150/150 ppm |
|------|-----------|-------------|
|------|-----------|-------------|

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Liver  
Extramedullary Hematopoiesis

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**LESION RATES**

|                    |            |           |
|--------------------|------------|-----------|
| OVERALL (a)        | 1/10 (10%) | 0/10 (0%) |
| POLY-3 RATE (b)    | 1/10.00    | 0/10.00   |
| POLY-3 PERCENT (g) | 10%        | 0%        |
| INT SACRIFICE 1    | 1/10 (10%) | 0/10 (0%) |
| TERMINAL (d)       | 0/0 (0%)   | 0/0 (0%)  |
| FIRST INCIDENCE    | 109 (I)    | ---       |

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**STATISTICAL TESTS**

|                    |          |
|--------------------|----------|
| POLY 3             | P=0.500N |
| POLY 1.5           | P=0.500N |
| POLY 6             | P=0.500N |
| COCH-ARM / FISHERS | P=0.500N |
| MAX-ISO-POLY-3     | P=0.158N |

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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: 07/26/2018

Time Report Requested: 20:21:31

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

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

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Liver  
Inflammation Focal

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**LESION RATES**

|                           |            |            |
|---------------------------|------------|------------|
| <b>OVERALL (a)</b>        | 9/10 (90%) | 9/10 (90%) |
| <b>POLY-3 RATE (b)</b>    | 9/10.00    | 9/10.00    |
| <b>POLY-3 PERCENT (g)</b> | 90%        | 90%        |
| <b>INT SACRIFICE 1</b>    | 9/10 (90%) | 9/10 (90%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)   | 0/0 (0%)   |
| <b>FIRST INCIDENCE</b>    | 109 (I)    | 109 (I)    |

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**STATISTICAL TESTS**

|                           |          |
|---------------------------|----------|
| <b>POLY 3</b>             | P=0.760  |
| <b>POLY 1.5</b>           | P=0.760  |
| <b>POLY 6</b>             | P=0.760  |
| <b>COCH-ARM / FISHERS</b> | P=0.763N |
| <b>MAX-ISO-POLY-3</b>     | P=1.000  |

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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: 07/26/2018

Time Report Requested: 20:21:31

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

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

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**Males**

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| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

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Liver  
Necrosis

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**LESION RATES**

|                           |            |            |
|---------------------------|------------|------------|
| <b>OVERALL (a)</b>        | 6/10 (60%) | 2/10 (20%) |
| <b>POLY-3 RATE (b)</b>    | 6/10.00    | 2/10.00    |
| <b>POLY-3 PERCENT (g)</b> | 60%        | 20%        |
| <b>INT SACRIFICE 1</b>    | 6/10 (60%) | 2/10 (20%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)   | 0/0 (0%)   |
| <b>FIRST INCIDENCE</b>    | 109 (I)    | 109 (I)    |

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**STATISTICAL TESTS**

|                           |           |
|---------------------------|-----------|
| <b>POLY 3</b>             | P=0.077N  |
| <b>POLY 1.5</b>           | P=0.077N  |
| <b>POLY 6</b>             | P=0.077N  |
| <b>COCH-ARM / FISHERS</b> | P=0.085N  |
| <b>MAX-ISO-POLY-3</b>     | P=0.029N* |

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Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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Perfluorooctanoic Acid

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Time Report Requested: 20:21:31

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

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

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Liver  
Pigment

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**LESION RATES**

|                           |            |            |
|---------------------------|------------|------------|
| <b>OVERALL (a)</b>        | 8/10 (80%) | 9/10 (90%) |
| <b>POLY-3 RATE (b)</b>    | 8/10.00    | 9/10.00    |
| <b>POLY-3 PERCENT (g)</b> | 80%        | 90%        |
| <b>INT SACRIFICE 1</b>    | 8/10 (80%) | 9/10 (90%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)   | 0/0 (0%)   |
| <b>FIRST INCIDENCE</b>    | 109 (I)    | 109 (I)    |

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**STATISTICAL TESTS**

|                           |         |
|---------------------------|---------|
| <b>POLY 3</b>             | P=0.500 |
| <b>POLY 1.5</b>           | P=0.500 |
| <b>POLY 6</b>             | P=0.500 |
| <b>COCH-ARM / FISHERS</b> | P=0.500 |
| <b>MAX-ISO-POLY-3</b>     | P=0.274 |

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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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Time Report Requested: 20:21:31

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

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

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Liver: Hepatocyte  
Cytoplasmic Alteration

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**LESION RATES**

|                           |              |              |
|---------------------------|--------------|--------------|
| <b>OVERALL (a)</b>        | 10/10 (100%) | 10/10 (100%) |
| <b>POLY-3 RATE (b)</b>    | 10/10.00     | 10/10.00     |
| <b>POLY-3 PERCENT (g)</b> | 100%         | 100%         |
| <b>INT SACRIFICE 1</b>    | 10/10 (100%) | 10/10 (100%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)     | 0/0 (0%)     |
| <b>FIRST INCIDENCE</b>    | 109 (I)      | 109 (I)      |

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**STATISTICAL TESTS**

|                           |     |
|---------------------------|-----|
| <b>POLY 3</b>             | (e) |
| <b>POLY 1.5</b>           | (e) |
| <b>POLY 6</b>             | (e) |
| <b>COCH-ARM / FISHERS</b> | (e) |
| <b>MAX-ISO-POLY-3</b>     | (e) |

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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: 07/26/2018

Time Report Requested: 20:21:31

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

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

**Males**

---

| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

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Liver: Hepatocyte  
Hypertrophy

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**LESION RATES**

|                           |              |              |
|---------------------------|--------------|--------------|
| <b>OVERALL (a)</b>        | 10/10 (100%) | 10/10 (100%) |
| <b>POLY-3 RATE (b)</b>    | 10/10.00     | 10/10.00     |
| <b>POLY-3 PERCENT (g)</b> | 100%         | 100%         |
| <b>INT SACRIFICE 1</b>    | 10/10 (100%  | 10/10 (100%  |
| <b>TERMINAL (d)</b>       | 0/0 (0%)     | 0/0 (0%)     |
| <b>FIRST INCIDENCE</b>    | 109 (I)      | 109 (I)      |

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**STATISTICAL TESTS**

|                           |     |
|---------------------------|-----|
| <b>POLY 3</b>             | (e) |
| <b>POLY 1.5</b>           | (e) |
| <b>POLY 6</b>             | (e) |
| <b>COCH-ARM / FISHERS</b> | (e) |
| <b>MAX-ISO-POLY-3</b>     | (e) |

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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: 07/26/2018

Time Report Requested: 20:21:31

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

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

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Liver: Hepatocyte  
Single Cell Death

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**LESION RATES**

|                           |              |            |
|---------------------------|--------------|------------|
| <b>OVERALL (a)</b>        | 10/10 (100%) | 9/10 (90%) |
| <b>POLY-3 RATE (b)</b>    | 10/10.00     | 9/10.00    |
| <b>POLY-3 PERCENT (g)</b> | 100%         | 90%        |
| <b>INT SACRIFICE 1</b>    | 10/10 (100%) | 9/10 (90%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)     | 0/0 (0%)   |
| <b>FIRST INCIDENCE</b>    | 109 (I)      | 109 (I)    |

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**STATISTICAL TESTS**

|                           |          |
|---------------------------|----------|
| <b>POLY 3</b>             | P=0.500N |
| <b>POLY 1.5</b>           | P=0.500N |
| <b>POLY 6</b>             | P=0.500N |
| <b>COCH-ARM / FISHERS</b> | P=0.500N |
| <b>MAX-ISO-POLY-3</b>     | P=0.158N |

---

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: 07/26/2018

Time Report Requested: 20:21:31

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

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

---

**Lung  
Inflammation Chronic**

---

**LESION RATES**

|                           |            |            |
|---------------------------|------------|------------|
| <b>OVERALL (a)</b>        | 1/10 (10%) | 1/10 (10%) |
| <b>POLY-3 RATE (b)</b>    | 1/10.00    | 1/10.00    |
| <b>POLY-3 PERCENT (g)</b> | 10%        | 10%        |
| <b>INT SACRIFICE 1</b>    | 1/10 (10%) | 1/10 (10%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)   | 0/0 (0%)   |
| <b>FIRST INCIDENCE</b>    | 109 (I)    | 109 (I)    |

---

**STATISTICAL TESTS**

|                           |          |
|---------------------------|----------|
| <b>POLY 3</b>             | P=0.760  |
| <b>POLY 1.5</b>           | P=0.760  |
| <b>POLY 6</b>             | P=0.760  |
| <b>COCH-ARM / FISHERS</b> | P=0.763N |
| <b>MAX-ISO-POLY-3</b>     | P=1.000  |

---



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: 07/26/2018  
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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)  
LAST REMOVAL AT 16 WEEKS**

**Males**

---

| DOSE | 0/150 ppm | 150/150 ppm |
|------|-----------|-------------|
|------|-----------|-------------|

---

Lung: Alveolus  
Infiltration Cellular Histiocyte

---

**LESION RATES**

|                    |            |            |
|--------------------|------------|------------|
| OVERALL (a)        | 1/10 (10%) | 1/10 (10%) |
| POLY-3 RATE (b)    | 1/10.00    | 1/10.00    |
| POLY-3 PERCENT (g) | 10%        | 10%        |
| INT SACRIFICE 1    | 1/10 (10%) | 1/10 (10%) |
| TERMINAL (d)       | 0/0 (0%)   | 0/0 (0%)   |
| FIRST INCIDENCE    | 109 (I)    | 109 (I)    |

---

**STATISTICAL TESTS**

|                    |          |
|--------------------|----------|
| POLY 3             | P=0.760  |
| POLY 1.5           | P=0.760  |
| POLY 6             | P=0.760  |
| COCH-ARM / FISHERS | P=0.763N |
| MAX-ISO-POLY-3     | P=1.000  |

---

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)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

---

**Lymph Node, Mandibular  
Atrophy**

---

**LESION RATES**

|                           |            |            |
|---------------------------|------------|------------|
| <b>OVERALL (a)</b>        | 2/10 (20%) | 2/10 (20%) |
| <b>POLY-3 RATE (b)</b>    | 2/10.00    | 2/10.00    |
| <b>POLY-3 PERCENT (g)</b> | 20%        | 20%        |
| <b>INT SACRIFICE 1</b>    | 2/10 (20%) | 2/10 (20%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)   | 0/0 (0%)   |
| <b>FIRST INCIDENCE</b>    | 109 (I)    | 109 (I)    |

---

**STATISTICAL TESTS**

|                           |          |
|---------------------------|----------|
| <b>POLY 3</b>             | P=0.702  |
| <b>POLY 1.5</b>           | P=0.702  |
| <b>POLY 6</b>             | P=0.702  |
| <b>COCH-ARM / FISHERS</b> | P=0.709N |
| <b>MAX-ISO-POLY-3</b>     | P=1.000  |

---

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: 07/26/2018  
Time Report Requested: 20:21:31  
First Dose M/F: 10/27/08 / 10/28/08  
Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| DOSE | 0/150 ppm | 150/150 ppm |
|------|-----------|-------------|
|------|-----------|-------------|

---

Pituitary Gland: Pars Distalis  
Cyst

---

**LESION RATES**

|                    |            |           |
|--------------------|------------|-----------|
| OVERALL (a)        | 1/10 (10%) | 0/10 (0%) |
| POLY-3 RATE (b)    | 1/10.00    | 0/10.00   |
| POLY-3 PERCENT (g) | 10%        | 0%        |
| INT SACRIFICE 1    | 1/10 (10%) | 0/10 (0%) |
| TERMINAL (d)       | 0/0 (0%)   | 0/0 (0%)  |
| FIRST INCIDENCE    | 109 (I)    | ---       |

---

**STATISTICAL TESTS**

|                    |          |
|--------------------|----------|
| POLY 3             | P=0.500N |
| POLY 1.5           | P=0.500N |
| POLY 6             | P=0.500N |
| COCH-ARM / FISHERS | P=0.500N |
| MAX-ISO-POLY-3     | P=0.158N |

---

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: 07/26/2018

Time Report Requested: 20:21:31

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

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| <b>DOSE</b> | <b>0/150 ppm</b> | <b>150/150 ppm</b> |
|-------------|------------------|--------------------|
|-------------|------------------|--------------------|

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**Pituitary Gland: Rathke's Cleft  
Hyperplasia**

---

**LESION RATES**

|                           |           |            |
|---------------------------|-----------|------------|
| <b>OVERALL (a)</b>        | 0/10 (0%) | 1/10 (10%) |
| <b>POLY-3 RATE (b)</b>    | 0/10.00   | 1/10.00    |
| <b>POLY-3 PERCENT (g)</b> | 0%        | 10%        |
| <b>INT SACRIFICE 1</b>    | 0/10 (0%) | 1/10 (10%) |
| <b>TERMINAL (d)</b>       | 0/0 (0%)  | 0/0 (0%)   |
| <b>FIRST INCIDENCE</b>    | ---       | 109 (I)    |

---

**STATISTICAL TESTS**

|                           |         |
|---------------------------|---------|
| <b>POLY 3</b>             | P=0.500 |
| <b>POLY 1.5</b>           | P=0.500 |
| <b>POLY 6</b>             | P=0.500 |
| <b>COCH-ARM / FISHERS</b> | P=0.500 |
| <b>MAX-ISO-POLY-3</b>     | P=0.158 |

---

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: 07/26/2018

Time Report Requested: 20:21:31

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

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| DOSE | 0/150 ppm | 150/150 ppm |
|------|-----------|-------------|
|------|-----------|-------------|

---

Stomach, Glandular: Submucosa  
Inflammation Chronic

---

**LESION RATES**

|                    |            |            |
|--------------------|------------|------------|
| OVERALL (a)        | 2/10 (20%) | 2/10 (20%) |
| POLY-3 RATE (b)    | 2/10.00    | 2/10.00    |
| POLY-3 PERCENT (g) | 20%        | 20%        |
| INT SACRIFICE 1    | 2/10 (20%) | 2/10 (20%) |
| TERMINAL (d)       | 0/0 (0%)   | 0/0 (0%)   |
| FIRST INCIDENCE    | 109 (I)    | 109 (I)    |

---

**STATISTICAL TESTS**

|                    |          |
|--------------------|----------|
| POLY 3             | P=0.702  |
| POLY 1.5           | P=0.702  |
| POLY 6             | P=0.702  |
| COCH-ARM / FISHERS | P=0.709N |
| MAX-ISO-POLY-3     | P=1.000  |

---

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)  
LAST REMOVAL AT 16 WEEKS**

---

**Males**

---

| DOSE | 0/150 ppm | 150/150 ppm |
|------|-----------|-------------|
|------|-----------|-------------|

---

Thyroid Gland: Follicular Cell  
Hypertrophy

---

**LESION RATES**

|                    |            |           |
|--------------------|------------|-----------|
| OVERALL (a)        | 2/10 (20%) | 0/10 (0%) |
| POLY-3 RATE (b)    | 2/10.00    | 0/10.00   |
| POLY-3 PERCENT (g) | 20%        | 0%        |
| INT SACRIFICE 1    | 2/10 (20%) | 0/10 (0%) |
| TERMINAL (d)       | 0/0 (0%)   | 0/0 (0%)  |
| FIRST INCIDENCE    | 109 (I)    | ---       |

---

**STATISTICAL TESTS**

|                    |          |
|--------------------|----------|
| POLY 3             | P=0.227N |
| POLY 1.5           | P=0.227N |
| POLY 6             | P=0.227N |
| COCH-ARM / FISHERS | P=0.237N |
| MAX-ISO-POLY-3     | P=0.066N |

---

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: 07/26/2018

Time Report Requested: 20:21:31

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

Lab: BAT

**LEGEND**

- (a) Number of tumor-bearing animals/number of animals examined at site.
  - (b) 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.
  - (n) No statistics are calculated if all dose groups have fewer than two tumors.
  - (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 Cochran-Armitage and Fishers exact tests compare directly the overall incidence rates.

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