

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

**Study Number:** C20302B-01  
**Study Sex:** Both  
**PWG Approval Date:** See web page for date of PWG Approval  
**Version:** v1.7.0  
**Stat Version:** 2023.06.14S

SUMMARY OF STATISTICALLY SIGNIFICANT (P<=.05) RESULTS IN THE ANALYSIS OF ALPHA-PINENE

Males: Interim Males

| Organ                        | Morphology                        |
|------------------------------|-----------------------------------|
| URINARY BLADDER              | INFILTRATION CELLULAR: LYMPHOCYTE |
|                              | SINGLE CELL DEATH                 |
| URINARY BLADDER: CYTOPLASMIC | VACUOLATION                       |
| URINARY BLADDER: UROTHELIUM  | HYPERPLASIA                       |

Males: Core Animals

| Organ                                  | Morphology                                |
|----------------------------------------|-------------------------------------------|
| EPIDIDYMIS: DUCT                       | EXFOLIATED GERM CELL                      |
|                                        | EXFOLIATED GERM CELL (INCLUDES BILATERAL) |
| EPIDIDYMIS: DUCT, BILATERAL            | EXFOLIATED GERM CELL                      |
| EYE: LENS                              | CATARACT                                  |
| HARDERIAN GLAND                        | HYPERPLASIA                               |
|                                        | HYPERPLASIA (INCLUDES BILATERAL)          |
| INTESTINE, SMALL, ILEUM                | CELLULARITY INCREASED: LYMPHOCYTE         |
| KIDNEY: RENAL TUBULE                   | NECROSIS                                  |
| LIVER                                  | BASOPHILIC FOCUS                          |
|                                        | MULTINUCLEATED HEPATOCYTE                 |
|                                        | NECROSIS                                  |
| LUNG                                   | HEMORRHAGE                                |
| LUNG: ALVEOLAR/BRONCHIOLAR, EPITHELIUM | HYPERPLASIA                               |
| LYMPH NODE, MEDIASTINAL                | INFILTRATION CELLULAR: HISTIOCYTE         |
| LYMPH NODE, MESENTERIC                 | INFLAMMATION: GRANULOMATOUS               |
| NOSE: NASOLACRIMAL DUCT                | INFLAMMATION: SUPPURATIVE                 |
| NOSE: OLFACTORY EPITHELIUM             | METAPLASIA: RESPIRATORY                   |
| NOSE: RESPIRATORY EPITHELIUM           | INFLAMMATION: SUPPURATIVE                 |
| PREPUTIAL GLAND                        | CYST                                      |
|                                        | INFLAMMATION: SUPPURATIVE                 |
| TESTIS: GERMINAL EPITHELIUM            | ATROPHY (INCLUDES BILATERAL)              |

Males: Core Animals

Organ

TESTIS: GERMINAL EPITHELIUM, BILATERAL  
URINARY BLADDER  
  
URINARY BLADDER: UROTHELIUM

Morphology

DEGENERATION (INCLUDES BILATERAL)  
DEGENERATION OR ATROPHY  
DEGENERATION  
INFILTRATION CELLULAR: LYMPHOCYTE  
INFLAMMATION: SUPPURATIVE  
HYPERPLASIA

Females: Core Animals

Organ

ADRENAL GLAND: BILATERAL, CORTEX, SUBCAPSULAR  
ADRENAL GLAND: CORTEX, SUBCAPSULAR  
LIVER  
LIVER: CENTRIOBULAR  
LUNG: ALVEOLAR/BRONCHIOLAR, EPITHELIUM  
OVARY  
  
OVARY: BILATERAL  
STOMACH, FORESTOMACH: EPITHELIUM  
URINARY BLADDER  
URINARY BLADDER: UROTHELIUM

Morphology

HYPERPLASIA  
HYPERPLASIA (INCLUDES BILATERAL)  
FATTY CHANGE: DIFFUSE  
NECROSIS  
HYPERPLASIA  
HYPERPLASIA: TUBULOSTROMAL  
HYPERPLASIA; TUBULOSTROMAL (INCLUDES BILATERAL)  
HYPERPLASIA: TUBULOSTROMAL  
HYPERPLASIA: FOCAL  
INFILTRATION CELLULAR: LYMPHOCYTE  
HYPERPLASIA

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**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**

**Date Report Requested:** 08/20/2024  
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**Lab:** Battelle with EPL

|                                         | Males: Interim Males |         |         |         |
|-----------------------------------------|----------------------|---------|---------|---------|
|                                         | 0 ppm                | 100 ppm | 200 ppm | 400 ppm |
| Disposition Summary                     |                      |         |         |         |
| Animals Initially In Study              | 10                   | 10      | 10      | 10      |
| Censored                                |                      |         |         |         |
| Early Deaths                            |                      |         |         |         |
| Survivors                               |                      |         |         |         |
| Scheduled Sacrifice, Terminal           | 10                   | 10      | 10      | 10      |
| Number Animals Examined Microscopically | 10                   | 10      | 10      | 10      |

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**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 89**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Interim Males                |           |           |           |            |
|-------------------------------------|-----------|-----------|-----------|------------|
| DOSE                                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| TESTIS: GERMINAL EPITHELIUM ATROPHY |           |           |           |            |
| LESION RATES                        |           |           |           |            |
| OVERALL                             | 0/10 (0%) | 0/10 (0%) | 0/10 (0%) | 1/10 (10%) |
| POLY 3 RATE                         | 0/10      | 0/10      | 0/10      | 1/10       |
| POLY 3 PERCENT                      | 0%        | 0%        | 0%        | 10%        |
| TERMINAL                            | 0/10 (0%) | 0/10 (0%) | 0/10 (0%) | 1/10 (10%) |
| FIRST INCIDENCE                     | ---       | ---       | ---       | 89 (T)     |
| STATISTICAL TESTS                   |           |           |           |            |
| POLY 3                              | P=0.199   |           |           | P=0.500    |
| POLY 1.5                            | P=0.199   |           |           | P=0.500    |
| POLY 6                              | P=0.199   |           |           | P=0.500    |
| COCH-ARM / FISHERS                  | P=0.196   |           |           | P=0.500    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 89

| Males: Interim Males                                     |           |           |           |            |
|----------------------------------------------------------|-----------|-----------|-----------|------------|
| DOSE                                                     | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| TESTIS: GERMINAL EPITHELIUM ATROPHY (INCLUDES BILATERAL) |           |           |           |            |
| LESION RATES                                             |           |           |           |            |
| OVERALL                                                  | 0/10 (0%) | 0/10 (0%) | 0/10 (0%) | 1/10 (10%) |
| POLY 3 RATE                                              | 0/10      | 0/10      | 0/10      | 1/10       |
| POLY 3 PERCENT                                           | 0%        | 0%        | 0%        | 10%        |
| TERMINAL                                                 | 0/10 (0%) | 0/10 (0%) | 0/10 (0%) | 1/10 (10%) |
| FIRST INCIDENCE                                          | ---       | ---       | ---       | 89 (T)     |
| STATISTICAL TESTS                                        |           |           |           |            |
| POLY 3                                                   | P=0.199   |           |           | P=0.500    |
| POLY 1.5                                                 | P=0.199   |           |           | P=0.500    |
| POLY 6                                                   | P=0.199   |           |           | P=0.500    |
| COCH-ARM / FISHERS                                       | P=0.196   |           |           | P=0.500    |

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Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 89

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Interim Males                     |            |            |            |            |
|------------------------------------------|------------|------------|------------|------------|
| DOSE                                     | 0 ppm      | 100 ppm    | 200 ppm    | 400 ppm    |
| TESTIS: GERMINAL EPITHELIUM DEGENERATION |            |            |            |            |
| LESION RATES                             |            |            |            |            |
| OVERALL                                  | 1/10 (10%) | 1/10 (10%) | 1/10 (10%) | 1/10 (10%) |
| POLY 3 RATE                              | 1/10       | 1/10       | 1/10       | 1/10       |
| POLY 3 PERCENT                           | 10%        | 10%        | 10%        | 10%        |
| TERMINAL                                 | 1/10 (10%) | 1/10 (10%) | 1/10 (10%) | 1/10 (10%) |
| FIRST INCIDENCE                          | 89 (T)     | 89 (T)     | 89 (T)     | 89 (T)     |
| STATISTICAL TESTS                        |            |            |            |            |
| POLY 3                                   | P=0.632    | P=0.760    | P=0.760    | P=0.760    |
| POLY 1.5                                 | P=0.632    | P=0.760    | P=0.760    | P=0.760    |
| POLY 6                                   | P=0.632    | P=0.760    | P=0.760    | P=0.760    |
| COCH-ARM / FISHERS                       | P=0.639    | P=0.763    | P=0.763    | P=0.763    |

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Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 89

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Interim Males                                             |            |            |            |            |
|------------------------------------------------------------------|------------|------------|------------|------------|
| DOSE                                                             | 0 ppm      | 100 ppm    | 200 ppm    | 400 ppm    |
| TESTIS: GERMINAL EPITHELIUM<br>DEGENERATION (INCLUDES BILATERAL) |            |            |            |            |
| LESION RATES                                                     |            |            |            |            |
| OVERALL                                                          | 1/10 (10%) | 1/10 (10%) | 1/10 (10%) | 1/10 (10%) |
| POLY 3 RATE                                                      | 1/10       | 1/10       | 1/10       | 1/10       |
| POLY 3 PERCENT                                                   | 10%        | 10%        | 10%        | 10%        |
| TERMINAL                                                         | 1/10 (10%) | 1/10 (10%) | 1/10 (10%) | 1/10 (10%) |
| FIRST INCIDENCE                                                  | 89 (T)     | 89 (T)     | 89 (T)     | 89 (T)     |
| STATISTICAL TESTS                                                |            |            |            |            |
| POLY 3                                                           | P=0.632    | P=0.760    | P=0.760    | P=0.760    |
| POLY 1.5                                                         | P=0.632    | P=0.760    | P=0.760    | P=0.760    |
| POLY 6                                                           | P=0.632    | P=0.760    | P=0.760    | P=0.760    |
| COCH-ARM / FISHERS                                               | P=0.639    | P=0.763    | P=0.763    | P=0.763    |

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Test Compound: alpha-Pinene  
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STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 89

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Lab: Battelle with EPL

| Males: Interim Males                                   |            |            |            |            |
|--------------------------------------------------------|------------|------------|------------|------------|
| DOSE                                                   | 0 ppm      | 100 ppm    | 200 ppm    | 400 ppm    |
| TESTIS: GERMINAL EPITHELIUM<br>DEGENERATION OR ATROPHY |            |            |            |            |
| LESION RATES                                           |            |            |            |            |
| OVERALL                                                | 1/10 (10%) | 1/10 (10%) | 1/10 (10%) | 2/10 (20%) |
| POLY 3 RATE                                            | 1/10       | 1/10       | 1/10       | 2/10       |
| POLY 3 PERCENT                                         | 10%        | 10%        | 10%        | 20%        |
| TERMINAL                                               | 1/10 (10%) | 1/10 (10%) | 1/10 (10%) | 2/10 (20%) |
| FIRST INCIDENCE                                        | 89 (T)     | 89 (T)     | 89 (T)     | 89 (T)     |
| STATISTICAL TESTS                                      |            |            |            |            |
| POLY 3                                                 | P=0.350    | P=0.760    | P=0.760    | P=0.500    |
| POLY 1.5                                               | P=0.350    | P=0.760    | P=0.760    | P=0.500    |
| POLY 6                                                 | P=0.350    | P=0.760    | P=0.760    | P=0.500    |
| COCH-ARM / FISHERS                                     | P=0.343    | P=0.763    | P=0.763    | P=0.500    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 89

| Males: Interim Males              |           |            |            |              |
|-----------------------------------|-----------|------------|------------|--------------|
| DOSE                              | 0 ppm     | 100 ppm    | 200 ppm    | 400 ppm      |
| URINARY BLADDER                   |           |            |            |              |
| INFILTRATION CELLULAR: LYMPHOCYTE |           |            |            |              |
| LESION RATES                      |           |            |            |              |
| OVERALL                           | 0/10 (0%) | 1/10 (10%) | 9/10 (90%) | 10/10 (100%) |
| POLY 3 RATE                       | 0/10      | 1/10       | 9/10       | 10/10        |
| POLY 3 PERCENT                    | 0%        | 10%        | 90%        | 100%         |
| TERMINAL                          | 0/10 (0%) | 1/10 (10%) | 9/10 (90%) | 10/10 (100%) |
| FIRST INCIDENCE                   | ---       | 89 (T)     | 89 (T)     | 89 (T)       |
| STATISTICAL TESTS                 |           |            |            |              |
| POLY 3                            | P<0.001** | P=0.500    | P<0.001**  | P<0.001**    |
| POLY 1.5                          | P<0.001** | P=0.500    | P<0.001**  | P<0.001**    |
| POLY 6                            | P<0.001** | P=0.500    | P<0.001**  | P<0.001**    |
| COCH-ARM / FISHERS                | P<0.001** | P=0.500    | P<0.001**  | P<0.001**    |

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STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 89

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Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Interim Males              |            |           |           |           |
|-----------------------------------|------------|-----------|-----------|-----------|
| DOSE                              | 0 ppm      | 100 ppm   | 200 ppm   | 400 ppm   |
| URINARY BLADDER                   |            |           |           |           |
| INFILTRATION CELLULAR: MIXED CELL |            |           |           |           |
| LESION RATES                      |            |           |           |           |
| OVERALL                           | 1/10 (10%) | 0/10 (0%) | 0/10 (0%) | 0/10 (0%) |
| POLY 3 RATE                       | 1/10       | 0/10      | 0/10      | 0/10      |
| POLY 3 PERCENT                    | 10%        | 0%        | 0%        | 0%        |
| TERMINAL                          | 1/10 (10%) | 0/10 (0%) | 0/10 (0%) | 0/10 (0%) |
| FIRST INCIDENCE                   | 89 (T)     | ---       | ---       | ---       |
| STATISTICAL TESTS                 |            |           |           |           |
| POLY 3                            | P=0.969    | P=0.977   | P=0.977   | P=0.977   |
| POLY 1.5                          | P=0.969    | P=0.977   | P=0.977   | P=0.977   |
| POLY 6                            | P=0.969    | P=0.977   | P=0.977   | P=0.977   |
| COCH-ARM / FISHERS                | P=0.970    | P=1.000   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 89

| Males: Interim Males |           |            |            |              |
|----------------------|-----------|------------|------------|--------------|
| DOSE                 | 0 ppm     | 100 ppm    | 200 ppm    | 400 ppm      |
| URINARY BLADDER      |           |            |            |              |
| SINGLE CELL DEATH    |           |            |            |              |
| LESION RATES         |           |            |            |              |
| OVERALL              | 0/10 (0%) | 9/10 (90%) | 9/10 (90%) | 10/10 (100%) |
| POLY 3 RATE          | 0/10      | 9/10       | 9/10       | 10/10        |
| POLY 3 PERCENT       | 0%        | 90%        | 90%        | 100%         |
| TERMINAL             | 0/10 (0%) | 9/10 (90%) | 9/10 (90%) | 10/10 (100%) |
| FIRST INCIDENCE      | ---       | 89 (T)     | 89 (T)     | 89 (T)       |
| STATISTICAL TESTS    |           |            |            |              |
| POLY 3               | P<0.001** | P<0.001**  | P<0.001**  | P<0.001**    |
| POLY 1.5             | P<0.001** | P<0.001**  | P<0.001**  | P<0.001**    |
| POLY 6               | P<0.001** | P<0.001**  | P<0.001**  | P<0.001**    |
| COCH-ARM / FISHERS   | P<0.001** | P<0.001**  | P<0.001**  | P<0.001**    |

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Test Compound: alpha-Pinene  
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TERMINAL REMOVAL DAYS: SD 89

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Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Interim Males                     |           |            |              |              |
|------------------------------------------|-----------|------------|--------------|--------------|
| DOSE                                     | 0 ppm     | 100 ppm    | 200 ppm      | 400 ppm      |
| URINARY BLADDER: CYTOPLASMIC VACUOLATION |           |            |              |              |
| LESION RATES                             |           |            |              |              |
| OVERALL                                  | 0/10 (0%) | 9/10 (90%) | 10/10 (100%) | 10/10 (100%) |
| POLY 3 RATE                              | 0/10      | 9/10       | 10/10        | 10/10        |
| POLY 3 PERCENT                           | 0%        | 90%        | 100%         | 100%         |
| TERMINAL                                 | 0/10 (0%) | 9/10 (90%) | 10/10 (100%) | 10/10 (100%) |
| FIRST INCIDENCE                          | ---       | 89 (T)     | 89 (T)       | 89 (T)       |
| STATISTICAL TESTS                        |           |            |              |              |
| POLY 3                                   | P<0.001** | P<0.001**  | P<0.001**    | P<0.001**    |
| POLY 1.5                                 | P<0.001** | P<0.001**  | P<0.001**    | P<0.001**    |
| POLY 6                                   | P<0.001** | P<0.001**  | P<0.001**    | P<0.001**    |
| COCH-ARM / FISHERS                       | P<0.001** | P<0.001**  | P<0.001**    | P<0.001**    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 89

| Males: Interim Males                       |           |           |            |              |
|--------------------------------------------|-----------|-----------|------------|--------------|
| DOSE                                       | 0 ppm     | 100 ppm   | 200 ppm    | 400 ppm      |
| URINARY BLADDER: UROTHELIUM<br>HYPERPLASIA |           |           |            |              |
| LESION RATES                               |           |           |            |              |
| OVERALL                                    | 0/10 (0%) | 0/10 (0%) | 6/10 (60%) | 10/10 (100%) |
| POLY 3 RATE                                | 0/10      | 0/10      | 6/10       | 10/10        |
| POLY 3 PERCENT                             | 0%        | 0%        | 60%        | 100%         |
| TERMINAL                                   | 0/10 (0%) | 0/10 (0%) | 6/10 (60%) | 10/10 (100%) |
| FIRST INCIDENCE                            | ---       | ---       | 89 (T)     | 89 (T)       |
| 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**    |
| COCH-ARM / FISHERS                         | P<0.001** |           | P=0.005**  | P<0.001**    |

|                                         | Males: Core Animals |         |         |         |
|-----------------------------------------|---------------------|---------|---------|---------|
|                                         | 0 ppm               | 100 ppm | 200 ppm | 400 ppm |
| Disposition Summary                     |                     |         |         |         |
| Animals Initially In Study              | 50                  | 50      | 50      | 50      |
| Censored                                |                     |         | 2       |         |
| Early Deaths                            |                     |         |         |         |
| Found Dead                              | 8                   | 15      | 9       | 14      |
| Sacrificed, Moribund                    | 3                   | 5       | 5       | 5       |
| Survivors                               |                     |         |         |         |
| Scheduled Sacrifice, Terminal           | 39                  | 30      | 34      | 31      |
| Number Animals Examined Microscopically | 50                  | 50      | 50      | 50      |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals                                          |           |           |           |           |
|--------------------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| ADRENAL GLAND: BILATERAL, CORTEX, SUBCAPSULAR<br>HYPERPLASIA |           |           |           |           |
| LESION RATES                                                 |           |           |           |           |
| OVERALL                                                      | 0/50 (0%) | 0/50 (0%) | 1/48 (2%) | 0/50 (0%) |
| POLY 3 RATE                                                  | 0/45.06   | 0/41.23   | 1/39.89   | 0/41.67   |
| POLY 3 PERCENT                                               | 0%        | 0%        | 2.51%     | 0%        |
| TERMINAL                                                     | 0/39 (0%) | 0/30 (0%) | 1/32 (3%) | 0/31 (0%) |
| FIRST INCIDENCE                                              | ---       | ---       | 729 (T)   | ---       |
| STATISTICAL TESTS                                            |           |           |           |           |
| POLY 3                                                       | P=0.672   |           | P=0.476   |           |
| POLY 1.5                                                     | P=0.683   |           | P=0.479   |           |
| POLY 6                                                       | P=0.656   |           | P=0.473   |           |
| COCH-ARM / FISHERS                                           | P=0.693   |           | P=0.490   |           |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals   |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| ADRENAL GLAND: CORTEX |           |           |           |           |
| HYPERPLASIA: FOCAL    |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 2/50 (4%) | 0/50 (0%) | 1/48 (2%) | 0/50 (0%) |
| POLY 3 RATE           | 2/45.06   | 0/41.23   | 1/39.89   | 0/41.67   |
| POLY 3 PERCENT        | 4.44%     | 0%        | 2.51%     | 0%        |
| TERMINAL              | 2/39 (5%) | 0/30 (0%) | 1/32 (3%) | 0/31 (0%) |
| FIRST INCIDENCE       | 729 (T)   | ---       | 729 (T)   | ---       |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.950   | P=0.981   | P=0.855   | P=0.982   |
| POLY 1.5              | P=0.951   | P=0.983   | P=0.858   | P=0.983   |
| POLY 6                | P=0.948   | P=0.979   | P=0.853   | P=0.980   |
| COCH-ARM / FISHERS    | P=0.952   | P=1.000   | P=0.871   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals   |           |           |           |            |
|-----------------------|-----------|-----------|-----------|------------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| ADRENAL GLAND: CORTEX |           |           |           |            |
| HYPERTROPHY: FOCAL    |           |           |           |            |
| LESION RATES          |           |           |           |            |
| OVERALL               | 3/50 (6%) | 0/50 (0%) | 2/48 (4%) | 3/50 (6%)  |
| POLY 3 RATE           | 3/45.06   | 0/41.23   | 2/39.89   | 3/41.67    |
| POLY 3 PERCENT        | 6.66%     | 0%        | 5.01%     | 7.2%       |
| TERMINAL              | 3/39 (8%) | 0/30 (0%) | 2/32 (6%) | 3/31 (10%) |
| FIRST INCIDENCE       | 729 (T)   | ---       | 729 (T)   | 729 (T)    |
| STATISTICAL TESTS     |           |           |           |            |
| POLY 3                | P=0.392   | P=0.989   | P=0.781   | P=0.626    |
| POLY 1.5              | P=0.396   | P=0.990   | P=0.786   | P=0.642    |
| POLY 6                | P=0.386   | P=0.987   | P=0.777   | P=0.604    |
| COCH-ARM / FISHERS    | P=0.402   | P=1.000   | P=0.806   | P=0.661    |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                     |            |           |           |            |
|-----------------------------------------|------------|-----------|-----------|------------|
| DOSE                                    | 0 ppm      | 100 ppm   | 200 ppm   | 400 ppm    |
| ADRENAL GLAND: CORTEX                   |            |           |           |            |
| HYPERTROPHY; FOCAL (INCLUDES BILATERAL) |            |           |           |            |
| LESION RATES                            |            |           |           |            |
| OVERALL                                 | 7/50 (14%) | 0/50 (0%) | 3/48 (6%) | 3/50 (6%)  |
| POLY 3 RATE                             | 7/45.06    | 0/41.23   | 3/39.89   | 3/41.67    |
| POLY 3 PERCENT                          | 15.54%     | 0%        | 7.52%     | 7.2%       |
| TERMINAL                                | 7/39 (18%) | 0/30 (0%) | 3/32 (9%) | 3/31 (10%) |
| FIRST INCIDENCE                         | 729 (T)    | ---       | 729 (T)   | 729 (T)    |
| STATISTICAL TESTS                       |            |           |           |            |
| POLY 3                                  | P=0.866    | P=0.999   | P=0.930   | P=0.940    |
| POLY 1.5                                | P=0.867    | P=0.999   | P=0.933   | P=0.946    |
| POLY 6                                  | P=0.864    | P=0.999   | P=0.928   | P=0.930    |
| COCH-ARM / FISHERS                      | P=0.865    | P=1.000   | P=0.947   | P=0.954    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals              |            |           |           |           |
|----------------------------------|------------|-----------|-----------|-----------|
| DOSE                             | 0 ppm      | 100 ppm   | 200 ppm   | 400 ppm   |
| ADRENAL GLAND: CORTEX, BILATERAL |            |           |           |           |
| HYPERTROPHY: FOCAL               |            |           |           |           |
| LESION RATES                     |            |           |           |           |
| OVERALL                          | 4/50 (8%)  | 0/50 (0%) | 1/48 (2%) | 0/50 (0%) |
| POLY 3 RATE                      | 4/45.06    | 0/41.23   | 1/39.89   | 0/41.67   |
| POLY 3 PERCENT                   | 8.88%      | 0%        | 2.51%     | 0%        |
| TERMINAL                         | 4/39 (10%) | 0/30 (0%) | 1/32 (3%) | 0/31 (0%) |
| FIRST INCIDENCE                  | 729 (T)    | ---       | 729 (T)   | ---       |
| STATISTICAL TESTS                |            |           |           |           |
| POLY 3                           | P=0.992    | P=0.994   | P=0.956   | P=0.994   |
| POLY 1.5                         | P=0.992    | P=0.994   | P=0.957   | P=0.994   |
| POLY 6                           | P=0.992    | P=0.993   | P=0.954   | P=0.993   |
| COCH-ARM / FISHERS               | P=0.991    | P=1.000   | P=0.969   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals                               |            |           |           |           |
|---------------------------------------------------|------------|-----------|-----------|-----------|
| DOSE                                              | 0 ppm      | 100 ppm   | 200 ppm   | 400 ppm   |
| ADRENAL GLAND: CORTEX, SUBCAPSULAR<br>HYPERPLASIA |            |           |           |           |
| LESION RATES                                      |            |           |           |           |
| OVERALL                                           | 4/50 (8%)  | 0/50 (0%) | 2/48 (4%) | 2/50 (4%) |
| POLY 3 RATE                                       | 4/45.06    | 0/41.23   | 2/39.98   | 2/41.67   |
| POLY 3 PERCENT                                    | 8.88%      | 0%        | 5%        | 4.8%      |
| TERMINAL                                          | 4/39 (10%) | 0/30 (0%) | 1/32 (3%) | 2/31 (6%) |
| FIRST INCIDENCE                                   | 729 (T)    | ---       | 708       | 729 (T)   |
| STATISTICAL TESTS                                 |            |           |           |           |
| POLY 3                                            | P=0.761    | P=0.994   | P=0.867   | P=0.878   |
| POLY 1.5                                          | P=0.762    | P=0.994   | P=0.870   | P=0.886   |
| POLY 6                                            | P=0.757    | P=0.993   | P=0.864   | P=0.866   |
| COCH-ARM / FISHERS                                | P=0.765    | P=1.000   | P=0.888   | P=0.898   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                                                    |            |           |           |           |
|------------------------------------------------------------------------|------------|-----------|-----------|-----------|
| DOSE                                                                   | 0 ppm      | 100 ppm   | 200 ppm   | 400 ppm   |
| ADRENAL GLAND: CORTEX, SUBCAPSULAR<br>HYPERPLASIA (INCLUDES BILATERAL) |            |           |           |           |
| LESION RATES                                                           |            |           |           |           |
| OVERALL                                                                | 4/50 (8%)  | 0/50 (0%) | 3/48 (6%) | 2/50 (4%) |
| POLY 3 RATE                                                            | 4/45.06    | 0/41.23   | 3/39.98   | 2/41.67   |
| POLY 3 PERCENT                                                         | 8.88%      | 0%        | 7.5%      | 4.8%      |
| TERMINAL                                                               | 4/39 (10%) | 0/30 (0%) | 2/32 (6%) | 2/31 (6%) |
| FIRST INCIDENCE                                                        | 729 (T)    | ---       | 708       | 729 (T)   |
| STATISTICAL TESTS                                                      |            |           |           |           |
| POLY 3                                                                 | P=0.725    | P=0.994   | P=0.732   | P=0.878   |
| POLY 1.5                                                               | P=0.729    | P=0.994   | P=0.738   | P=0.886   |
| POLY 6                                                                 | P=0.718    | P=0.993   | P=0.728   | P=0.866   |
| COCH-ARM / FISHERS                                                     | P=0.734    | P=1.000   | P=0.765   | P=0.898   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals  |           |           |           |           |
|----------------------|-----------|-----------|-----------|-----------|
| DOSE                 | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| ALL ORGANS           |           |           |           |           |
| POLYARTERITIS NODOSA |           |           |           |           |
| LESION RATES         |           |           |           |           |
| OVERALL              | 0/50 (0%) | 0/50 (0%) | 1/50 (2%) | 1/50 (2%) |
| POLY 3 RATE          | 0/45.06   | 0/41.23   | 1/42.44   | 1/41.67   |
| POLY 3 PERCENT       | 0%        | 0%        | 2.36%     | 2.4%      |
| TERMINAL             | 0/39 (0%) | 0/30 (0%) | 0/34 (0%) | 1/31 (3%) |
| FIRST INCIDENCE      | ---       | ---       | 558       | 729 (T)   |
| STATISTICAL TESTS    |           |           |           |           |
| POLY 3               | P=0.223   |           | P=0.488   | P=0.484   |
| POLY 1.5             | P=0.229   |           | P=0.490   | P=0.491   |
| POLY 6               | P=0.214   |           | P=0.488   | P=0.475   |
| COCH-ARM / FISHERS   | P=0.236   |           | P=0.500   | P=0.500   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals |           |           |           |           |
|---------------------|-----------|-----------|-----------|-----------|
| DOSE                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| EPIDIDYMIS          |           |           |           |           |
| HYOSPERMIA          |           |           |           |           |
| LESION RATES        |           |           |           |           |
| OVERALL             | 0/50 (0%) | 0/49 (0%) | 1/50 (2%) | 2/48 (4%) |
| POLY 3 RATE         | 0/45.06   | 0/40.26   | 1/41.89   | 2/40.34   |
| POLY 3 PERCENT      | 0%        | 0%        | 2.39%     | 4.96%     |
| TERMINAL            | 0/39 (0%) | 0/30 (0%) | 1/34 (3%) | 1/31 (3%) |
| FIRST INCIDENCE     | ---       | ---       | 729 (T)   | 708       |
| STATISTICAL TESTS   |           |           |           |           |
| POLY 3              | P=0.062   |           | P=0.485   | P=0.213   |
| POLY 1.5            | P=0.064   |           | P=0.488   | P=0.219   |
| POLY 6              | P=0.060   |           | P=0.484   | P=0.205   |
| COCH-ARM / FISHERS  | P=0.066   |           | P=0.500   | P=0.237   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals             |           |           |           |           |
|---------------------------------|-----------|-----------|-----------|-----------|
| DOSE                            | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| EPIDIDYMIS                      |           |           |           |           |
| HYOSPERMIA (INCLUDES BILATERAL) |           |           |           |           |
| LESION RATES                    |           |           |           |           |
| OVERALL                         | 1/50 (2%) | 1/49 (2%) | 1/50 (2%) | 2/48 (4%) |
| POLY 3 RATE                     | 1/45.49   | 1/41.05   | 1/41.89   | 2/40.34   |
| POLY 3 PERCENT                  | 2.2%      | 2.44%     | 2.39%     | 4.96%     |
| TERMINAL                        | 0/39 (0%) | 0/30 (0%) | 1/34 (3%) | 1/31 (3%) |
| FIRST INCIDENCE                 | 603       | 432       | 729 (T)   | 708       |
| STATISTICAL TESTS               |           |           |           |           |
| POLY 3                          | P=0.320   | P=0.737   | P=0.742   | P=0.458   |
| POLY 1.5                        | P=0.328   | P=0.746   | P=0.746   | P=0.470   |
| POLY 6                          | P=0.311   | P=0.724   | P=0.739   | P=0.443   |
| COCH-ARM / FISHERS              | P=0.339   | P=0.747   | P=0.753   | P=0.485   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals                           |           |            |           |            |
|-----------------------------------------------|-----------|------------|-----------|------------|
| DOSE                                          | 0 ppm     | 100 ppm    | 200 ppm   | 400 ppm    |
| EPIDIDYMIS: DUCT ATROPHY (INCLUDES BILATERAL) |           |            |           |            |
| LESION RATES                                  |           |            |           |            |
| OVERALL                                       | 2/50 (4%) | 6/49 (12%) | 3/50 (6%) | 5/48 (10%) |
| POLY 3 RATE                                   | 2/45.49   | 6/42.28    | 3/42.44   | 5/40.57    |
| POLY 3 PERCENT                                | 4.4%      | 14.19%     | 7.07%     | 12.32%     |
| TERMINAL                                      | 1/39 (3%) | 3/30 (10%) | 2/34 (6%) | 3/31 (10%) |
| FIRST INCIDENCE                               | 603       | 432        | 558       | 667        |
| STATISTICAL TESTS                             |           |            |           |            |
| POLY 3                                        | P=0.236   | P=0.110    | P=0.468   | P=0.172    |
| POLY 1.5                                      | P=0.252   | P=0.118    | P=0.474   | P=0.183    |
| POLY 6                                        | P=0.218   | P=0.097    | P=0.465   | P=0.158    |
| COCH-ARM / FISHERS                            | P=0.279   | P=0.128    | P=0.500   | P=0.201    |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                      |           |           |           |            |
|------------------------------------------|-----------|-----------|-----------|------------|
| DOSE                                     | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| EPIDIDYMIS: DUCT<br>EXFOLIATED GERM CELL |           |           |           |            |
| LESION RATES                             |           |           |           |            |
| OVERALL                                  | 0/50 (0%) | 3/49 (6%) | 1/50 (2%) | 6/48 (13%) |
| POLY 3 RATE                              | 0/45.06   | 3/40.56   | 1/41.89   | 6/41.33    |
| POLY 3 PERCENT                           | 0%        | 7.4%      | 2.39%     | 14.52%     |
| TERMINAL                                 | 0/39 (0%) | 2/30 (7%) | 1/34 (3%) | 4/31 (13%) |
| FIRST INCIDENCE                          | ---       | 647       | 729 (T)   | 395        |
| STATISTICAL TESTS                        |           |           |           |            |
| POLY 3                                   | P=0.007** | P=0.101   | P=0.485   | P=0.011*   |
| POLY 1.5                                 | P=0.007** | P=0.107   | P=0.488   | P=0.012*   |
| POLY 6                                   | P=0.006** | P=0.092   | P=0.484   | P=0.010**  |
| COCH-ARM / FISHERS                       | P=0.009** | P=0.117   | P=0.500   | P=0.012*   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                              |           |            |           |             |
|--------------------------------------------------|-----------|------------|-----------|-------------|
| DOSE                                             | 0 ppm     | 100 ppm    | 200 ppm   | 400 ppm     |
| <b>EPIDIDYMIS: DUCT</b>                          |           |            |           |             |
| <b>EXFOLIATED GERM CELL (INCLUDES BILATERAL)</b> |           |            |           |             |
| <b>LESION RATES</b>                              |           |            |           |             |
| OVERALL                                          | 2/50 (4%) | 5/49 (10%) | 2/50 (4%) | 18/48 (38%) |
| POLY 3 RATE                                      | 2/45.06   | 5/41.35    | 2/42.4    | 18/41.96    |
| POLY 3 PERCENT                                   | 4.44%     | 12.09%     | 4.72%     | 42.9%       |
| TERMINAL                                         | 2/39 (5%) | 3/30 (10%) | 1/34 (3%) | 13/31 (42%) |
| FIRST INCIDENCE                                  | 729 (T)   | 432        | 576       | 395         |
| <b>STATISTICAL TESTS</b>                         |           |            |           |             |
| POLY 3                                           | P<0.001** | P=0.182    | P=0.672   | P<0.001**   |
| POLY 1.5                                         | P<0.001** | P=0.194    | P=0.675   | P<0.001**   |
| POLY 6                                           | P<0.001** | P=0.165    | P=0.671   | P<0.001**   |
| COCH-ARM / FISHERS                               | P<0.001** | P=0.210    | P=0.691   | P<0.001**   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals                 |           |            |           |            |
|-------------------------------------|-----------|------------|-----------|------------|
| DOSE                                | 0 ppm     | 100 ppm    | 200 ppm   | 400 ppm    |
| EPIDIDYMIS: DUCT, BILATERAL ATROPHY |           |            |           |            |
| LESION RATES                        |           |            |           |            |
| OVERALL                             | 2/50 (4%) | 6/49 (12%) | 2/50 (4%) | 5/48 (10%) |
| POLY 3 RATE                         | 2/45.49   | 6/42.28    | 2/42.44   | 5/40.57    |
| POLY 3 PERCENT                      | 4.4%      | 14.19%     | 4.71%     | 12.32%     |
| TERMINAL                            | 1/39 (3%) | 3/30 (10%) | 1/34 (3%) | 3/31 (10%) |
| FIRST INCIDENCE                     | 603       | 432        | 558       | 667        |
| STATISTICAL TESTS                   |           |            |           |            |
| POLY 3                              | P=0.248   | P=0.110    | P=0.669   | P=0.172    |
| POLY 1.5                            | P=0.263   | P=0.118    | P=0.673   | P=0.183    |
| POLY 6                              | P=0.231   | P=0.097    | P=0.666   | P=0.158    |
| COCH-ARM / FISHERS                  | P=0.290   | P=0.128    | P=0.691   | P=0.201    |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                                         |           |           |           |             |
|-------------------------------------------------------------|-----------|-----------|-----------|-------------|
| DOSE                                                        | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm     |
| <b>EPIDIDYMIS: DUCT, BILATERAL<br/>EXFOLIATED GERM CELL</b> |           |           |           |             |
| <b>LESION RATES</b>                                         |           |           |           |             |
| OVERALL                                                     | 2/50 (4%) | 2/49 (4%) | 1/50 (2%) | 12/48 (25%) |
| POLY 3 RATE                                                 | 2/45.06   | 2/41.05   | 1/42.4    | 12/40.88    |
| POLY 3 PERCENT                                              | 4.44%     | 4.87%     | 2.36%     | 29.35%      |
| TERMINAL                                                    | 2/39 (5%) | 1/30 (3%) | 0/34 (0%) | 9/31 (29%)  |
| FIRST INCIDENCE                                             | 729 (T)   | 432       | 576       | 625         |
| <b>STATISTICAL TESTS</b>                                    |           |           |           |             |
| POLY 3                                                      | P<0.001** | P=0.660   | P=0.867   | P=0.002**   |
| POLY 1.5                                                    | P<0.001** | P=0.673   | P=0.868   | P=0.002**   |
| POLY 6                                                      | P<0.001** | P=0.641   | P=0.867   | P=0.001**   |
| COCH-ARM / FISHERS                                          | P<0.001** | P=0.684   | P=0.879   | P=0.003**   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals   |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| EYE: LENS<br>CATARACT |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 0/50 (0%) | 4/50 (8%) | 1/49 (2%) | 0/49 (0%) |
| POLY 3 RATE           | 0/45.06   | 4/42.67   | 1/41.88   | 0/40.67   |
| POLY 3 PERCENT        | 0%        | 9.37%     | 2.39%     | 0%        |
| TERMINAL              | 0/39 (0%) | 1/30 (3%) | 1/34 (3%) | 0/30 (0%) |
| FIRST INCIDENCE       | ---       | 565       | 729 (T)   | ---       |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.844   | P=0.053   | P=0.485   |           |
| POLY 1.5              | P=0.857   | P=0.056   | P=0.487   |           |
| POLY 6                | P=0.824   | P=0.049*  | P=0.484   |           |
| COCH-ARM / FISHERS    | P=0.871   | P=0.059   | P=0.495   |           |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                    |           |            |            |            |
|----------------------------------------|-----------|------------|------------|------------|
| DOSE                                   | 0 ppm     | 100 ppm    | 200 ppm    | 400 ppm    |
| <b>HARDERIAN GLAND<br/>HYPERPLASIA</b> |           |            |            |            |
| <b>LESION RATES</b>                    |           |            |            |            |
| OVERALL                                | 2/50 (4%) | 8/50 (16%) | 6/50 (12%) | 5/50 (10%) |
| POLY 3 RATE                            | 2/45.06   | 8/42.48    | 6/41.89    | 5/41.98    |
| POLY 3 PERCENT                         | 4.44%     | 18.83%     | 14.32%     | 11.91%     |
| TERMINAL                               | 2/39 (5%) | 5/30 (17%) | 6/34 (18%) | 3/31 (10%) |
| FIRST INCIDENCE                        | 729 (T)   | 565        | 729 (T)    | 669        |
| <b>STATISTICAL TESTS</b>               |           |            |            |            |
| POLY 3                                 | P=0.301   | P=0.035*   | P=0.110    | P=0.188    |
| POLY 1.5                               | P=0.326   | P=0.040*   | P=0.114    | P=0.200    |
| POLY 6                                 | P=0.271   | P=0.030*   | P=0.107    | P=0.173    |
| COCH-ARM / FISHERS                     | P=0.363   | P=0.046*   | P=0.134    | P=0.218    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals              |           |            |            |            |
|----------------------------------|-----------|------------|------------|------------|
| DOSE                             | 0 ppm     | 100 ppm    | 200 ppm    | 400 ppm    |
| HARDERIAN GLAND                  |           |            |            |            |
| HYPERPLASIA (INCLUDES BILATERAL) |           |            |            |            |
| LESION RATES                     |           |            |            |            |
| OVERALL                          | 2/50 (4%) | 8/50 (16%) | 7/50 (14%) | 6/50 (12%) |
| POLY 3 RATE                      | 2/45.06   | 8/42.48    | 7/41.89    | 6/41.98    |
| POLY 3 PERCENT                   | 4.44%     | 18.83%     | 16.71%     | 14.29%     |
| TERMINAL                         | 2/39 (5%) | 5/30 (17%) | 7/34 (21%) | 4/31 (13%) |
| FIRST INCIDENCE                  | 729 (T)   | 565        | 729 (T)    | 669        |
| STATISTICAL TESTS                |           |            |            |            |
| POLY 3                           | P=0.186   | P=0.035*   | P=0.062    | P=0.110    |
| POLY 1.5                         | P=0.206   | P=0.040*   | P=0.065    | P=0.120    |
| POLY 6                           | P=0.161   | P=0.030*   | P=0.060    | P=0.099    |
| COCH-ARM / FISHERS               | P=0.238   | P=0.046*   | P=0.080    | P=0.134    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals |             |             |             |             |
|---------------------|-------------|-------------|-------------|-------------|
| DOSE                | 0 ppm       | 100 ppm     | 200 ppm     | 400 ppm     |
| HEART               |             |             |             |             |
| CARDIOMYOPATHY      |             |             |             |             |
| LESION RATES        |             |             |             |             |
| OVERALL             | 34/50 (68%) | 29/50 (58%) | 41/49 (84%) | 28/50 (56%) |
| POLY 3 RATE         | 34/46.87    | 29/45.57    | 41/47.3     | 28/44.06    |
| POLY 3 PERCENT      | 72.54%      | 63.64%      | 86.68%      | 63.55%      |
| TERMINAL            | 30/39 (77%) | 19/30 (63%) | 30/34 (88%) | 21/31 (68%) |
| FIRST INCIDENCE     | 557         | 506         | 194         | 383         |
| STATISTICAL TESTS   |             |             |             |             |
| POLY 3              | P=0.715     | P=0.880     | P=0.066     | P=0.883     |
| POLY 1.5            | P=0.770     | P=0.890     | P=0.056     | P=0.908     |
| POLY 6              | P=0.629     | P=0.857     | P=0.079     | P=0.833     |
| COCH-ARM / FISHERS  | P=0.814     | P=0.893     | P=0.056     | P=0.926     |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals     |           |           |           |           |
|-------------------------|-----------|-----------|-----------|-----------|
| DOSE                    | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| HEART: VALVE<br>PIGMENT |           |           |           |           |
| LESION RATES            |           |           |           |           |
| OVERALL                 | 1/50 (2%) | 1/50 (2%) | 0/49 (0%) | 0/50 (0%) |
| POLY 3 RATE             | 1/45.06   | 1/41.23   | 0/41.88   | 0/41.67   |
| POLY 3 PERCENT          | 2.22%     | 2.43%     | 0%        | 0%        |
| TERMINAL                | 1/39 (3%) | 1/30 (3%) | 0/34 (0%) | 0/31 (0%) |
| FIRST INCIDENCE         | 729 (T)   | 729 (T)   | ---       | ---       |
| STATISTICAL TESTS       |           |           |           |           |
| POLY 3                  | P=0.948   | P=0.741   | P=0.975   | P=0.975   |
| POLY 1.5                | P=0.950   | P=0.750   | P=0.976   | P=0.976   |
| POLY 6                  | P=0.945   | P=0.727   | P=0.975   | P=0.974   |
| COCH-ARM / FISHERS      | P=0.953   | P=0.753   | P=1.000   | P=1.000   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                      |           |           |           |            |
|------------------------------------------|-----------|-----------|-----------|------------|
| DOSE                                     | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| <b>INTESTINE, SMALL, ILEUM</b>           |           |           |           |            |
| <b>CELLULARITY INCREASED: LYMPHOCYTE</b> |           |           |           |            |
| <b>LESION RATES</b>                      |           |           |           |            |
| OVERALL                                  | 1/50 (2%) | 0/50 (0%) | 0/49 (0%) | 4/48 (8%)  |
| POLY 3 RATE                              | 1/45.06   | 0/41.23   | 0/40.89   | 4/40.58    |
| POLY 3 PERCENT                           | 2.22%     | 0%        | 0%        | 9.86%      |
| TERMINAL                                 | 1/39 (3%) | 0/30 (0%) | 0/33 (0%) | 4/31 (13%) |
| FIRST INCIDENCE                          | 729 (T)   | ---       | ---       | 729 (T)    |
| <b>STATISTICAL TESTS</b>                 |           |           |           |            |
| POLY 3                                   | P=0.023*  | P=0.975   | P=0.974   | P=0.148    |
| POLY 1.5                                 | P=0.023*  | P=0.976   | P=0.975   | P=0.156    |
| POLY 6                                   | P=0.023*  | P=0.973   | P=0.974   | P=0.138    |
| COCH-ARM / FISHERS                       | P=0.025*  | P=1.000   | P=1.000   | P=0.168    |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals             |             |             |             |             |
|---------------------------------|-------------|-------------|-------------|-------------|
| DOSE                            | 0 ppm       | 100 ppm     | 200 ppm     | 400 ppm     |
| KIDNEY                          |             |             |             |             |
| CHRONIC PROGRESSIVE NEPHROPATHY |             |             |             |             |
| LESION RATES                    |             |             |             |             |
| OVERALL                         | 40/49 (82%) | 33/50 (66%) | 30/50 (60%) | 32/50 (64%) |
| POLY 3 RATE                     | 40/47.64    | 33/45.49    | 30/43.69    | 32/44.33    |
| POLY 3 PERCENT                  | 83.96%      | 72.54%      | 68.66%      | 72.19%      |
| TERMINAL                        | 34/39 (87%) | 23/30 (77%) | 26/34 (76%) | 26/31 (84%) |
| FIRST INCIDENCE                 | 369         | 506         | 555         | 383         |
| STATISTICAL TESTS               |             |             |             |             |
| POLY 3                          | P=0.919     | P=0.953     | P=0.980     | P=0.960     |
| POLY 1.5                        | P=0.945     | P=0.965     | P=0.985     | P=0.976     |
| POLY 6                          | P=0.866     | P=0.934     | P=0.978     | P=0.917     |
| COCH-ARM / FISHERS              | P=0.963     | P=0.978     | P=0.995     | P=0.986     |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals |           |           |           |           |
|---------------------|-----------|-----------|-----------|-----------|
| DOSE                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| KIDNEY              |           |           |           |           |
| INFARCT             |           |           |           |           |
| LESION RATES        |           |           |           |           |
| OVERALL             | 2/49 (4%) | 1/50 (2%) | 0/50 (0%) | 2/50 (4%) |
| POLY 3 RATE         | 2/45.31   | 1/41.34   | 0/41.89   | 2/41.67   |
| POLY 3 PERCENT      | 4.41%     | 2.42%     | 0%        | 4.8%      |
| TERMINAL            | 1/39 (3%) | 0/30 (0%) | 0/34 (0%) | 2/31 (6%) |
| FIRST INCIDENCE     | 600       | 699       | ---       | 729 (T)   |
| STATISTICAL TESTS   |           |           |           |           |
| POLY 3              | P=0.581   | P=0.861   | P=0.982   | P=0.663   |
| POLY 1.5            | P=0.587   | P=0.870   | P=0.982   | P=0.679   |
| POLY 6              | P=0.575   | P=0.848   | P=0.981   | P=0.642   |
| COCH-ARM / FISHERS  | P=0.596   | P=0.883   | P=1.000   | P=0.699   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals                           |           |           |           |           |
|-----------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                          | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| KIDNEY: CYTOPLASMIC, RENAL TUBULE VACUOLATION |           |           |           |           |
| LESION RATES                                  |           |           |           |           |
| OVERALL                                       | 0/49 (0%) | 4/50 (8%) | 0/50 (0%) | 2/50 (4%) |
| POLY 3 RATE                                   | 0/44.87   | 4/43.2    | 0/41.89   | 2/42.29   |
| POLY 3 PERCENT                                | 0%        | 9.26%     | 0%        | 4.73%     |
| TERMINAL                                      | 0/39 (0%) | 1/30 (3%) | 0/34 (0%) | 0/31 (0%) |
| FIRST INCIDENCE                               | ---       | 365       | ---       | 563       |
| STATISTICAL TESTS                             |           |           |           |           |
| POLY 3                                        | P=0.405   | P=0.055   |           | P=0.224   |
| POLY 1.5                                      | P=0.422   | P=0.059   |           | P=0.231   |
| POLY 6                                        | P=0.385   | P=0.051   |           | P=0.216   |
| COCH-ARM / FISHERS                            | P=0.450   | P=0.061   |           | P=0.253   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals |           |           |           |           |
|---------------------|-----------|-----------|-----------|-----------|
| DOSE                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| KIDNEY: PELVIS      |           |           |           |           |
| DILATION            |           |           |           |           |
| LESION RATES        |           |           |           |           |
| OVERALL             | 4/49 (8%) | 1/50 (2%) | 0/50 (0%) | 4/50 (8%) |
| POLY 3 RATE         | 4/45.3    | 1/41.44   | 0/41.89   | 4/43.58   |
| POLY 3 PERCENT      | 8.83%     | 2.41%     | 0%        | 9.18%     |
| TERMINAL            | 3/39 (8%) | 0/30 (0%) | 0/34 (0%) | 0/31 (0%) |
| FIRST INCIDENCE     | 603       | 674       | ---       | 395       |
| STATISTICAL TESTS   |           |           |           |           |
| POLY 3              | P=0.486   | P=0.959   | P=0.994   | P=0.622   |
| POLY 1.5            | P=0.484   | P=0.963   | P=0.994   | P=0.636   |
| POLY 6              | P=0.488   | P=0.952   | P=0.994   | P=0.602   |
| COCH-ARM / FISHERS  | P=0.484   | P=0.973   | P=1.000   | P=0.654   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals       |           |           |           |           |
|---------------------------|-----------|-----------|-----------|-----------|
| DOSE                      | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| KIDNEY: PELVIS            |           |           |           |           |
| INFLAMMATION: SUPPURATIVE |           |           |           |           |
| LESION RATES              |           |           |           |           |
| OVERALL                   | 3/49 (6%) | 3/50 (6%) | 1/50 (2%) | 4/50 (8%) |
| POLY 3 RATE               | 3/45.15   | 3/41.85   | 1/41.89   | 4/42.76   |
| POLY 3 PERCENT            | 6.64%     | 7.17%     | 2.39%     | 9.36%     |
| TERMINAL                  | 2/39 (5%) | 1/30 (3%) | 1/34 (3%) | 2/31 (6%) |
| FIRST INCIDENCE           | 653       | 609       | 729 (T)   | 477       |
| STATISTICAL TESTS         |           |           |           |           |
| POLY 3                    | P=0.420   | P=0.627   | P=0.927   | P=0.470   |
| POLY 1.5                  | P=0.430   | P=0.646   | P=0.929   | P=0.487   |
| POLY 6                    | P=0.407   | P=0.602   | P=0.924   | P=0.448   |
| COCH-ARM / FISHERS        | P=0.445   | P=0.671   | P=0.944   | P=0.511   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals       |            |           |           |            |
|---------------------------|------------|-----------|-----------|------------|
| DOSE                      | 0 ppm      | 100 ppm   | 200 ppm   | 400 ppm    |
| KIDNEY: RENAL TUBULE CYST |            |           |           |            |
| LESION RATES              |            |           |           |            |
| OVERALL                   | 7/49 (14%) | 1/50 (2%) | 0/50 (0%) | 3/50 (6%)  |
| POLY 3 RATE               | 7/44.87    | 1/41.23   | 0/41.89   | 3/41.67    |
| POLY 3 PERCENT            | 15.6%      | 2.43%     | 0%        | 7.2%       |
| TERMINAL                  | 7/39 (18%) | 1/30 (3%) | 0/34 (0%) | 3/31 (10%) |
| FIRST INCIDENCE           | 729 (T)    | 729 (T)   | ---       | 729 (T)    |
| STATISTICAL TESTS         |            |           |           |            |
| POLY 3                    | P=0.943    | P=0.994   | P=0.999   | P=0.940    |
| POLY 1.5                  | P=0.942    | P=0.995   | P=0.999   | P=0.947    |
| POLY 6                    | P=0.945    | P=0.992   | P=0.999   | P=0.930    |
| COCH-ARM / FISHERS        | P=0.939    | P=0.997   | P=1.000   | P=0.957    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals                               |           |           |           |           |
|---------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                              | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| KIDNEY: RENAL TUBULE<br>INFLAMMATION: SUPPURATIVE |           |           |           |           |
| LESION RATES                                      |           |           |           |           |
| OVERALL                                           | 0/49 (0%) | 1/50 (2%) | 0/50 (0%) | 2/50 (4%) |
| POLY 3 RATE                                       | 0/44.87   | 1/41.79   | 0/41.89   | 2/42.94   |
| POLY 3 PERCENT                                    | 0%        | 2.39%     | 0%        | 4.66%     |
| TERMINAL                                          | 0/39 (0%) | 0/30 (0%) | 0/34 (0%) | 0/31 (0%) |
| FIRST INCIDENCE                                   | ---       | 554       | ---       | 395       |
| STATISTICAL TESTS                                 |           |           |           |           |
| POLY 3                                            | P=0.132   | P=0.486   |           | P=0.227   |
| POLY 1.5                                          | P=0.136   | P=0.494   |           | P=0.234   |
| POLY 6                                            | P=0.127   | P=0.475   |           | P=0.219   |
| COCH-ARM / FISHERS                                | P=0.142   | P=0.505   |           | P=0.253   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals           |           |           |           |           |
|-------------------------------|-----------|-----------|-----------|-----------|
| DOSE                          | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| KIDNEY: RENAL TUBULE NECROSIS |           |           |           |           |
| LESION RATES                  |           |           |           |           |
| OVERALL                       | 0/49 (0%) | 0/50 (0%) | 0/50 (0%) | 2/50 (4%) |
| POLY 3 RATE                   | 0/44.87   | 0/41.23   | 0/41.89   | 2/42.1    |
| POLY 3 PERCENT                | 0%        | 0%        | 0%        | 4.75%     |
| TERMINAL                      | 0/39 (0%) | 0/30 (0%) | 0/34 (0%) | 1/31 (3%) |
| FIRST INCIDENCE               | ---       | ---       | ---       | 603       |
| STATISTICAL TESTS             |           |           |           |           |
| POLY 3                        | P=0.044*  |           |           | P=0.223   |
| POLY 1.5                      | P=0.045*  |           |           | P=0.231   |
| POLY 6                        | P=0.044*  |           |           | P=0.214   |
| COCH-ARM / FISHERS            | P=0.047*  |           |           | P=0.253   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

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Test Compound: alpha-Pinene  
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STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals       |           |           |           |           |
|---------------------------|-----------|-----------|-----------|-----------|
| DOSE                      | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LARYNX                    |           |           |           |           |
| INFLAMMATION: SUPPURATIVE |           |           |           |           |
| LESION RATES              |           |           |           |           |
| OVERALL                   | 1/48 (2%) | 0/50 (0%) | 0/48 (0%) | 0/49 (0%) |
| POLY 3 RATE               | 1/44.15   | 0/41.23   | 0/41.86   | 0/40.93   |
| POLY 3 PERCENT            | 2.27%     | 0%        | 0%        | 0%        |
| TERMINAL                  | 1/39 (3%) | 0/30 (0%) | 0/34 (0%) | 0/31 (0%) |
| FIRST INCIDENCE           | 729 (T)   | ---       | ---       | ---       |
| STATISTICAL TESTS         |           |           |           |           |
| POLY 3                    | P=0.968   | P=0.975   | P=0.976   | P=0.975   |
| POLY 1.5                  | P=0.969   | P=0.977   | P=0.976   | P=0.976   |
| POLY 6                    | P=0.968   | P=0.973   | P=0.975   | P=0.973   |
| COCH-ARM / FISHERS        | P=0.969   | P=1.000   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals       |            |           |           |           |
|---------------------------|------------|-----------|-----------|-----------|
| DOSE                      | 0 ppm      | 100 ppm   | 200 ppm   | 400 ppm   |
| LARYNX: GLAND             |            |           |           |           |
| INFLAMMATION: SUPPURATIVE |            |           |           |           |
| LESION RATES              |            |           |           |           |
| OVERALL                   | 5/48 (10%) | 1/50 (2%) | 0/48 (0%) | 3/49 (6%) |
| POLY 3 RATE               | 5/44.15    | 1/41.23   | 0/41.86   | 3/41.12   |
| POLY 3 PERCENT            | 11.33%     | 2.43%     | 0%        | 7.3%      |
| TERMINAL                  | 5/39 (13%) | 1/30 (3%) | 0/34 (0%) | 2/31 (6%) |
| FIRST INCIDENCE           | 729 (T)    | 729 (T)   | ---       | 680       |
| STATISTICAL TESTS         |            |           |           |           |
| POLY 3                    | P=0.814    | P=0.979   | P=0.997   | P=0.842   |
| POLY 1.5                  | P=0.812    | P=0.982   | P=0.997   | P=0.855   |
| POLY 6                    | P=0.816    | P=0.975   | P=0.997   | P=0.825   |
| COCH-ARM / FISHERS        | P=0.809    | P=0.988   | P=1.000   | P=0.873   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals |           |           |           |            |
|---------------------|-----------|-----------|-----------|------------|
| DOSE                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| LIVER               |           |           |           |            |
| BASOPHILIC FOCUS    |           |           |           |            |
| LESION RATES        |           |           |           |            |
| OVERALL             | 1/50 (2%) | 2/50 (4%) | 3/49 (6%) | 7/50 (14%) |
| POLY 3 RATE         | 1/45.06   | 2/41.23   | 3/42.16   | 7/42.18    |
| POLY 3 PERCENT      | 2.22%     | 4.85%     | 7.12%     | 16.59%     |
| TERMINAL            | 1/39 (3%) | 2/30 (7%) | 1/34 (3%) | 5/31 (16%) |
| FIRST INCIDENCE     | 729 (T)   | 729 (T)   | 667       | 603        |
| STATISTICAL TESTS   |           |           |           |            |
| POLY 3              | P=0.007** | P=0.469   | P=0.282   | P=0.023*   |
| POLY 1.5            | P=0.007** | P=0.483   | P=0.284   | P=0.026*   |
| POLY 6              | P=0.006** | P=0.449   | P=0.280   | P=0.020*   |
| COCH-ARM / FISHERS  | P=0.009** | P=0.500   | P=0.301   | P=0.030*   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals |            |            |            |           |
|---------------------|------------|------------|------------|-----------|
| DOSE                | 0 ppm      | 100 ppm    | 200 ppm    | 400 ppm   |
| LIVER               |            |            |            |           |
| CLEAR CELL FOCUS    |            |            |            |           |
| LESION RATES        |            |            |            |           |
| OVERALL             | 8/50 (16%) | 5/50 (10%) | 8/49 (16%) | 1/50 (2%) |
| POLY 3 RATE         | 8/45.06    | 5/41.67    | 8/42.86    | 1/41.67   |
| POLY 3 PERCENT      | 17.76%     | 12%        | 18.67%     | 2.4%      |
| TERMINAL            | 8/39 (21%) | 4/30 (13%) | 7/34 (21%) | 1/31 (3%) |
| FIRST INCIDENCE     | 729 (T)    | 599        | 194        | 729 (T)   |
| STATISTICAL TESTS   |            |            |            |           |
| POLY 3              | P=0.983    | P=0.853    | P=0.566    | P=0.997   |
| POLY 1.5            | P=0.985    | P=0.867    | P=0.571    | P=0.997   |
| POLY 6              | P=0.980    | P=0.831    | P=0.560    | P=0.996   |
| COCH-ARM / FISHERS  | P=0.986    | P=0.883    | P=0.590    | P=0.999   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals |            |            |           |            |
|---------------------|------------|------------|-----------|------------|
| DOSE                | 0 ppm      | 100 ppm    | 200 ppm   | 400 ppm    |
| LIVER               |            |            |           |            |
| EOSINOPHILIC FOCUS  |            |            |           |            |
| LESION RATES        |            |            |           |            |
| OVERALL             | 7/50 (14%) | 3/50 (6%)  | 3/49 (6%) | 9/50 (18%) |
| POLY 3 RATE         | 7/45.5     | 3/41.23    | 3/41.88   | 9/42.96    |
| POLY 3 PERCENT      | 15.38%     | 7.28%      | 7.16%     | 20.95%     |
| TERMINAL            | 6/39 (15%) | 3/30 (10%) | 3/34 (9%) | 5/31 (16%) |
| FIRST INCIDENCE     | 600        | 729 (T)    | 729 (T)   | 542        |
| STATISTICAL TESTS   |            |            |           |            |
| POLY 3              | P=0.190    | P=0.935    | P=0.938   | P=0.344    |
| POLY 1.5            | P=0.193    | P=0.944    | P=0.941   | P=0.365    |
| POLY 6              | P=0.187    | P=0.921    | P=0.936   | P=0.317    |
| COCH-ARM / FISHERS  | P=0.200    | P=0.954    | P=0.951   | P=0.393    |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals          |           |           |           |           |
|------------------------------|-----------|-----------|-----------|-----------|
| DOSE                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LIVER                        |           |           |           |           |
| EXTRAMEDULLARY HEMATOPOIESIS |           |           |           |           |
| LESION RATES                 |           |           |           |           |
| OVERALL                      | 2/50 (4%) | 0/50 (0%) | 0/49 (0%) | 1/50 (2%) |
| POLY 3 RATE                  | 2/45.48   | 0/41.23   | 0/41.88   | 1/42.26   |
| POLY 3 PERCENT               | 4.4%      | 0%        | 0%        | 2.37%     |
| TERMINAL                     | 1/39 (3%) | 0/30 (0%) | 0/34 (0%) | 0/31 (0%) |
| FIRST INCIDENCE              | 606       | ---       | ---       | 541       |
| STATISTICAL TESTS            |           |           |           |           |
| POLY 3                       | P=0.814   | P=0.981   | P=0.982   | P=0.865   |
| POLY 1.5                     | P=0.812   | P=0.982   | P=0.982   | P=0.870   |
| POLY 6                       | P=0.816   | P=0.979   | P=0.981   | P=0.856   |
| COCH-ARM / FISHERS           | P=0.811   | P=1.000   | P=1.000   | P=0.879   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals   |             |             |           |           |
|-----------------------|-------------|-------------|-----------|-----------|
| DOSE                  | 0 ppm       | 100 ppm     | 200 ppm   | 400 ppm   |
| LIVER                 |             |             |           |           |
| FATTY CHANGE: DIFFUSE |             |             |           |           |
| LESION RATES          |             |             |           |           |
| OVERALL               | 13/50 (26%) | 10/50 (20%) | 3/49 (6%) | 3/50 (6%) |
| POLY 3 RATE           | 13/45.44    | 10/42.77    | 3/42.06   | 3/42.79   |
| POLY 3 PERCENT        | 28.61%      | 23.38%      | 7.13%     | 7.01%     |
| TERMINAL              | 12/39 (31%) | 7/30 (23%)  | 2/34 (6%) | 1/31 (3%) |
| FIRST INCIDENCE       | 621         | 554         | 681       | 542       |
| STATISTICAL TESTS     |             |             |           |           |
| POLY 3                | P=0.999     | P=0.789     | P=0.998   | P=0.999   |
| POLY 1.5              | P=0.999     | P=0.808     | P=0.999   | P=0.999   |
| POLY 6                | P=0.999     | P=0.757     | P=0.998   | P=0.998   |
| COCH-ARM / FISHERS    | P=0.999     | P=0.829     | P=0.999   | P=0.999   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals          |           |           |           |           |
|------------------------------|-----------|-----------|-----------|-----------|
| DOSE                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LIVER                        |           |           |           |           |
| INFLAMMATION: CHRONIC-ACTIVE |           |           |           |           |
| LESION RATES                 |           |           |           |           |
| OVERALL                      | 0/50 (0%) | 0/50 (0%) | 1/49 (2%) | 2/50 (4%) |
| POLY 3 RATE                  | 0/45.06   | 0/41.23   | 1/41.88   | 2/41.67   |
| POLY 3 PERCENT               | 0%        | 0%        | 2.39%     | 4.8%      |
| TERMINAL                     | 0/39 (0%) | 0/30 (0%) | 1/34 (3%) | 2/31 (6%) |
| FIRST INCIDENCE              | ---       | ---       | 729 (T)   | 729 (T)   |
| STATISTICAL TESTS            |           |           |           |           |
| POLY 3                       | P=0.065   |           | P=0.485   | P=0.220   |
| POLY 1.5                     | P=0.067   |           | P=0.487   | P=0.227   |
| POLY 6                       | P=0.062   |           | P=0.484   | P=0.210   |
| COCH-ARM / FISHERS           | P=0.070   |           | P=0.495   | P=0.247   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals |           |           |           |           |
|---------------------|-----------|-----------|-----------|-----------|
| DOSE                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LIVER               |           |           |           |           |
| INFLAMMATION: FOCAL |           |           |           |           |
| LESION RATES        |           |           |           |           |
| OVERALL             | 2/50 (4%) | 2/50 (4%) | 1/49 (2%) | 1/50 (2%) |
| POLY 3 RATE         | 2/45.06   | 2/41.69   | 1/41.88   | 1/41.67   |
| POLY 3 PERCENT      | 4.44%     | 4.8%      | 2.39%     | 2.4%      |
| TERMINAL            | 2/39 (5%) | 1/30 (3%) | 1/34 (3%) | 1/31 (3%) |
| FIRST INCIDENCE     | 729 (T)   | 591       | 729 (T)   | 729 (T)   |
| STATISTICAL TESTS   |           |           |           |           |
| POLY 3              | P=0.818   | P=0.666   | P=0.865   | P=0.864   |
| POLY 1.5            | P=0.825   | P=0.678   | P=0.866   | P=0.870   |
| POLY 6              | P=0.808   | P=0.648   | P=0.863   | P=0.855   |
| COCH-ARM / FISHERS  | P=0.836   | P=0.691   | P=0.875   | P=0.879   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals |            |            |           |            |
|---------------------|------------|------------|-----------|------------|
| DOSE                | 0 ppm      | 100 ppm    | 200 ppm   | 400 ppm    |
| LIVER               |            |            |           |            |
| MIXED CELL FOCUS    |            |            |           |            |
| LESION RATES        |            |            |           |            |
| OVERALL             | 4/50 (8%)  | 6/50 (12%) | 3/49 (6%) | 5/50 (10%) |
| POLY 3 RATE         | 4/45.06    | 6/41.23    | 3/41.88   | 5/41.67    |
| POLY 3 PERCENT      | 8.88%      | 14.55%     | 7.16%     | 12%        |
| TERMINAL            | 4/39 (10%) | 6/30 (20%) | 3/34 (9%) | 5/31 (16%) |
| FIRST INCIDENCE     | 729 (T)    | 729 (T)    | 729 (T)   | 729 (T)    |
| STATISTICAL TESTS   |            |            |           |            |
| POLY 3              | P=0.487    | P=0.314    | P=0.752   | P=0.451    |
| POLY 1.5            | P=0.506    | P=0.339    | P=0.756   | P=0.472    |
| POLY 6              | P=0.462    | P=0.280    | P=0.749   | P=0.422    |
| COCH-ARM / FISHERS  | P=0.532    | P=0.370    | P=0.774   | P=0.500    |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals              |           |             |             |             |
|----------------------------------|-----------|-------------|-------------|-------------|
| DOSE                             | 0 ppm     | 100 ppm     | 200 ppm     | 400 ppm     |
| <b>LIVER</b>                     |           |             |             |             |
| <b>MULTINUCLEATED HEPATOCYTE</b> |           |             |             |             |
| <b>LESION RATES</b>              |           |             |             |             |
| OVERALL                          | 3/50 (6%) | 11/50 (22%) | 10/49 (20%) | 23/50 (46%) |
| POLY 3 RATE                      | 3/45.06   | 11/42.23    | 10/42.3     | 23/45.45    |
| POLY 3 PERCENT                   | 6.66%     | 26.05%      | 23.64%      | 50.61%      |
| TERMINAL                         | 3/39 (8%) | 9/30 (30%)  | 8/34 (24%)  | 15/31 (48%) |
| FIRST INCIDENCE                  | 729 (T)   | 554         | 624         | 383         |
| <b>STATISTICAL TESTS</b>         |           |             |             |             |
| POLY 3                           | P<0.001** | P=0.013*    | P=0.025*    | P<0.001**   |
| POLY 1.5                         | P<0.001** | P=0.016*    | P=0.026*    | P<0.001**   |
| POLY 6                           | P<0.001** | P=0.010**   | P=0.024*    | P<0.001**   |
| COCH-ARM / FISHERS               | P<0.001** | P=0.020*    | P=0.033*    | P<0.001**   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals |           |           |           |            |
|---------------------|-----------|-----------|-----------|------------|
| DOSE                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| LIVER               |           |           |           |            |
| NECROSIS            |           |           |           |            |
| LESION RATES        |           |           |           |            |
| OVERALL             | 1/50 (2%) | 3/50 (6%) | 2/49 (4%) | 7/50 (14%) |
| POLY 3 RATE         | 1/45.07   | 3/42.43   | 2/41.88   | 7/44.67    |
| POLY 3 PERCENT      | 2.22%     | 7.07%     | 4.78%     | 15.67%     |
| TERMINAL            | 0/39 (0%) | 0/30 (0%) | 2/34 (6%) | 2/31 (6%)  |
| FIRST INCIDENCE     | 726       | 540       | 729 (T)   | 395        |
| STATISTICAL TESTS   |           |           |           |            |
| POLY 3              | P=0.013*  | P=0.284   | P=0.474   | P=0.029*   |
| POLY 1.5            | P=0.014*  | P=0.293   | P=0.478   | P=0.030*   |
| POLY 6              | P=0.013*  | P=0.271   | P=0.471   | P=0.027*   |
| COCH-ARM / FISHERS  | P=0.015*  | P=0.309   | P=0.492   | P=0.030*   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals |           |           |           |           |
|---------------------|-----------|-----------|-----------|-----------|
| DOSE                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LIVER               |           |           |           |           |
| TENSION LIPIDOSIS   |           |           |           |           |
| LESION RATES        |           |           |           |           |
| OVERALL             | 3/50 (6%) | 2/50 (4%) | 2/49 (4%) | 0/50 (0%) |
| POLY 3 RATE         | 3/45.44   | 2/41.79   | 2/41.88   | 0/41.67   |
| POLY 3 PERCENT      | 6.6%      | 4.79%     | 4.78%     | 0%        |
| TERMINAL            | 2/39 (5%) | 1/30 (3%) | 2/34 (6%) | 0/31 (0%) |
| FIRST INCIDENCE     | 621       | 554       | 729 (T)   | ---       |
| STATISTICAL TESTS   |           |           |           |           |
| POLY 3              | P=0.964   | P=0.793   | P=0.794   | P=0.989   |
| POLY 1.5            | P=0.967   | P=0.805   | P=0.798   | P=0.990   |
| POLY 6              | P=0.960   | P=0.775   | P=0.789   | P=0.987   |
| COCH-ARM / FISHERS  | P=0.970   | P=0.819   | P=0.813   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals |           |           |           |           |
|---------------------|-----------|-----------|-----------|-----------|
| DOSE                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LUNG                |           |           |           |           |
| HEMORRHAGE          |           |           |           |           |
| LESION RATES        |           |           |           |           |
| OVERALL             | 0/50 (0%) | 0/50 (0%) | 0/50 (0%) | 4/50 (8%) |
| POLY 3 RATE         | 0/45.06   | 0/41.23   | 0/41.89   | 4/42.37   |
| POLY 3 PERCENT      | 0%        | 0%        | 0%        | 9.44%     |
| TERMINAL            | 0/39 (0%) | 0/30 (0%) | 0/34 (0%) | 2/31 (6%) |
| FIRST INCIDENCE     | ---       | ---       | ---       | 603       |
| STATISTICAL TESTS   |           |           |           |           |
| POLY 3              | P=0.002** |           |           | P=0.053   |
| POLY 1.5            | P=0.003** |           |           | P=0.056   |
| POLY 6              | P=0.002** |           |           | P=0.049*  |
| COCH-ARM / FISHERS  | P=0.003** |           |           | P=0.059   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                                           |           |             |             |             |
|---------------------------------------------------------------|-----------|-------------|-------------|-------------|
| DOSE                                                          | 0 ppm     | 100 ppm     | 200 ppm     | 400 ppm     |
| <b>LUNG: ALVEOLAR/BRONCHIOLAR, EPITHELIUM<br/>HYPERPLASIA</b> |           |             |             |             |
| <b>LESION RATES</b>                                           |           |             |             |             |
| OVERALL                                                       | 2/50 (4%) | 10/50 (20%) | 20/50 (40%) | 27/50 (54%) |
| POLY 3 RATE                                                   | 2/45.06   | 10/42.21    | 20/42.03    | 27/45.57    |
| POLY 3 PERCENT                                                | 4.44%     | 23.69%      | 47.59%      | 59.25%      |
| TERMINAL                                                      | 2/39 (5%) | 8/30 (27%)  | 18/34 (53%) | 18/31 (58%) |
| FIRST INCIDENCE                                               | 729 (T)   | 565         | 708         | 383         |
| <b>STATISTICAL TESTS</b>                                      |           |             |             |             |
| POLY 3                                                        | P<0.001** | P=0.009**   | P<0.001**   | P<0.001**   |
| POLY 1.5                                                      | P<0.001** | P=0.011*    | P<0.001**   | P<0.001**   |
| POLY 6                                                        | P<0.001** | P=0.007**   | P<0.001**   | P<0.001**   |
| COCH-ARM / FISHERS                                            | P<0.001** | P=0.014*    | P<0.001**   | P<0.001**   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                                 |           |           |           |           |
|-----------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LUNG: ALVEOLUS<br>INFILTRATION CELLULAR: HISTIOCYTE |           |           |           |           |
| LESION RATES                                        |           |           |           |           |
| OVERALL                                             | 0/50 (0%) | 1/50 (2%) | 0/50 (0%) | 1/50 (2%) |
| POLY 3 RATE                                         | 0/45.06   | 1/41.23   | 0/41.89   | 1/41.67   |
| POLY 3 PERCENT                                      | 0%        | 2.43%     | 0%        | 2.4%      |
| TERMINAL                                            | 0/39 (0%) | 1/30 (3%) | 0/34 (0%) | 1/31 (3%) |
| FIRST INCIDENCE                                     | ---       | 729 (T)   | ---       | 729 (T)   |
| STATISTICAL TESTS                                   |           |           |           |           |
| POLY 3                                              | P=0.382   | P=0.482   |           | P=0.484   |
| POLY 1.5                                            | P=0.392   | P=0.490   |           | P=0.491   |
| POLY 6                                              | P=0.370   | P=0.471   |           | P=0.475   |
| COCH-ARM / FISHERS                                  | P=0.405   | P=0.500   |           | P=0.500   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals                                           |           |            |           |           |
|---------------------------------------------------------------|-----------|------------|-----------|-----------|
| DOSE                                                          | 0 ppm     | 100 ppm    | 200 ppm   | 400 ppm   |
| LUNG: PERIVASCULAR<br>INFILTRATION CELLULAR: MONONUCLEAR CELL |           |            |           |           |
| LESION RATES                                                  |           |            |           |           |
| OVERALL                                                       | 1/50 (2%) | 3/50 (6%)  | 0/50 (0%) | 0/50 (0%) |
| POLY 3 RATE                                                   | 1/45.06   | 3/41.23    | 0/41.89   | 0/41.67   |
| POLY 3 PERCENT                                                | 2.22%     | 7.28%      | 0%        | 0%        |
| TERMINAL                                                      | 1/39 (3%) | 3/30 (10%) | 0/34 (0%) | 0/31 (0%) |
| FIRST INCIDENCE                                               | 729 (T)   | 729 (T)    | ---       | ---       |
| STATISTICAL TESTS                                             |           |            |           |           |
| POLY 3                                                        | P=0.948   | P=0.274    | P=0.975   | P=0.975   |
| POLY 1.5                                                      | P=0.952   | P=0.288    | P=0.976   | P=0.976   |
| POLY 6                                                        | P=0.942   | P=0.255    | P=0.975   | P=0.974   |
| COCH-ARM / FISHERS                                            | P=0.956   | P=0.309    | P=1.000   | P=1.000   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                              |           |           |           |           |
|--------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                             | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LYMPH NODE, BRONCHIAL<br>HYPERPLASIA: LYMPHOCYTE |           |           |           |           |
| LESION RATES                                     |           |           |           |           |
| OVERALL                                          | 1/41 (2%) | 0/45 (0%) | 0/44 (0%) | 0/44 (0%) |
| POLY 3 RATE                                      | 1/36.15   | 0/37      | 0/36.4    | 0/36.37   |
| POLY 3 PERCENT                                   | 2.77%     | 0%        | 0%        | 0%        |
| TERMINAL                                         | 1/31 (3%) | 0/28 (0%) | 0/29 (0%) | 0/28 (0%) |
| FIRST INCIDENCE                                  | 729 (T)   | ---       | ---       | ---       |
| STATISTICAL TESTS                                |           |           |           |           |
| POLY 3                                           | P=0.971   | P=0.978   | P=0.978   | P=0.978   |
| POLY 1.5                                         | P=0.971   | P=0.979   | P=0.978   | P=0.978   |
| POLY 6                                           | P=0.971   | P=0.977   | P=0.978   | P=0.977   |
| COCH-ARM / FISHERS                               | P=0.971   | P=1.000   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals                               |           |           |           |            |
|---------------------------------------------------|-----------|-----------|-----------|------------|
| DOSE                                              | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| LYMPH NODE, MANDIBULAR<br>HYPERPLASIA: LYMPHOCYTE |           |           |           |            |
| LESION RATES                                      |           |           |           |            |
| OVERALL                                           | 3/47 (6%) | 1/47 (2%) | 3/48 (6%) | 6/48 (13%) |
| POLY 3 RATE                                       | 3/42.06   | 1/39.17   | 3/41.24   | 6/40.39    |
| POLY 3 PERCENT                                    | 7.13%     | 2.55%     | 7.27%     | 14.86%     |
| TERMINAL                                          | 3/36 (8%) | 1/30 (3%) | 3/34 (9%) | 6/30 (20%) |
| FIRST INCIDENCE                                   | 729 (T)   | 729 (T)   | 729 (T)   | 729 (T)    |
| STATISTICAL TESTS                                 |           |           |           |            |
| POLY 3                                            | P=0.077   | P=0.928   | P=0.654   | P=0.220    |
| POLY 1.5                                          | P=0.080   | P=0.932   | P=0.653   | P=0.235    |
| POLY 6                                            | P=0.074   | P=0.921   | P=0.656   | P=0.200    |
| COCH-ARM / FISHERS                                | P=0.085   | P=0.942   | P=0.671   | P=0.254    |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals            |           |           |           |           |
|--------------------------------|-----------|-----------|-----------|-----------|
| DOSE                           | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LYMPH NODE, MANDIBULAR PIGMENT |           |           |           |           |
| LESION RATES                   |           |           |           |           |
| OVERALL                        | 0/47 (0%) | 0/47 (0%) | 2/48 (4%) | 0/48 (0%) |
| POLY 3 RATE                    | 0/42.06   | 0/39.17   | 2/41.42   | 0/40.39   |
| POLY 3 PERCENT                 | 0%        | 0%        | 4.83%     | 0%        |
| TERMINAL                       | 0/36 (0%) | 0/30 (0%) | 1/34 (3%) | 0/30 (0%) |
| FIRST INCIDENCE                | ---       | ---       | 681       | ---       |
| STATISTICAL TESTS              |           |           |           |           |
| POLY 3                         | P=0.577   |           | P=0.234   |           |
| POLY 1.5                       | P=0.589   |           | P=0.233   |           |
| POLY 6                         | P=0.557   |           | P=0.235   |           |
| COCH-ARM / FISHERS             | P=0.600   |           | P=0.253   |           |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                                |           |           |           |           |
|----------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                               | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LYMPH NODE, MEDIASTINAL<br>HYPERPLASIA: LYMPHOCYTE |           |           |           |           |
| LESION RATES                                       |           |           |           |           |
| OVERALL                                            | 0/42 (0%) | 0/44 (0%) | 0/41 (0%) | 1/38 (3%) |
| POLY 3 RATE                                        | 0/38.56   | 0/36.13   | 0/33.53   | 1/30.52   |
| POLY 3 PERCENT                                     | 0%        | 0%        | 0%        | 3.28%     |
| TERMINAL                                           | 0/33 (0%) | 0/26 (0%) | 0/28 (0%) | 1/23 (4%) |
| FIRST INCIDENCE                                    | ---       | ---       | ---       | 729 (T)   |
| STATISTICAL TESTS                                  |           |           |           |           |
| POLY 3                                             | P=0.171   |           |           | P=0.454   |
| POLY 1.5                                           | P=0.175   |           |           | P=0.464   |
| POLY 6                                             | P=0.166   |           |           | P=0.442   |
| COCH-ARM / FISHERS                                 | P=0.182   |           |           | P=0.475   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals                                          |           |           |           |           |
|--------------------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LYMPH NODE, MEDIASTINAL<br>INFILTRATION CELLULAR: HISTIOCYTE |           |           |           |           |
| LESION RATES                                                 |           |           |           |           |
| OVERALL                                                      | 0/42 (0%) | 0/44 (0%) | 2/41 (5%) | 2/38 (5%) |
| POLY 3 RATE                                                  | 0/38.56   | 0/36.13   | 2/34.26   | 2/30.52   |
| POLY 3 PERCENT                                               | 0%        | 0%        | 5.84%     | 6.55%     |
| TERMINAL                                                     | 0/33 (0%) | 0/26 (0%) | 1/28 (4%) | 2/23 (9%) |
| FIRST INCIDENCE                                              | ---       | ---       | 472       | 729 (T)   |
| STATISTICAL TESTS                                            |           |           |           |           |
| POLY 3                                                       | P=0.055   |           | P=0.211   | P=0.187   |
| POLY 1.5                                                     | P=0.060   |           | P=0.214   | P=0.198   |
| POLY 6                                                       | P=0.049*  |           | P=0.210   | P=0.176   |
| COCH-ARM / FISHERS                                           | P=0.069   |           | P=0.241   | P=0.222   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals               |           |           |           |           |
|-----------------------------------|-----------|-----------|-----------|-----------|
| DOSE                              | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LYMPH NODE, MESENTERIC HEMORRHAGE |           |           |           |           |
| LESION RATES                      |           |           |           |           |
| OVERALL                           | 2/50 (4%) | 0/45 (0%) | 0/45 (0%) | 2/48 (4%) |
| POLY 3 RATE                       | 2/45.06   | 0/38.6    | 0/37.08   | 2/41.29   |
| POLY 3 PERCENT                    | 4.44%     | 0%        | 0%        | 4.84%     |
| TERMINAL                          | 2/39 (5%) | 0/29 (0%) | 0/30 (0%) | 0/31 (0%) |
| FIRST INCIDENCE                   | 729 (T)   | ---       | ---       | 616       |
| STATISTICAL TESTS                 |           |           |           |           |
| POLY 3                            | P=0.491   | P=0.979   | P=0.978   | P=0.662   |
| POLY 1.5                          | P=0.491   | P=0.980   | P=0.978   | P=0.670   |
| POLY 6                            | P=0.492   | P=0.978   | P=0.977   | P=0.653   |
| COCH-ARM / FISHERS                | P=0.494   | P=1.000   | P=1.000   | P=0.676   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                               |           |           |           |            |
|---------------------------------------------------|-----------|-----------|-----------|------------|
| DOSE                                              | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| LYMPH NODE, MESENTERIC<br>HYPERPLASIA: LYMPHOCYTE |           |           |           |            |
| LESION RATES                                      |           |           |           |            |
| OVERALL                                           | 3/50 (6%) | 1/45 (2%) | 1/45 (2%) | 6/48 (13%) |
| POLY 3 RATE                                       | 3/45.06   | 1/38.6    | 1/37.08   | 6/40.71    |
| POLY 3 PERCENT                                    | 6.66%     | 2.59%     | 2.7%      | 14.74%     |
| TERMINAL                                          | 3/39 (8%) | 1/29 (3%) | 1/30 (3%) | 6/31 (19%) |
| FIRST INCIDENCE                                   | 729 (T)   | 729 (T)   | 729 (T)   | 729 (T)    |
| STATISTICAL TESTS                                 |           |           |           |            |
| POLY 3                                            | P=0.069   | P=0.915   | P=0.908   | P=0.193    |
| POLY 1.5                                          | P=0.071   | P=0.919   | P=0.911   | P=0.206    |
| POLY 6                                            | P=0.066   | P=0.909   | P=0.907   | P=0.176    |
| COCH-ARM / FISHERS                                | P=0.078   | P=0.928   | P=0.928   | P=0.223    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals                                |           |           |           |           |
|----------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                               | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LYMPH NODE, MESENTERIC INFLAMMATION: GRANULOMATOUS |           |           |           |           |
| LESION RATES                                       |           |           |           |           |
| OVERALL                                            | 0/50 (0%) | 0/45 (0%) | 0/45 (0%) | 2/48 (4%) |
| POLY 3 RATE                                        | 0/45.06   | 0/38.6    | 0/37.08   | 2/40.71   |
| POLY 3 PERCENT                                     | 0%        | 0%        | 0%        | 4.91%     |
| TERMINAL                                           | 0/39 (0%) | 0/29 (0%) | 0/30 (0%) | 2/31 (6%) |
| FIRST INCIDENCE                                    | ---       | ---       | ---       | 729 (T)   |
| STATISTICAL TESTS                                  |           |           |           |           |
| POLY 3                                             | P=0.045*  |           |           | P=0.215   |
| POLY 1.5                                           | P=0.045*  |           |           | P=0.221   |
| POLY 6                                             | P=0.044*  |           |           | P=0.207   |
| COCH-ARM / FISHERS                                 | P=0.048*  |           |           | P=0.237   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals |           |           |           |           |
|---------------------|-----------|-----------|-----------|-----------|
| DOSE                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| NOSE                |           |           |           |           |
| FOREIGN BODY        |           |           |           |           |
| LESION RATES        |           |           |           |           |
| OVERALL             | 1/49 (2%) | 3/50 (6%) | 0/50 (0%) | 2/49 (4%) |
| POLY 3 RATE         | 1/44.87   | 3/42.13   | 0/41.89   | 2/41.17   |
| POLY 3 PERCENT      | 2.23%     | 7.12%     | 0%        | 4.86%     |
| TERMINAL            | 1/39 (3%) | 1/30 (3%) | 0/34 (0%) | 1/31 (3%) |
| FIRST INCIDENCE     | 729 (T)   | 365       | ---       | 667       |
| STATISTICAL TESTS   |           |           |           |           |
| POLY 3              | P=0.518   | P=0.283   | P=0.975   | P=0.470   |
| POLY 1.5            | P=0.532   | P=0.296   | P=0.976   | P=0.482   |
| POLY 6              | P=0.503   | P=0.264   | P=0.975   | P=0.456   |
| COCH-ARM / FISHERS  | P=0.554   | P=0.316   | P=1.000   | P=0.500   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                                          |           |           |           |            |
|--------------------------------------------------------------|-----------|-----------|-----------|------------|
| DOSE                                                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| <b>NOSE: NASOLACRIMAL DUCT<br/>INFLAMMATION: SUPPURATIVE</b> |           |           |           |            |
| <b>LESION RATES</b>                                          |           |           |           |            |
| OVERALL                                                      | 1/49 (2%) | 0/50 (0%) | 0/50 (0%) | 5/49 (10%) |
| POLY 3 RATE                                                  | 1/44.87   | 0/41.23   | 0/41.89   | 5/41.97    |
| POLY 3 PERCENT                                               | 2.23%     | 0%        | 0%        | 11.91%     |
| TERMINAL                                                     | 1/39 (3%) | 0/30 (0%) | 0/34 (0%) | 2/31 (6%)  |
| FIRST INCIDENCE                                              | 729 (T)   | ---       | ---       | 477        |
| <b>STATISTICAL TESTS</b>                                     |           |           |           |            |
| POLY 3                                                       | P=0.007** | P=0.975   | P=0.975   | P=0.086    |
| POLY 1.5                                                     | P=0.007** | P=0.976   | P=0.976   | P=0.092    |
| POLY 6                                                       | P=0.007** | P=0.973   | P=0.975   | P=0.079    |
| COCH-ARM / FISHERS                                           | P=0.008** | P=1.000   | P=1.000   | P=0.102    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals        |           |            |           |           |
|----------------------------|-----------|------------|-----------|-----------|
| DOSE                       | 0 ppm     | 100 ppm    | 200 ppm   | 400 ppm   |
| NOSE: OLFACTORY EPITHELIUM |           |            |           |           |
| METAPLASIA: RESPIRATORY    |           |            |           |           |
| LESION RATES               |           |            |           |           |
| OVERALL                    | 2/49 (4%) | 7/50 (14%) | 4/50 (8%) | 2/49 (4%) |
| POLY 3 RATE                | 2/45.25   | 7/41.72    | 4/42.13   | 2/41.3    |
| POLY 3 PERCENT             | 4.42%     | 16.78%     | 9.5%      | 4.84%     |
| TERMINAL                   | 1/39 (3%) | 5/30 (17%) | 3/34 (9%) | 1/31 (3%) |
| FIRST INCIDENCE            | 621       | 647        | 667       | 625       |
| STATISTICAL TESTS          |           |            |           |           |
| POLY 3                     | P=0.722   | P=0.060    | P=0.305   | P=0.661   |
| POLY 1.5                   | P=0.746   | P=0.070    | P=0.313   | P=0.674   |
| POLY 6                     | P=0.691   | P=0.050*   | P=0.298   | P=0.644   |
| COCH-ARM / FISHERS         | P=0.779   | P=0.085    | P=0.349   | P=0.691   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                         |             |             |            |            |
|---------------------------------------------|-------------|-------------|------------|------------|
| DOSE                                        | 0 ppm       | 100 ppm     | 200 ppm    | 400 ppm    |
| NOSE: RESPIRATORY EPITHELIUM<br>HYPERPLASIA |             |             |            |            |
| LESION RATES                                |             |             |            |            |
| OVERALL                                     | 12/49 (24%) | 12/50 (24%) | 9/50 (18%) | 5/49 (10%) |
| POLY 3 RATE                                 | 12/45.34    | 12/42.54    | 9/43.18    | 5/40.93    |
| POLY 3 PERCENT                              | 26.46%      | 28.21%      | 20.84%     | 12.21%     |
| TERMINAL                                    | 10/39 (26%) | 9/30 (30%)  | 6/34 (18%) | 5/31 (16%) |
| FIRST INCIDENCE                             | 621         | 565         | 558        | 729 (T)    |
| STATISTICAL TESTS                           |             |             |            |            |
| POLY 3                                      | P=0.974     | P=0.523     | P=0.807    | P=0.974    |
| POLY 1.5                                    | P=0.979     | P=0.562     | P=0.813    | P=0.979    |
| POLY 6                                      | P=0.967     | P=0.469     | P=0.807    | P=0.966    |
| COCH-ARM / FISHERS                          | P=0.984     | P=0.615     | P=0.850    | P=0.985    |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                                       |           |           |           |            |
|-----------------------------------------------------------|-----------|-----------|-----------|------------|
| DOSE                                                      | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| NOSE: RESPIRATORY EPITHELIUM<br>INFLAMMATION: SUPPURATIVE |           |           |           |            |
| LESION RATES                                              |           |           |           |            |
| OVERALL                                                   | 2/49 (4%) | 1/50 (2%) | 3/50 (6%) | 6/49 (12%) |
| POLY 3 RATE                                               | 2/45.69   | 1/41.23   | 3/42.36   | 6/41.25    |
| POLY 3 PERCENT                                            | 4.38%     | 2.43%     | 7.08%     | 14.55%     |
| TERMINAL                                                  | 0/39 (0%) | 1/30 (3%) | 0/34 (0%) | 4/31 (13%) |
| FIRST INCIDENCE                                           | 600       | 729 (T)   | 638       | 669        |
| STATISTICAL TESTS                                         |           |           |           |            |
| POLY 3                                                    | P=0.028*  | P=0.859   | P=0.466   | P=0.102    |
| POLY 1.5                                                  | P=0.030*  | P=0.869   | P=0.475   | P=0.114    |
| POLY 6                                                    | P=0.025*  | P=0.844   | P=0.459   | P=0.088    |
| COCH-ARM / FISHERS                                        | P=0.034*  | P=0.883   | P=0.510   | P=0.134    |

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

| Males: Core Animals                                  |           |           |           |           |
|------------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                                 | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| NOSE: RESPIRATORY EPITHELIUM<br>METAPLASIA: SQUAMOUS |           |           |           |           |
| LESION RATES                                         |           |           |           |           |
| OVERALL                                              | 1/49 (2%) | 0/50 (0%) | 2/50 (4%) | 2/49 (4%) |
| POLY 3 RATE                                          | 1/45.74   | 0/41.23   | 2/42.5    | 2/41.16   |
| POLY 3 PERCENT                                       | 2.19%     | 0%        | 4.71%     | 4.86%     |
| TERMINAL                                             | 0/39 (0%) | 0/30 (0%) | 0/34 (0%) | 1/31 (3%) |
| FIRST INCIDENCE                                      | 369       | ---       | 558       | 669       |
| STATISTICAL TESTS                                    |           |           |           |           |
| POLY 3                                               | P=0.227   | P=0.974   | P=0.474   | P=0.463   |
| POLY 1.5                                             | P=0.233   | P=0.976   | P=0.480   | P=0.477   |
| POLY 6                                               | P=0.220   | P=0.972   | P=0.472   | P=0.448   |
| COCH-ARM / FISHERS                                   | P=0.243   | P=1.000   | P=0.508   | P=0.500   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals         |             |           |           |           |
|-----------------------------|-------------|-----------|-----------|-----------|
| DOSE                        | 0 ppm       | 100 ppm   | 200 ppm   | 400 ppm   |
| NOSE: STENO'S GLAND ATROPHY |             |           |           |           |
| LESION RATES                |             |           |           |           |
| OVERALL                     | 10/49 (20%) | 0/50 (0%) | 3/50 (6%) | 0/49 (0%) |
| POLY 3 RATE                 | 10/44.87    | 0/41.23   | 3/42.22   | 0/40.93   |
| POLY 3 PERCENT              | 22.29%      | 0%        | 7.11%     | 0%        |
| TERMINAL                    | 10/39 (26%) | 0/30 (0%) | 2/34 (6%) | 0/31 (0%) |
| FIRST INCIDENCE             | 729 (T)     | ---       | 638       | ---       |
| STATISTICAL TESTS           |             |           |           |           |
| POLY 3                      | P=1.000     | P=1.000   | P=0.990   | P=1.000   |
| POLY 1.5                    | P=1.000     | P=1.000   | P=0.990   | P=1.000   |
| POLY 6                      | P=1.000     | P=1.000   | P=0.990   | P=1.000   |
| COCH-ARM / FISHERS          | P=1.000     | P=1.000   | P=0.993   | P=1.000   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                            |           |           |           |           |
|------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                           | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| <b>PITUITARY GLAND: PARS DISTALIS<br/>CYST</b> |           |           |           |           |
| <b>LESION RATES</b>                            |           |           |           |           |
| OVERALL                                        | 4/49 (8%) | 1/45 (2%) | 3/46 (7%) | 3/45 (7%) |
| POLY 3 RATE                                    | 4/45.46   | 1/38.18   | 3/39.09   | 3/38.75   |
| POLY 3 PERCENT                                 | 8.8%      | 2.62%     | 7.67%     | 7.74%     |
| TERMINAL                                       | 2/39 (5%) | 1/28 (4%) | 2/32 (6%) | 2/30 (7%) |
| FIRST INCIDENCE                                | 603       | 729 (T)   | 681       | 712       |
| <b>STATISTICAL TESTS</b>                       |           |           |           |           |
| POLY 3                                         | P=0.550   | P=0.950   | P=0.718   | P=0.714   |
| POLY 1.5                                       | P=0.558   | P=0.954   | P=0.727   | P=0.728   |
| POLY 6                                         | P=0.541   | P=0.942   | P=0.709   | P=0.694   |
| COCH-ARM / FISHERS                             | P=0.571   | P=0.965   | P=0.755   | P=0.746   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                           |           |           |           |           |
|-----------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                          | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| PITUITARY GLAND: PARS DISTALIS<br>HYPERPLASIA |           |           |           |           |
| LESION RATES                                  |           |           |           |           |
| OVERALL                                       | 0/49 (0%) | 0/45 (0%) | 1/46 (2%) | 0/45 (0%) |
| POLY 3 RATE                                   | 0/44.93   | 0/38.18   | 1/38.9    | 0/38.68   |
| POLY 3 PERCENT                                | 0%        | 0%        | 2.57%     | 0%        |
| TERMINAL                                      | 0/39 (0%) | 0/28 (0%) | 1/32 (3%) | 0/30 (0%) |
| FIRST INCIDENCE                               | ---       | ---       | 729 (T)   | ---       |
| STATISTICAL TESTS                             |           |           |           |           |
| POLY 3                                        | P=0.669   |           | P=0.471   |           |
| POLY 1.5                                      | P=0.677   |           | P=0.475   |           |
| POLY 6                                        | P=0.658   |           | P=0.468   |           |
| COCH-ARM / FISHERS                            | P=0.685   |           | P=0.484   |           |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals  |           |           |           |            |
|----------------------|-----------|-----------|-----------|------------|
| DOSE                 | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| PREPUTIAL GLAND CYST |           |           |           |            |
| LESION RATES         |           |           |           |            |
| OVERALL              | 0/49 (0%) | 0/49 (0%) | 0/49 (0%) | 3/47 (6%)  |
| POLY 3 RATE          | 0/44.06   | 0/40.44   | 0/41.88   | 3/38.92    |
| POLY 3 PERCENT       | 0%        | 0%        | 0%        | 7.71%      |
| TERMINAL             | 0/38 (0%) | 0/30 (0%) | 0/34 (0%) | 3/30 (10%) |
| FIRST INCIDENCE      | ---       | ---       | ---       | 729 (T)    |
| STATISTICAL TESTS    |           |           |           |            |
| POLY 3               | P=0.009** |           |           | P=0.097    |
| POLY 1.5             | P=0.009** |           |           | P=0.103    |
| POLY 6               | P=0.009** |           |           | P=0.090    |
| COCH-ARM / FISHERS   | P=0.011*  |           |           | P=0.113    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals       |           |            |            |             |
|---------------------------|-----------|------------|------------|-------------|
| DOSE                      | 0 ppm     | 100 ppm    | 200 ppm    | 400 ppm     |
| PREPUTIAL GLAND           |           |            |            |             |
| INFLAMMATION: SUPPURATIVE |           |            |            |             |
| LESION RATES              |           |            |            |             |
| OVERALL                   | 3/49 (6%) | 8/49 (16%) | 8/49 (16%) | 11/47 (23%) |
| POLY 3 RATE               | 3/44.34   | 8/41.18    | 8/42.63    | 11/40.85    |
| POLY 3 PERCENT            | 6.77%     | 19.43%     | 18.77%     | 26.93%      |
| TERMINAL                  | 2/38 (5%) | 6/30 (20%) | 5/34 (15%) | 7/30 (23%)  |
| FIRST INCIDENCE           | 653       | 600        | 624        | 395         |
| STATISTICAL TESTS         |           |            |            |             |
| POLY 3                    | P=0.015*  | P=0.075    | P=0.085    | P=0.011*    |
| POLY 1.5                  | P=0.016*  | P=0.085    | P=0.087    | P=0.013*    |
| POLY 6                    | P=0.012*  | P=0.064    | P=0.085    | P=0.009**   |
| COCH-ARM / FISHERS        | P=0.020*  | P=0.100    | P=0.100    | P=0.016*    |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals          |           |           |           |           |
|------------------------------|-----------|-----------|-----------|-----------|
| DOSE                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| PROSTATE                     |           |           |           |           |
| INFLAMMATION: CHRONIC-ACTIVE |           |           |           |           |
| LESION RATES                 |           |           |           |           |
| OVERALL                      | 2/49 (4%) | 0/50 (0%) | 0/50 (0%) | 0/50 (0%) |
| POLY 3 RATE                  | 2/44.34   | 0/41.23   | 0/41.89   | 0/41.67   |
| POLY 3 PERCENT               | 4.51%     | 0%        | 0%        | 0%        |
| TERMINAL                     | 2/39 (5%) | 0/30 (0%) | 0/34 (0%) | 0/31 (0%) |
| FIRST INCIDENCE              | 729 (T)   | ---       | ---       | ---       |
| STATISTICAL TESTS            |           |           |           |           |
| POLY 3                       | P=0.986   | P=0.982   | P=0.982   | P=0.982   |
| POLY 1.5                     | P=0.986   | P=0.983   | P=0.983   | P=0.983   |
| POLY 6                       | P=0.986   | P=0.980   | P=0.982   | P=0.980   |
| COCH-ARM / FISHERS           | P=0.985   | P=1.000   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals       |           |           |           |           |
|---------------------------|-----------|-----------|-----------|-----------|
| DOSE                      | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| PROSTATE                  |           |           |           |           |
| INFLAMMATION: SUPPURATIVE |           |           |           |           |
| LESION RATES              |           |           |           |           |
| OVERALL                   | 1/49 (2%) | 3/50 (6%) | 1/50 (2%) | 4/50 (8%) |
| POLY 3 RATE               | 1/44.78   | 3/42.65   | 1/41.89   | 4/42.61   |
| POLY 3 PERCENT            | 2.23%     | 7.03%     | 2.39%     | 9.39%     |
| TERMINAL                  | 0/39 (0%) | 0/30 (0%) | 1/34 (3%) | 2/31 (6%) |
| FIRST INCIDENCE           | 600       | 554       | 729 (T)   | 550       |
| STATISTICAL TESTS         |           |           |           |           |
| POLY 3                    | P=0.148   | P=0.288   | P=0.746   | P=0.164   |
| POLY 1.5                  | P=0.156   | P=0.299   | P=0.750   | P=0.173   |
| POLY 6                    | P=0.137   | P=0.272   | P=0.741   | P=0.151   |
| COCH-ARM / FISHERS        | P=0.168   | P=0.316   | P=0.758   | P=0.187   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals      |           |           |           |           |
|--------------------------|-----------|-----------|-----------|-----------|
| DOSE                     | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| PROSTATE: ACINUS ATROPHY |           |           |           |           |
| LESION RATES             |           |           |           |           |
| OVERALL                  | 2/49 (4%) | 1/50 (2%) | 0/50 (0%) | 0/50 (0%) |
| POLY 3 RATE              | 2/44.77   | 1/41.23   | 0/41.89   | 0/41.67   |
| POLY 3 PERCENT           | 4.47%     | 2.43%     | 0%        | 0%        |
| TERMINAL                 | 1/39 (3%) | 1/30 (3%) | 0/34 (0%) | 0/31 (0%) |
| FIRST INCIDENCE          | 603       | 729 (T)   | ---       | ---       |
| STATISTICAL TESTS        |           |           |           |           |
| POLY 3                   | P=0.980   | P=0.863   | P=0.982   | P=0.982   |
| POLY 1.5                 | P=0.980   | P=0.871   | P=0.983   | P=0.983   |
| POLY 6                   | P=0.978   | P=0.849   | P=0.981   | P=0.980   |
| COCH-ARM / FISHERS       | P=0.981   | P=0.883   | P=1.000   | P=1.000   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                 |           |           |           |           |
|-------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| PROSTATE: EPITHELIUM<br>HYPERPLASIA |           |           |           |           |
| LESION RATES                        |           |           |           |           |
| OVERALL                             | 1/49 (2%) | 0/50 (0%) | 0/50 (0%) | 2/50 (4%) |
| POLY 3 RATE                         | 1/44.78   | 0/41.23   | 0/41.89   | 2/41.67   |
| POLY 3 PERCENT                      | 2.23%     | 0%        | 0%        | 4.8%      |
| TERMINAL                            | 0/39 (0%) | 0/30 (0%) | 0/34 (0%) | 2/31 (6%) |
| FIRST INCIDENCE                     | 600       | ---       | ---       | 729 (T)   |
| STATISTICAL TESTS                   |           |           |           |           |
| POLY 3                              | P=0.246   | P=0.975   | P=0.975   | P=0.475   |
| POLY 1.5                            | P=0.247   | P=0.976   | P=0.976   | P=0.489   |
| POLY 6                              | P=0.245   | P=0.973   | P=0.975   | P=0.455   |
| COCH-ARM / FISHERS                  | P=0.249   | P=1.000   | P=1.000   | P=0.508   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                     |           |           |           |           |
|-----------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                    | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| SALIVARY GLAND                          |           |           |           |           |
| INFILTRATION CELLULAR: MONONUCLEAR CELL |           |           |           |           |
| LESION RATES                            |           |           |           |           |
| OVERALL                                 | 1/50 (2%) | 0/50 (0%) | 2/50 (4%) | 2/50 (4%) |
| POLY 3 RATE                             | 1/45.06   | 0/41.23   | 2/42.44   | 2/41.67   |
| POLY 3 PERCENT                          | 2.22%     | 0%        | 4.71%     | 4.8%      |
| TERMINAL                                | 1/39 (3%) | 0/30 (0%) | 1/34 (3%) | 2/31 (6%) |
| FIRST INCIDENCE                         | 729 (T)   | ---       | 558       | 729 (T)   |
| STATISTICAL TESTS                       |           |           |           |           |
| POLY 3                                  | P=0.233   | P=0.975   | P=0.479   | P=0.473   |
| POLY 1.5                                | P=0.239   | P=0.976   | P=0.482   | P=0.485   |
| POLY 6                                  | P=0.225   | P=0.973   | P=0.478   | P=0.456   |
| COCH-ARM / FISHERS                      | P=0.245   | P=1.000   | P=0.500   | P=0.500   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals     |           |           |           |           |
|-------------------------|-----------|-----------|-----------|-----------|
| DOSE                    | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| SEMINAL VESICLE ATROPHY |           |           |           |           |
| LESION RATES            |           |           |           |           |
| OVERALL                 | 2/49 (4%) | 1/50 (2%) | 0/50 (0%) | 0/50 (0%) |
| POLY 3 RATE             | 2/44.77   | 1/41.23   | 0/41.89   | 0/41.67   |
| POLY 3 PERCENT          | 4.47%     | 2.43%     | 0%        | 0%        |
| TERMINAL                | 1/39 (3%) | 1/30 (3%) | 0/34 (0%) | 0/31 (0%) |
| FIRST INCIDENCE         | 603       | 729 (T)   | ---       | ---       |
| STATISTICAL TESTS       |           |           |           |           |
| POLY 3                  | P=0.980   | P=0.863   | P=0.982   | P=0.982   |
| POLY 1.5                | P=0.980   | P=0.871   | P=0.983   | P=0.983   |
| POLY 6                  | P=0.978   | P=0.849   | P=0.981   | P=0.980   |
| COCH-ARM / FISHERS      | P=0.981   | P=0.883   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals                                        |           |           |           |           |
|------------------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                                       | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| SEMINAL VESICLE<br>INFLAMMATION, CHRONIC OR CHRONIC-ACTIVE |           |           |           |           |
| LESION RATES                                               |           |           |           |           |
| OVERALL                                                    | 2/49 (4%) | 0/50 (0%) | 0/50 (0%) | 0/50 (0%) |
| POLY 3 RATE                                                | 2/44.34   | 0/41.23   | 0/41.89   | 0/41.67   |
| POLY 3 PERCENT                                             | 4.51%     | 0%        | 0%        | 0%        |
| TERMINAL                                                   | 2/39 (5%) | 0/30 (0%) | 0/34 (0%) | 0/31 (0%) |
| FIRST INCIDENCE                                            | 729 (T)   | ---       | ---       | ---       |
| STATISTICAL TESTS                                          |           |           |           |           |
| POLY 3                                                     | P=0.986   | P=0.982   | P=0.982   | P=0.982   |
| POLY 1.5                                                   | P=0.986   | P=0.983   | P=0.983   | P=0.983   |
| POLY 6                                                     | P=0.986   | P=0.980   | P=0.982   | P=0.980   |
| COCH-ARM / FISHERS                                         | P=0.985   | P=1.000   | P=1.000   | P=1.000   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                          |           |           |           |           |
|----------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| SEMINAL VESICLE<br>INFLAMMATION: SUPPURATIVE |           |           |           |           |
| LESION RATES                                 |           |           |           |           |
| OVERALL                                      | 0/49 (0%) | 2/50 (4%) | 1/50 (2%) | 0/50 (0%) |
| POLY 3 RATE                                  | 0/44.34   | 2/42.49   | 1/41.89   | 0/41.67   |
| POLY 3 PERCENT                               | 0%        | 4.71%     | 2.39%     | 0%        |
| TERMINAL                                     | 0/39 (0%) | 0/30 (0%) | 1/34 (3%) | 0/31 (0%) |
| FIRST INCIDENCE                              | ---       | 506       | 729 (T)   | ---       |
| STATISTICAL TESTS                            |           |           |           |           |
| POLY 3                                       | P=0.785   | P=0.228   | P=0.489   |           |
| POLY 1.5                                     | P=0.799   | P=0.234   | P=0.492   |           |
| POLY 6                                       | P=0.764   | P=0.218   | P=0.486   |           |
| COCH-ARM / FISHERS                           | P=0.815   | P=0.253   | P=0.505   |           |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                        |           |           |           |           |
|--------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                       | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| SEMINAL VESICLE: EPITHELIUM<br>HYPERPLASIA |           |           |           |           |
| LESION RATES                               |           |           |           |           |
| OVERALL                                    | 0/49 (0%) | 0/50 (0%) | 2/50 (4%) | 1/50 (2%) |
| POLY 3 RATE                                | 0/44.34   | 0/41.23   | 2/41.89   | 1/41.67   |
| POLY 3 PERCENT                             | 0%        | 0%        | 4.77%     | 2.4%      |
| TERMINAL                                   | 0/39 (0%) | 0/30 (0%) | 2/34 (6%) | 1/31 (3%) |
| FIRST INCIDENCE                            | ---       | ---       | 729 (T)   | 729 (T)   |
| STATISTICAL TESTS                          |           |           |           |           |
| POLY 3                                     | P=0.229   |           | P=0.225   | P=0.488   |
| POLY 1.5                                   | P=0.238   |           | P=0.228   | P=0.495   |
| POLY 6                                     | P=0.216   |           | P=0.222   | P=0.477   |
| COCH-ARM / FISHERS                         | P=0.249   |           | P=0.253   | P=0.505   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals       |           |           |           |           |
|---------------------------|-----------|-----------|-----------|-----------|
| DOSE                      | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| SKIN                      |           |           |           |           |
| INFLAMMATION: SUPPURATIVE |           |           |           |           |
| LESION RATES              |           |           |           |           |
| OVERALL                   | 1/50 (2%) | 1/50 (2%) | 3/50 (6%) | 3/50 (6%) |
| POLY 3 RATE               | 1/45.69   | 1/41.89   | 3/42.82   | 3/42.9    |
| POLY 3 PERCENT            | 2.19%     | 2.39%     | 7.01%     | 6.99%     |
| TERMINAL                  | 0/39 (0%) | 0/30 (0%) | 1/34 (3%) | 0/31 (0%) |
| FIRST INCIDENCE           | 520       | 506       | 558       | 395       |
| STATISTICAL TESTS         |           |           |           |           |
| POLY 3                    | P=0.152   | P=0.741   | P=0.282   | P=0.283   |
| POLY 1.5                  | P=0.158   | P=0.750   | P=0.286   | P=0.293   |
| POLY 6                    | P=0.144   | P=0.728   | P=0.281   | P=0.269   |
| COCH-ARM / FISHERS        | P=0.165   | P=0.753   | P=0.309   | P=0.309   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals |           |           |            |           |
|---------------------|-----------|-----------|------------|-----------|
| DOSE                | 0 ppm     | 100 ppm   | 200 ppm    | 400 ppm   |
| SKIN                |           |           |            |           |
| ULCER               |           |           |            |           |
| LESION RATES        |           |           |            |           |
| OVERALL             | 1/50 (2%) | 0/50 (0%) | 5/50 (10%) | 2/50 (4%) |
| POLY 3 RATE         | 1/45.69   | 0/41.23   | 5/43.11    | 2/42.58   |
| POLY 3 PERCENT      | 2.19%     | 0%        | 11.6%      | 4.7%      |
| TERMINAL            | 0/39 (0%) | 0/30 (0%) | 1/34 (3%)  | 0/31 (0%) |
| FIRST INCIDENCE     | 520       | ---       | 555        | 395       |
| STATISTICAL TESTS   |           |           |            |           |
| POLY 3              | P=0.212   | P=0.974   | P=0.088    | P=0.475   |
| POLY 1.5            | P=0.221   | P=0.976   | P=0.090    | P=0.487   |
| POLY 6              | P=0.198   | P=0.972   | P=0.089    | P=0.459   |
| COCH-ARM / FISHERS  | P=0.232   | P=1.000   | P=0.102    | P=0.500   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals          |           |           |           |           |
|------------------------------|-----------|-----------|-----------|-----------|
| DOSE                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| SKIN: PENIS                  |           |           |           |           |
| INFLAMMATION: CHRONIC-ACTIVE |           |           |           |           |
| LESION RATES                 |           |           |           |           |
| OVERALL                      | 2/50 (4%) | 1/50 (2%) | 0/50 (0%) | 0/50 (0%) |
| POLY 3 RATE                  | 2/45.5    | 1/41.67   | 0/41.89   | 0/41.67   |
| POLY 3 PERCENT               | 4.4%      | 2.4%      | 0%        | 0%        |
| TERMINAL                     | 1/39 (3%) | 0/30 (0%) | 0/34 (0%) | 0/31 (0%) |
| FIRST INCIDENCE              | 600       | 600       | ---       | ---       |
| STATISTICAL TESTS            |           |           |           |           |
| POLY 3                       | P=0.979   | P=0.862   | P=0.981   | P=0.981   |
| POLY 1.5                     | P=0.979   | P=0.869   | P=0.982   | P=0.983   |
| POLY 6                       | P=0.978   | P=0.851   | P=0.981   | P=0.979   |
| COCH-ARM / FISHERS           | P=0.981   | P=0.879   | P=1.000   | P=1.000   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                     |            |            |            |            |
|-----------------------------------------|------------|------------|------------|------------|
| DOSE                                    | 0 ppm      | 100 ppm    | 200 ppm    | 400 ppm    |
| SPLEEN                                  |            |            |            |            |
| EXTRAMEDULLARY HEMATOPOIESIS: INCREASED |            |            |            |            |
| LESION RATES                            |            |            |            |            |
| OVERALL                                 | 6/50 (12%) | 6/49 (12%) | 7/48 (15%) | 6/49 (12%) |
| POLY 3 RATE                             | 6/46.55    | 6/43.14    | 7/43.05    | 6/43.67    |
| POLY 3 PERCENT                          | 12.89%     | 13.91%     | 16.26%     | 13.74%     |
| TERMINAL                                | 3/39 (8%)  | 2/30 (7%)  | 3/34 (9%)  | 2/31 (6%)  |
| FIRST INCIDENCE                         | 520        | 432        | 324        | 383        |
| STATISTICAL TESTS                       |            |            |            |            |
| POLY 3                                  | P=0.501    | P=0.566    | P=0.440    | P=0.575    |
| POLY 1.5                                | P=0.515    | P=0.587    | P=0.445    | P=0.591    |
| POLY 6                                  | P=0.479    | P=0.533    | P=0.432    | P=0.549    |
| COCH-ARM / FISHERS                      | P=0.528    | P=0.606    | P=0.468    | P=0.606    |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                     |           |           |           |           |
|-----------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                    | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| <b>STOMACH, FORESTOMACH: EPITHELIUM</b> |           |           |           |           |
| <b>HYPERPLASIA: FOCAL</b>               |           |           |           |           |
| <b>LESION RATES</b>                     |           |           |           |           |
| OVERALL                                 | 1/49 (2%) | 2/49 (4%) | 2/50 (4%) | 4/48 (8%) |
| POLY 3 RATE                             | 1/44.87   | 2/41.58   | 2/41.89   | 4/40.57   |
| POLY 3 PERCENT                          | 2.23%     | 4.81%     | 4.77%     | 9.86%     |
| TERMINAL                                | 1/39 (3%) | 1/30 (3%) | 2/34 (6%) | 2/31 (6%) |
| FIRST INCIDENCE                         | 729 (T)   | 554       | 729 (T)   | 667       |
| <b>STATISTICAL TESTS</b>                |           |           |           |           |
| POLY 3                                  | P=0.092   | P=0.473   | P=0.476   | P=0.149   |
| POLY 1.5                                | P=0.098   | P=0.485   | P=0.482   | P=0.158   |
| POLY 6                                  | P=0.087   | P=0.457   | P=0.472   | P=0.140   |
| COCH-ARM / FISHERS                      | P=0.108   | P=0.500   | P=0.508   | P=0.175   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                 |           |           |           |            |
|-------------------------------------|-----------|-----------|-----------|------------|
| DOSE                                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| TESTIS: GERMINAL EPITHELIUM ATROPHY |           |           |           |            |
| LESION RATES                        |           |           |           |            |
| OVERALL                             | 2/50 (4%) | 1/49 (2%) | 3/50 (6%) | 5/47 (11%) |
| POLY 3 RATE                         | 2/45.06   | 1/41.05   | 3/42.51   | 5/39.75    |
| POLY 3 PERCENT                      | 4.44%     | 2.44%     | 7.06%     | 12.58%     |
| TERMINAL                            | 2/39 (5%) | 0/30 (0%) | 2/34 (6%) | 3/31 (10%) |
| FIRST INCIDENCE                     | 729 (T)   | 432       | 529       | 667        |
| STATISTICAL TESTS                   |           |           |           |            |
| POLY 3                              | P=0.060   | P=0.861   | P=0.474   | P=0.168    |
| POLY 1.5                            | P=0.062   | P=0.867   | P=0.477   | P=0.177    |
| POLY 6                              | P=0.058   | P=0.850   | P=0.472   | P=0.157    |
| COCH-ARM / FISHERS                  | P=0.067   | P=0.875   | P=0.500   | P=0.193    |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                                             |           |           |           |            |
|-----------------------------------------------------------------|-----------|-----------|-----------|------------|
| DOSE                                                            | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| <b>TESTIS: GERMINAL EPITHELIUM ATROPHY (INCLUDES BILATERAL)</b> |           |           |           |            |
| <b>LESION RATES</b>                                             |           |           |           |            |
| OVERALL                                                         | 2/50 (4%) | 1/49 (2%) | 3/50 (6%) | 6/47 (13%) |
| POLY 3 RATE                                                     | 2/45.06   | 1/41.05   | 3/42.51   | 6/39.75    |
| POLY 3 PERCENT                                                  | 4.44%     | 2.44%     | 7.06%     | 15.1%      |
| TERMINAL                                                        | 2/39 (5%) | 0/30 (0%) | 2/34 (6%) | 4/31 (13%) |
| FIRST INCIDENCE                                                 | 729 (T)   | 432       | 529       | 667        |
| <b>STATISTICAL TESTS</b>                                        |           |           |           |            |
| POLY 3                                                          | P=0.024*  | P=0.861   | P=0.474   | P=0.095    |
| POLY 1.5                                                        | P=0.025*  | P=0.867   | P=0.477   | P=0.103    |
| POLY 6                                                          | P=0.024*  | P=0.850   | P=0.472   | P=0.087    |
| COCH-ARM / FISHERS                                              | P=0.029*  | P=0.875   | P=0.500   | P=0.115    |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                                 |            |            |            |            |
|-----------------------------------------------------|------------|------------|------------|------------|
| DOSE                                                | 0 ppm      | 100 ppm    | 200 ppm    | 400 ppm    |
| <b>TESTIS: GERMINAL EPITHELIUM<br/>DEGENERATION</b> |            |            |            |            |
| <b>LESION RATES</b>                                 |            |            |            |            |
| OVERALL                                             | 5/50 (10%) | 4/49 (8%)  | 8/50 (16%) | 8/47 (17%) |
| POLY 3 RATE                                         | 5/45.06    | 4/40.37    | 8/42.56    | 8/39.98    |
| POLY 3 PERCENT                                      | 11.1%      | 9.91%      | 18.8%      | 20.01%     |
| TERMINAL                                            | 5/39 (13%) | 3/30 (10%) | 6/34 (18%) | 6/31 (19%) |
| FIRST INCIDENCE                                     | 729 (T)    | 699        | 529        | 550        |
| <b>STATISTICAL TESTS</b>                            |            |            |            |            |
| POLY 3                                              | P=0.104    | P=0.701    | P=0.238    | P=0.201    |
| POLY 1.5                                            | P=0.110    | P=0.722    | P=0.243    | P=0.216    |
| POLY 6                                              | P=0.098    | P=0.670    | P=0.237    | P=0.184    |
| COCH-ARM / FISHERS                                  | P=0.121    | P=0.746    | P=0.277    | P=0.237    |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                      |             |            |             |             |
|------------------------------------------|-------------|------------|-------------|-------------|
| DOSE                                     | 0 ppm       | 100 ppm    | 200 ppm     | 400 ppm     |
| <b>TESTIS: GERMINAL EPITHELIUM</b>       |             |            |             |             |
| <b>DEGENERATION (INCLUDES BILATERAL)</b> |             |            |             |             |
| <b>LESION RATES</b>                      |             |            |             |             |
| OVERALL                                  | 14/50 (28%) | 9/49 (18%) | 15/50 (30%) | 28/47 (60%) |
| POLY 3 RATE                              | 14/45.93    | 9/41.73    | 15/43.11    | 28/42.01    |
| POLY 3 PERCENT                           | 30.48%      | 21.57%     | 34.79%      | 66.66%      |
| TERMINAL                                 | 12/39 (31%) | 6/30 (20%) | 12/34 (35%) | 21/31 (68%) |
| FIRST INCIDENCE                          | 600         | 432        | 529         | 395         |
| <b>STATISTICAL TESTS</b>                 |             |            |             |             |
| POLY 3                                   | P<0.001**   | P=0.884    | P=0.418     | P<0.001**   |
| POLY 1.5                                 | P<0.001**   | P=0.900    | P=0.431     | P=0.001**   |
| POLY 6                                   | P<0.001**   | P=0.854    | P=0.408     | P<0.001**   |
| COCH-ARM / FISHERS                       | P<0.001**   | P=0.916    | P=0.500     | P=0.002**   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                                            |             |            |             |             |
|----------------------------------------------------------------|-------------|------------|-------------|-------------|
| DOSE                                                           | 0 ppm       | 100 ppm    | 200 ppm     | 400 ppm     |
| <b>TESTIS: GERMINAL EPITHELIUM<br/>DEGENERATION OR ATROPHY</b> |             |            |             |             |
| <b>LESION RATES</b>                                            |             |            |             |             |
| OVERALL                                                        | 14/50 (28%) | 9/49 (18%) | 16/50 (32%) | 28/47 (60%) |
| POLY 3 RATE                                                    | 14/45.93    | 9/41.73    | 16/43.11    | 28/42.01    |
| POLY 3 PERCENT                                                 | 30.48%      | 21.57%     | 37.11%      | 66.66%      |
| TERMINAL                                                       | 12/39 (31%) | 6/30 (20%) | 13/34 (38%) | 21/31 (68%) |
| FIRST INCIDENCE                                                | 600         | 432        | 529         | 395         |
| <b>STATISTICAL TESTS</b>                                       |             |            |             |             |
| POLY 3                                                         | P<0.001**   | P=0.884    | P=0.331     | P<0.001**   |
| POLY 1.5                                                       | P<0.001**   | P=0.900    | P=0.344     | P=0.001**   |
| POLY 6                                                         | P<0.001**   | P=0.854    | P=0.321     | P<0.001**   |
| COCH-ARM / FISHERS                                             | P<0.001**   | P=0.916    | P=0.414     | P=0.002**   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals                    |            |            |            |             |
|----------------------------------------|------------|------------|------------|-------------|
| DOSE                                   | 0 ppm      | 100 ppm    | 200 ppm    | 400 ppm     |
| TESTIS: GERMINAL EPITHELIUM, BILATERAL |            |            |            |             |
| DEGENERATION                           |            |            |            |             |
| LESION RATES                           |            |            |            |             |
| OVERALL                                | 9/50 (18%) | 5/49 (10%) | 7/50 (14%) | 20/47 (43%) |
| POLY 3 RATE                            | 9/45.93    | 5/41.61    | 7/42.44    | 20/41.35    |
| POLY 3 PERCENT                         | 19.59%     | 12.02%     | 16.49%     | 48.36%      |
| TERMINAL                               | 7/39 (18%) | 3/30 (10%) | 6/34 (18%) | 15/31 (48%) |
| FIRST INCIDENCE                        | 600        | 432        | 558        | 395         |
| STATISTICAL TESTS                      |            |            |            |             |
| POLY 3                                 | P<0.001**  | P=0.895    | P=0.742    | P=0.003**   |
| POLY 1.5                               | P<0.001**  | P=0.907    | P=0.753    | P=0.004**   |
| POLY 6                                 | P<0.001**  | P=0.874    | P=0.733    | P=0.002**   |
| COCH-ARM / FISHERS                     | P<0.001**  | P=0.920    | P=0.793    | P=0.008**   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals |           |           |           |            |
|---------------------|-----------|-----------|-----------|------------|
| DOSE                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| TESTIS: RETE TESTIS |           |           |           |            |
| DILATION            |           |           |           |            |
| LESION RATES        |           |           |           |            |
| OVERALL             | 3/50 (6%) | 0/49 (0%) | 0/50 (0%) | 5/47 (11%) |
| POLY 3 RATE         | 3/45.48   | 0/40.26   | 0/41.89   | 5/39.89    |
| POLY 3 PERCENT      | 6.6%      | 0%        | 0%        | 12.53%     |
| TERMINAL            | 2/39 (5%) | 0/30 (0%) | 0/34 (0%) | 4/31 (13%) |
| FIRST INCIDENCE     | 606       | ---       | ---       | 550        |
| STATISTICAL TESTS   |           |           |           |            |
| POLY 3              | P=0.096   | P=0.988   | P=0.989   | P=0.286    |
| POLY 1.5            | P=0.094   | P=0.989   | P=0.989   | P=0.302    |
| POLY 6              | P=0.098   | P=0.986   | P=0.989   | P=0.267    |
| COCH-ARM / FISHERS  | P=0.098   | P=1.000   | P=1.000   | P=0.323    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals           |           |           |           |            |
|-------------------------------|-----------|-----------|-----------|------------|
| DOSE                          | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| TESTIS: RETE TESTIS           |           |           |           |            |
| DILATION (INCLUDES BILATERAL) |           |           |           |            |
| LESION RATES                  |           |           |           |            |
| OVERALL                       | 3/50 (6%) | 1/49 (2%) | 0/50 (0%) | 5/47 (11%) |
| POLY 3 RATE                   | 3/45.48   | 1/40.7    | 0/41.89   | 5/39.89    |
| POLY 3 PERCENT                | 6.6%      | 2.46%     | 0%        | 12.53%     |
| TERMINAL                      | 2/39 (5%) | 0/30 (0%) | 0/34 (0%) | 4/31 (13%) |
| FIRST INCIDENCE               | 606       | 600       | ---       | 550        |
| STATISTICAL TESTS             |           |           |           |            |
| POLY 3                        | P=0.139   | P=0.921   | P=0.989   | P=0.286    |
| POLY 1.5                      | P=0.140   | P=0.927   | P=0.989   | P=0.302    |
| POLY 6                        | P=0.139   | P=0.912   | P=0.989   | P=0.267    |
| COCH-ARM / FISHERS            | P=0.146   | P=0.939   | P=1.000   | P=0.323    |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                         |           |           |           |           |
|---------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                        | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| <b>TESTIS: SEMINIFEROUS TUBULE DILATION</b> |           |           |           |           |
| <b>LESION RATES</b>                         |           |           |           |           |
| OVERALL                                     | 1/50 (2%) | 2/49 (4%) | 1/50 (2%) | 2/47 (4%) |
| POLY 3 RATE                                 | 1/45.06   | 2/40.26   | 1/42.26   | 2/39.32   |
| POLY 3 PERCENT                              | 2.22%     | 4.97%     | 2.37%     | 5.09%     |
| TERMINAL                                    | 1/39 (3%) | 2/30 (7%) | 0/34 (0%) | 2/31 (6%) |
| FIRST INCIDENCE                             | 729 (T)   | 729 (T)   | 624       | 729 (T)   |
| <b>STATISTICAL TESTS</b>                    |           |           |           |           |
| POLY 3                                      | P=0.398   | P=0.461   | P=0.746   | P=0.453   |
| POLY 1.5                                    | P=0.408   | P=0.475   | P=0.748   | P=0.464   |
| POLY 6                                      | P=0.385   | P=0.440   | P=0.746   | P=0.439   |
| COCH-ARM / FISHERS                          | P=0.423   | P=0.492   | P=0.753   | P=0.477   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                                                  |           |            |           |           |
|----------------------------------------------------------------------|-----------|------------|-----------|-----------|
| DOSE                                                                 | 0 ppm     | 100 ppm    | 200 ppm   | 400 ppm   |
| <b>TESTIS: SEMINIFEROUS TUBULE<br/>DILATION (INCLUDES BILATERAL)</b> |           |            |           |           |
| <b>LESION RATES</b>                                                  |           |            |           |           |
| OVERALL                                                              | 2/50 (4%) | 3/49 (6%)  | 2/50 (4%) | 2/47 (4%) |
| POLY 3 RATE                                                          | 2/45.06   | 3/40.26    | 2/42.26   | 2/39.32   |
| POLY 3 PERCENT                                                       | 4.44%     | 7.45%      | 4.73%     | 5.09%     |
| TERMINAL                                                             | 2/39 (5%) | 3/30 (10%) | 1/34 (3%) | 2/31 (6%) |
| FIRST INCIDENCE                                                      | 729 (T)   | 729 (T)    | 624       | 729 (T)   |
| <b>STATISTICAL TESTS</b>                                             |           |            |           |           |
| POLY 3                                                               | P=0.602   | P=0.449    | P=0.671   | P=0.644   |
| POLY 1.5                                                             | P=0.615   | P=0.468    | P=0.674   | P=0.656   |
| POLY 6                                                               | P=0.587   | P=0.422    | P=0.670   | P=0.629   |
| COCH-ARM / FISHERS                                                   | P=0.634   | P=0.490    | P=0.691   | P=0.668   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals |           |           |           |           |
|---------------------|-----------|-----------|-----------|-----------|
| DOSE                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| THYMUS ATROPHY      |           |           |           |           |
| LESION RATES        |           |           |           |           |
| OVERALL             | 2/46 (4%) | 0/42 (0%) | 0/43 (0%) | 1/41 (2%) |
| POLY 3 RATE         | 2/43      | 0/36.16   | 0/35.15   | 1/34.07   |
| POLY 3 PERCENT      | 4.65%     | 0%        | 0%        | 2.93%     |
| TERMINAL            | 1/37 (3%) | 0/28 (0%) | 0/29 (0%) | 1/27 (4%) |
| FIRST INCIDENCE     | 603       | ---       | ---       | 729 (T)   |
| STATISTICAL TESTS   |           |           |           |           |
| POLY 3              | P=0.788   | P=0.978   | P=0.977   | P=0.832   |
| POLY 1.5            | P=0.790   | P=0.980   | P=0.978   | P=0.842   |
| POLY 6              | P=0.786   | P=0.977   | P=0.976   | P=0.821   |
| COCH-ARM / FISHERS  | P=0.796   | P=1.000   | P=1.000   | P=0.857   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                      |           |           |            |            |
|------------------------------------------|-----------|-----------|------------|------------|
| DOSE                                     | 0 ppm     | 100 ppm   | 200 ppm    | 400 ppm    |
| <b>URINARY BLADDER</b>                   |           |           |            |            |
| <b>INFILTRATION CELLULAR: LYMPHOCYTE</b> |           |           |            |            |
| <b>LESION RATES</b>                      |           |           |            |            |
| OVERALL                                  | 1/48 (2%) | 2/43 (5%) | 9/48 (19%) | 9/45 (20%) |
| POLY 3 RATE                              | 1/44.15   | 2/37.06   | 9/41.46    | 9/39       |
| POLY 3 PERCENT                           | 2.27%     | 5.4%      | 21.71%     | 23.08%     |
| TERMINAL                                 | 1/39 (3%) | 2/30 (7%) | 8/34 (24%) | 8/31 (26%) |
| FIRST INCIDENCE                          | 729 (T)   | 729 (T)   | 555        | 563        |
| <b>STATISTICAL TESTS</b>                 |           |           |            |            |
| POLY 3                                   | P=0.001** | P=0.439   | P=0.005**  | P=0.004**  |
| POLY 1.5                                 | P=0.001** | P=0.449   | P=0.006**  | P=0.004**  |
| POLY 6                                   | P=0.001** | P=0.426   | P=0.005**  | P=0.003**  |
| COCH-ARM / FISHERS                       | P=0.002** | P=0.458   | P=0.008**  | P=0.006**  |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 729 - 731

| Males: Core Animals          |           |           |           |           |
|------------------------------|-----------|-----------|-----------|-----------|
| DOSE                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| URINARY BLADDER              |           |           |           |           |
| INFLAMMATION: CHRONIC-ACTIVE |           |           |           |           |
| LESION RATES                 |           |           |           |           |
| OVERALL                      | 3/48 (6%) | 1/43 (2%) | 1/48 (2%) | 2/45 (4%) |
| POLY 3 RATE                  | 3/44.59   | 1/37.06   | 1/40.9    | 2/38.83   |
| POLY 3 PERCENT               | 6.73%     | 2.7%      | 2.44%     | 5.15%     |
| TERMINAL                     | 2/39 (5%) | 1/30 (3%) | 1/34 (3%) | 1/31 (3%) |
| FIRST INCIDENCE              | 600       | 729 (T)   | 729 (T)   | 625       |
| STATISTICAL TESTS            |           |           |           |           |
| POLY 3                       | P=0.696   | P=0.910   | P=0.925   | P=0.775   |
| POLY 1.5                     | P=0.701   | P=0.915   | P=0.928   | P=0.785   |
| POLY 6                       | P=0.690   | P=0.903   | P=0.922   | P=0.763   |
| COCH-ARM / FISHERS           | P=0.711   | P=0.927   | P=0.941   | P=0.799   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                          |           |           |           |            |
|----------------------------------------------|-----------|-----------|-----------|------------|
| DOSE                                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| URINARY BLADDER<br>INFLAMMATION: SUPPURATIVE |           |           |           |            |
| LESION RATES                                 |           |           |           |            |
| OVERALL                                      | 0/48 (0%) | 2/43 (5%) | 0/48 (0%) | 5/45 (11%) |
| POLY 3 RATE                                  | 0/44.15   | 2/38.04   | 0/40.9    | 5/39.26    |
| POLY 3 PERCENT                               | 0%        | 5.26%     | 0%        | 12.74%     |
| TERMINAL                                     | 0/39 (0%) | 0/30 (0%) | 0/34 (0%) | 3/31 (10%) |
| FIRST INCIDENCE                              | ---       | 554       | ---       | 550        |
| STATISTICAL TESTS                            |           |           |           |            |
| POLY 3                                       | P=0.008** | P=0.205   |           | P=0.021*   |
| POLY 1.5                                     | P=0.008** | P=0.208   |           | P=0.023*   |
| POLY 6                                       | P=0.007** | P=0.200   |           | P=0.020*   |
| COCH-ARM / FISHERS                           | P=0.010*  | P=0.221   |           | P=0.024*   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 729 - 731**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Males: Core Animals                                |           |            |             |             |
|----------------------------------------------------|-----------|------------|-------------|-------------|
| DOSE                                               | 0 ppm     | 100 ppm    | 200 ppm     | 400 ppm     |
| <b>URINARY BLADDER: UROTHELIUM<br/>HYPERPLASIA</b> |           |            |             |             |
| <b>LESION RATES</b>                                |           |            |             |             |
| OVERALL                                            | 1/48 (2%) | 7/43 (16%) | 18/48 (38%) | 15/45 (33%) |
| POLY 3 RATE                                        | 1/44.15   | 7/37.7     | 18/43.28    | 15/39.9     |
| POLY 3 PERCENT                                     | 2.27%     | 18.57%     | 41.59%      | 37.59%      |
| TERMINAL                                           | 1/39 (3%) | 6/30 (20%) | 14/34 (41%) | 11/31 (35%) |
| FIRST INCIDENCE                                    | 729 (T)   | 519        | 194         | 541         |
| <b>STATISTICAL TESTS</b>                           |           |            |             |             |
| POLY 3                                             | P<0.001** | P=0.016*   | P<0.001**   | P<0.001**   |
| POLY 1.5                                           | P<0.001** | P=0.017*   | P<0.001**   | P<0.001**   |
| POLY 6                                             | P<0.001** | P=0.014*   | P<0.001**   | P<0.001**   |
| COCH-ARM / FISHERS                                 | P<0.001** | P=0.020*   | P<0.001**   | P<0.001**   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 729 - 731

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Males: Core Animals                  |           |           |           |           |
|--------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                 | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| URINARY BLADDER: UROTHELIUM<br>ULCER |           |           |           |           |
| LESION RATES                         |           |           |           |           |
| OVERALL                              | 0/48 (0%) | 2/43 (5%) | 0/48 (0%) | 0/45 (0%) |
| POLY 3 RATE                          | 0/44.15   | 2/38.04   | 0/40.9    | 0/38.46   |
| POLY 3 PERCENT                       | 0%        | 5.26%     | 0%        | 0%        |
| TERMINAL                             | 0/39 (0%) | 0/30 (0%) | 0/34 (0%) | 0/31 (0%) |
| FIRST INCIDENCE                      | ---       | 554       | ---       | ---       |
| STATISTICAL TESTS                    |           |           |           |           |
| POLY 3                               | P=0.867   | P=0.205   |           |           |
| POLY 1.5                             | P=0.874   | P=0.208   |           |           |
| POLY 6                               | P=0.857   | P=0.200   |           |           |
| COCH-ARM / FISHERS                   | P=0.882   | P=0.221   |           |           |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

|                                         | Females: Core Animals |         |         |         |
|-----------------------------------------|-----------------------|---------|---------|---------|
|                                         | 0 ppm                 | 100 ppm | 200 ppm | 400 ppm |
| Disposition Summary                     |                       |         |         |         |
| Animals Initially In Study              | 50                    | 50      | 40      | 50      |
| Censored                                |                       |         |         |         |
| Early Deaths                            |                       |         |         |         |
| Found Dead                              | 10                    | 14      | 9       | 17      |
| Sacrificed, Moribund                    | 7                     | 7       | 7       | 9       |
| Survivors                               |                       |         |         |         |
| Scheduled Sacrifice, Terminal           | 33                    | 29      | 24      | 24      |
| Number Animals Examined Microscopically | 50                    | 50      | 40      | 50      |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals                                                |           |           |           |           |
|----------------------------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                                                 | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| <b>ADRENAL GLAND: BILATERAL, CORTEX, SUBCAPSULAR<br/>HYPERPLASIA</b> |           |           |           |           |
| <b>LESION RATES</b>                                                  |           |           |           |           |
| OVERALL                                                              | 0/50 (0%) | 0/50 (0%) | 0/38 (0%) | 2/49 (4%) |
| POLY 3 RATE                                                          | 0/43.42   | 0/42.27   | 0/33.64   | 2/41.61   |
| POLY 3 PERCENT                                                       | 0%        | 0%        | 0%        | 4.81%     |
| TERMINAL                                                             | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 2/24 (8%) |
| FIRST INCIDENCE                                                      | ---       | ---       | ---       | 731 (T)   |
| <b>STATISTICAL TESTS</b>                                             |           |           |           |           |
| POLY 3                                                               | P=0.047*  |           |           | P=0.227   |
| POLY 1.5                                                             | P=0.047*  |           |           | P=0.229   |
| POLY 6                                                               | P=0.046*  |           |           | P=0.224   |
| COCH-ARM / FISHERS                                                   | P=0.048*  |           |           | P=0.242   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| ADRENAL GLAND: CORTEX |           |           |           |           |
| HYPERTROPHY: FOCAL    |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 0/50 (0%) | 0/50 (0%) | 0/38 (0%) | 1/49 (2%) |
| POLY 3 RATE           | 0/43.42   | 0/42.27   | 0/33.64   | 1/41.61   |
| POLY 3 PERCENT        | 0%        | 0%        | 0%        | 2.4%      |
| TERMINAL              | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 1/24 (4%) |
| FIRST INCIDENCE       | ---       | ---       | ---       | 731 (T)   |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.198   |           |           | P=0.491   |
| POLY 1.5              | P=0.199   |           |           | P=0.493   |
| POLY 6                | P=0.196   |           |           | P=0.489   |
| COCH-ARM / FISHERS    | P=0.199   |           |           | P=0.495   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals                   |           |           |           |           |
|-----------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                    | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| ADRENAL GLAND: CORTEX                   |           |           |           |           |
| HYPERTROPHY; FOCAL (INCLUDES BILATERAL) |           |           |           |           |
| LESION RATES                            |           |           |           |           |
| OVERALL                                 | 0/50 (0%) | 0/50 (0%) | 0/38 (0%) | 1/49 (2%) |
| POLY 3 RATE                             | 0/43.42   | 0/42.27   | 0/33.64   | 1/41.61   |
| POLY 3 PERCENT                          | 0%        | 0%        | 0%        | 2.4%      |
| TERMINAL                                | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 1/24 (4%) |
| FIRST INCIDENCE                         | ---       | ---       | ---       | 731 (T)   |
| STATISTICAL TESTS                       |           |           |           |           |
| POLY 3                                  | P=0.198   |           |           | P=0.491   |
| POLY 1.5                                | P=0.199   |           |           | P=0.493   |
| POLY 6                                  | P=0.196   |           |           | P=0.489   |
| COCH-ARM / FISHERS                      | P=0.199   |           |           | P=0.495   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals                             |           |           |           |           |
|---------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                              | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| ADRENAL GLAND: CORTEX, SUBCAPSULAR<br>HYPERPLASIA |           |           |           |           |
| LESION RATES                                      |           |           |           |           |
| OVERALL                                           | 0/50 (0%) | 0/50 (0%) | 0/38 (0%) | 1/49 (2%) |
| POLY 3 RATE                                       | 0/43.42   | 0/42.27   | 0/33.64   | 1/41.61   |
| POLY 3 PERCENT                                    | 0%        | 0%        | 0%        | 2.4%      |
| TERMINAL                                          | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 1/24 (4%) |
| FIRST INCIDENCE                                   | ---       | ---       | ---       | 731 (T)   |
| STATISTICAL TESTS                                 |           |           |           |           |
| POLY 3                                            | P=0.198   |           |           | P=0.491   |
| POLY 1.5                                          | P=0.199   |           |           | P=0.493   |
| POLY 6                                            | P=0.196   |           |           | P=0.489   |
| COCH-ARM / FISHERS                                | P=0.199   |           |           | P=0.495   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals                                                  |           |           |           |            |
|------------------------------------------------------------------------|-----------|-----------|-----------|------------|
| DOSE                                                                   | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| ADRENAL GLAND: CORTEX, SUBCAPSULAR<br>HYPERPLASIA (INCLUDES BILATERAL) |           |           |           |            |
| LESION RATES                                                           |           |           |           |            |
| OVERALL                                                                | 0/50 (0%) | 0/50 (0%) | 0/38 (0%) | 3/49 (6%)  |
| POLY 3 RATE                                                            | 0/43.42   | 0/42.27   | 0/33.64   | 3/41.61    |
| POLY 3 PERCENT                                                         | 0%        | 0%        | 0%        | 7.21%      |
| TERMINAL                                                               | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 3/24 (13%) |
| FIRST INCIDENCE                                                        | ---       | ---       | ---       | 731 (T)    |
| STATISTICAL TESTS                                                      |           |           |           |            |
| POLY 3                                                                 | P=0.012*  |           |           | P=0.111    |
| POLY 1.5                                                               | P=0.012*  |           |           | P=0.112    |
| POLY 6                                                                 | P=0.011*  |           |           | P=0.108    |
| COCH-ARM / FISHERS                                                     | P=0.013*  |           |           | P=0.117    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals                     |           |           |           |           |
|-------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                      | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| ADRENAL GLAND: SUBCAPSULAR<br>HYPERPLASIA |           |           |           |           |
| LESION RATES                              |           |           |           |           |
| OVERALL                                   | 0/50 (0%) | 0/50 (0%) | 2/38 (5%) | 0/49 (0%) |
| POLY 3 RATE                               | 0/43.42   | 0/42.27   | 2/33.64   | 0/41.61   |
| POLY 3 PERCENT                            | 0%        | 0%        | 5.95%     | 0%        |
| TERMINAL                                  | 0/33 (0%) | 0/29 (0%) | 2/24 (8%) | 0/24 (0%) |
| FIRST INCIDENCE                           | ---       | ---       | 731 (T)   | ---       |
| STATISTICAL TESTS                         |           |           |           |           |
| POLY 3                                    | P=0.572   |           | P=0.181   |           |
| POLY 1.5                                  | P=0.577   |           | P=0.179   |           |
| POLY 6                                    | P=0.562   |           | P=0.183   |           |
| COCH-ARM / FISHERS                        | P=0.582   |           | P=0.184   |           |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| ALL ORGANS            |           |           |           |           |
| POLYARTERITIS NODOSA  |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 3/50 (6%) | 4/50 (8%) | 1/40 (3%) | 0/50 (0%) |
| POLY 3 RATE           | 3/43.59   | 4/43.13   | 1/34.08   | 0/41.64   |
| POLY 3 PERCENT        | 6.88%     | 9.27%     | 2.93%     | 0%        |
| TERMINAL              | 2/33 (6%) | 1/29 (3%) | 1/24 (4%) | 0/24 (0%) |
| FIRST INCIDENCE       | 688       | 562       | 731 (T)   | ---       |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.981   | P=0.494   | P=0.901   | P=0.990   |
| POLY 1.5              | P=0.982   | P=0.492   | P=0.902   | P=0.990   |
| POLY 6                | P=0.980   | P=0.500   | P=0.901   | P=0.990   |
| COCH-ARM / FISHERS    | P=0.983   | P=0.500   | P=0.910   | P=1.000   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| EYE: LENS<br>CATARACT |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 1/49 (2%) | 1/50 (2%) | 0/40 (0%) | 0/50 (0%) |
| POLY 3 RATE           | 1/42.42   | 1/42.27   | 0/34.08   | 0/41.64   |
| POLY 3 PERCENT        | 2.36%     | 2.37%     | 0%        | 0%        |
| TERMINAL              | 1/32 (3%) | 1/29 (3%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE       | 731 (T)   | 731 (T)   | ---       | ---       |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.946   | P=0.760   | P=0.971   | P=0.977   |
| POLY 1.5              | P=0.947   | P=0.760   | P=0.971   | P=0.977   |
| POLY 6                | P=0.945   | P=0.761   | P=0.972   | P=0.977   |
| COCH-ARM / FISHERS    | P=0.949   | P=0.758   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals          |           |            |           |            |
|--------------------------------|-----------|------------|-----------|------------|
| DOSE                           | 0 ppm     | 100 ppm    | 200 ppm   | 400 ppm    |
| HARDERIAN GLAND<br>HYPERPLASIA |           |            |           |            |
| LESION RATES                   |           |            |           |            |
| OVERALL                        | 3/50 (6%) | 6/49 (12%) | 3/40 (8%) | 7/50 (14%) |
| POLY 3 RATE                    | 3/43.64   | 6/41.33    | 3/34.53   | 7/43.1     |
| POLY 3 PERCENT                 | 6.87%     | 14.52%     | 8.69%     | 16.24%     |
| TERMINAL                       | 2/33 (6%) | 5/28 (18%) | 1/24 (4%) | 5/24 (21%) |
| FIRST INCIDENCE                | 673       | 715        | 660       | 417        |
| STATISTICAL TESTS              |           |            |           |            |
| POLY 3                         | P=0.167   | P=0.214    | P=0.551   | P=0.151    |
| POLY 1.5                       | P=0.168   | P=0.218    | P=0.550   | P=0.152    |
| POLY 6                         | P=0.164   | P=0.212    | P=0.555   | P=0.147    |
| COCH-ARM / FISHERS             | P=0.173   | P=0.233    | P=0.550   | P=0.159    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals            |           |            |           |            |
|----------------------------------|-----------|------------|-----------|------------|
| DOSE                             | 0 ppm     | 100 ppm    | 200 ppm   | 400 ppm    |
| HARDERIAN GLAND                  |           |            |           |            |
| HYPERPLASIA (INCLUDES BILATERAL) |           |            |           |            |
| LESION RATES                     |           |            |           |            |
| OVERALL                          | 3/50 (6%) | 6/49 (12%) | 3/40 (8%) | 8/50 (16%) |
| POLY 3 RATE                      | 3/43.64   | 6/41.33    | 3/34.53   | 8/43.1     |
| POLY 3 PERCENT                   | 6.87%     | 14.52%     | 8.69%     | 18.56%     |
| TERMINAL                         | 2/33 (6%) | 5/28 (18%) | 1/24 (4%) | 6/24 (25%) |
| FIRST INCIDENCE                  | 673       | 715        | 660       | 417        |
| STATISTICAL TESTS                |           |            |           |            |
| POLY 3                           | P=0.097   | P=0.214    | P=0.551   | P=0.093    |
| POLY 1.5                         | P=0.097   | P=0.218    | P=0.550   | P=0.094    |
| POLY 6                           | P=0.094   | P=0.212    | P=0.555   | P=0.089    |
| COCH-ARM / FISHERS               | P=0.101   | P=0.233    | P=0.550   | P=0.100    |

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

| Females: Core Animals    |             |             |             |             |
|--------------------------|-------------|-------------|-------------|-------------|
| DOSE                     | 0 ppm       | 100 ppm     | 200 ppm     | 400 ppm     |
| <b>HEART</b>             |             |             |             |             |
| <b>CARDIOMYOPATHY</b>    |             |             |             |             |
| <b>LESION RATES</b>      |             |             |             |             |
| OVERALL                  | 31/50 (62%) | 23/50 (46%) | 17/39 (44%) | 21/50 (42%) |
| POLY 3 RATE              | 31/44.71    | 23/43.92    | 17/35.55    | 21/45.02    |
| POLY 3 PERCENT           | 69.34%      | 52.37%      | 47.82%      | 46.64%      |
| TERMINAL                 | 25/33 (76%) | 15/29 (52%) | 11/24 (46%) | 11/24 (46%) |
| FIRST INCIDENCE          | 590         | 562         | 563         | 459         |
| <b>STATISTICAL TESTS</b> |             |             |             |             |
| POLY 3                   | P=0.984     | P=0.973     | P=0.989     | P=0.994     |
| POLY 1.5                 | P=0.979     | P=0.968     | P=0.984     | P=0.991     |
| POLY 6                   | P=0.987     | P=0.979     | P=0.993     | P=0.996     |
| COCH-ARM / FISHERS       | P=0.970     | P=0.965     | P=0.974     | P=0.986     |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals   |           |           |           |           |
|-------------------------|-----------|-----------|-----------|-----------|
| DOSE                    | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| HEART: VALVE<br>PIGMENT |           |           |           |           |
| LESION RATES            |           |           |           |           |
| OVERALL                 | 0/50 (0%) | 2/50 (4%) | 0/39 (0%) | 1/50 (2%) |
| POLY 3 RATE             | 0/43.42   | 2/42.27   | 0/33.93   | 1/42.39   |
| POLY 3 PERCENT          | 0%        | 4.73%     | 0%        | 2.36%     |
| TERMINAL                | 0/33 (0%) | 2/29 (7%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE         | ---       | 731 (T)   | ---       | 459       |
| STATISTICAL TESTS       |           |           |           |           |
| POLY 3                  | P=0.522   | P=0.231   |           | P=0.495   |
| POLY 1.5                | P=0.523   | P=0.232   |           | P=0.496   |
| POLY 6                  | P=0.519   | P=0.231   |           | P=0.493   |
| COCH-ARM / FISHERS      | P=0.531   | P=0.247   |           | P=0.500   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals             |           |           |           |           |
|-----------------------------------|-----------|-----------|-----------|-----------|
| DOSE                              | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| INTESTINE, SMALL, ILEUM           |           |           |           |           |
| CELLULARITY INCREASED: LYMPHOCYTE |           |           |           |           |
| LESION RATES                      |           |           |           |           |
| OVERALL                           | 0/50 (0%) | 1/47 (2%) | 0/39 (0%) | 0/49 (0%) |
| POLY 3 RATE                       | 0/43.42   | 1/40.71   | 0/33.19   | 0/41.12   |
| POLY 3 PERCENT                    | 0%        | 2.46%     | 0%        | 0%        |
| TERMINAL                          | 0/33 (0%) | 1/29 (3%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE                   | ---       | 731 (T)   | ---       | ---       |
| STATISTICAL TESTS                 |           |           |           |           |
| POLY 3                            | P=0.866   | P=0.487   |           |           |
| POLY 1.5                          | P=0.867   | P=0.486   |           |           |
| POLY 6                            | P=0.865   | P=0.489   |           |           |
| COCH-ARM / FISHERS                | P=0.873   | P=0.485   |           |           |

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

| Females: Core Animals           |             |             |             |             |
|---------------------------------|-------------|-------------|-------------|-------------|
| DOSE                            | 0 ppm       | 100 ppm     | 200 ppm     | 400 ppm     |
| KIDNEY                          |             |             |             |             |
| CHRONIC PROGRESSIVE NEPHROPATHY |             |             |             |             |
| LESION RATES                    |             |             |             |             |
| OVERALL                         | 19/50 (38%) | 18/49 (37%) | 17/40 (43%) | 20/50 (40%) |
| POLY 3 RATE                     | 19/44.66    | 18/45.09    | 17/35.52    | 20/44.05    |
| POLY 3 PERCENT                  | 42.54%      | 39.92%      | 47.87%      | 45.4%       |
| TERMINAL                        | 14/33 (42%) | 13/29 (45%) | 11/24 (46%) | 11/24 (46%) |
| FIRST INCIDENCE                 | 508         | 268         | 563         | 283         |
| STATISTICAL TESTS               |             |             |             |             |
| POLY 3                          | P=0.367     | P=0.681     | P=0.400     | P=0.477     |
| POLY 1.5                        | P=0.377     | P=0.666     | P=0.398     | P=0.480     |
| POLY 6                          | P=0.363     | P=0.686     | P=0.415     | P=0.473     |
| COCH-ARM / FISHERS              | P=0.415     | P=0.632     | P=0.414     | P=0.500     |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals     |           |           |           |           |
|---------------------------|-----------|-----------|-----------|-----------|
| DOSE                      | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| <b>KIDNEY<br/>INFARCT</b> |           |           |           |           |
| <b>LESION RATES</b>       |           |           |           |           |
| OVERALL                   | 0/50 (0%) | 4/49 (8%) | 1/40 (3%) | 1/50 (2%) |
| POLY 3 RATE               | 0/43.42   | 4/43.21   | 1/34.79   | 1/41.64   |
| POLY 3 PERCENT            | 0%        | 9.26%     | 2.87%     | 2.4%      |
| TERMINAL                  | 0/33 (0%) | 2/29 (7%) | 0/24 (0%) | 1/24 (4%) |
| FIRST INCIDENCE           | ---       | 380       | 484       | 731 (T)   |
| <b>STATISTICAL TESTS</b>  |           |           |           |           |
| POLY 3                    | P=0.633   | P=0.059   | P=0.456   | P=0.492   |
| POLY 1.5                  | P=0.638   | P=0.058   | P=0.455   | P=0.494   |
| POLY 6                    | P=0.626   | P=0.061   | P=0.457   | P=0.489   |
| COCH-ARM / FISHERS        | P=0.653   | P=0.056   | P=0.444   | P=0.500   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals                         |           |           |           |           |
|-----------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                          | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| KIDNEY: CYTOPLASMIC, RENAL TUBULE VACUOLATION |           |           |           |           |
| LESION RATES                                  |           |           |           |           |
| OVERALL                                       | 2/50 (4%) | 0/49 (0%) | 0/40 (0%) | 0/50 (0%) |
| POLY 3 RATE                                   | 2/43.76   | 0/42.06   | 0/34.08   | 0/41.64   |
| POLY 3 PERCENT                                | 4.57%     | 0%        | 0%        | 0%        |
| TERMINAL                                      | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE                               | 673       | ---       | ---       | ---       |
| STATISTICAL TESTS                             |           |           |           |           |
| POLY 3                                        | P=0.982   | P=0.983   | P=0.976   | P=0.983   |
| POLY 1.5                                      | P=0.982   | P=0.983   | P=0.976   | P=0.983   |
| POLY 6                                        | P=0.982   | P=0.983   | P=0.976   | P=0.982   |
| COCH-ARM / FISHERS                            | P=0.982   | P=1.000   | P=1.000   | P=1.000   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals      |           |            |           |           |
|----------------------------|-----------|------------|-----------|-----------|
| DOSE                       | 0 ppm     | 100 ppm    | 200 ppm   | 400 ppm   |
| KIDNEY: PELVIS<br>DILATION |           |            |           |           |
| LESION RATES               |           |            |           |           |
| OVERALL                    | 0/50 (0%) | 4/49 (8%)  | 0/40 (0%) | 1/50 (2%) |
| POLY 3 RATE                | 0/43.42   | 4/42.6     | 0/34.08   | 1/41.64   |
| POLY 3 PERCENT             | 0%        | 9.39%      | 0%        | 2.4%      |
| TERMINAL                   | 0/33 (0%) | 3/29 (10%) | 0/24 (0%) | 1/24 (4%) |
| FIRST INCIDENCE            | ---       | 562        | ---       | 731 (T)   |
| STATISTICAL TESTS          |           |            |           |           |
| POLY 3                     | P=0.679   | P=0.057    |           | P=0.492   |
| POLY 1.5                   | P=0.683   | P=0.057    |           | P=0.494   |
| POLY 6                     | P=0.674   | P=0.059    |           | P=0.489   |
| COCH-ARM / FISHERS         | P=0.694   | P=0.056    |           | P=0.500   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals     |           |           |           |           |
|---------------------------|-----------|-----------|-----------|-----------|
| DOSE                      | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| KIDNEY: PELVIS            |           |           |           |           |
| INFLAMMATION: SUPPURATIVE |           |           |           |           |
| LESION RATES              |           |           |           |           |
| OVERALL                   | 0/50 (0%) | 1/49 (2%) | 1/40 (3%) | 0/50 (0%) |
| POLY 3 RATE               | 0/43.42   | 1/42.35   | 1/34.79   | 0/41.64   |
| POLY 3 PERCENT            | 0%        | 2.36%     | 2.87%     | 0%        |
| TERMINAL                  | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE           | ---       | 650       | 484       | ---       |
| STATISTICAL TESTS         |           |           |           |           |
| POLY 3                    | P=0.738   | P=0.495   | P=0.456   |           |
| POLY 1.5                  | P=0.743   | P=0.494   | P=0.455   |           |
| POLY 6                    | P=0.732   | P=0.497   | P=0.457   |           |
| COCH-ARM / FISHERS        | P=0.756   | P=0.495   | P=0.444   |           |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals     |           |           |           |           |
|---------------------------|-----------|-----------|-----------|-----------|
| DOSE                      | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| KIDNEY: RENAL TUBULE CYST |           |           |           |           |
| LESION RATES              |           |           |           |           |
| OVERALL                   | 1/50 (2%) | 0/49 (0%) | 0/40 (0%) | 0/50 (0%) |
| POLY 3 RATE               | 1/43.42   | 0/42.06   | 0/34.08   | 0/41.64   |
| POLY 3 PERCENT            | 2.3%      | 0%        | 0%        | 0%        |
| TERMINAL                  | 1/33 (3%) | 0/29 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE           | 731 (T)   | ---       | ---       | ---       |
| STATISTICAL TESTS         |           |           |           |           |
| POLY 3                    | P=0.963   | P=0.976   | P=0.971   | P=0.976   |
| POLY 1.5                  | P=0.964   | P=0.976   | P=0.971   | P=0.976   |
| POLY 6                    | P=0.962   | P=0.977   | P=0.971   | P=0.976   |
| COCH-ARM / FISHERS        | P=0.965   | P=1.000   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals        |           |           |           |           |
|------------------------------|-----------|-----------|-----------|-----------|
| DOSE                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| KIDNEY: RENAL TUBULE         |           |           |           |           |
| HYALINE DROPLET ACCUMULATION |           |           |           |           |
| LESION RATES                 |           |           |           |           |
| OVERALL                      | 2/50 (4%) | 0/49 (0%) | 0/40 (0%) | 0/50 (0%) |
| POLY 3 RATE                  | 2/44.12   | 0/42.06   | 0/34.08   | 0/41.64   |
| POLY 3 PERCENT               | 4.53%     | 0%        | 0%        | 0%        |
| TERMINAL                     | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE              | 590       | ---       | ---       | ---       |
| STATISTICAL TESTS            |           |           |           |           |
| POLY 3                       | P=0.982   | P=0.983   | P=0.976   | P=0.982   |
| POLY 1.5                     | P=0.982   | P=0.983   | P=0.976   | P=0.983   |
| POLY 6                       | P=0.982   | P=0.983   | P=0.975   | P=0.982   |
| COCH-ARM / FISHERS           | P=0.982   | P=1.000   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals     |           |           |           |           |
|---------------------------|-----------|-----------|-----------|-----------|
| DOSE                      | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LARYNX                    |           |           |           |           |
| INFLAMMATION: SUPPURATIVE |           |           |           |           |
| LESION RATES              |           |           |           |           |
| OVERALL                   | 0/50 (0%) | 2/49 (4%) | 1/39 (3%) | 0/50 (0%) |
| POLY 3 RATE               | 0/43.42   | 2/42.55   | 1/33.99   | 0/41.64   |
| POLY 3 PERCENT            | 0%        | 4.7%      | 2.94%     | 0%        |
| TERMINAL                  | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE           | ---       | 640       | 710       | ---       |
| STATISTICAL TESTS         |           |           |           |           |
| POLY 3                    | P=0.786   | P=0.232   | P=0.451   |           |
| POLY 1.5                  | P=0.790   | P=0.231   | P=0.450   |           |
| POLY 6                    | P=0.780   | P=0.235   | P=0.452   |           |
| COCH-ARM / FISHERS        | P=0.802   | P=0.242   | P=0.438   |           |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals            |           |           |           |           |
|----------------------------------|-----------|-----------|-----------|-----------|
| DOSE                             | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| <b>LARYNX: GLAND</b>             |           |           |           |           |
| <b>INFLAMMATION: SUPPURATIVE</b> |           |           |           |           |
| <b>LESION RATES</b>              |           |           |           |           |
| OVERALL                          | 0/50 (0%) | 2/49 (4%) | 0/39 (0%) | 0/50 (0%) |
| POLY 3 RATE                      | 0/43.42   | 2/42.08   | 0/33.91   | 0/41.64   |
| POLY 3 PERCENT                   | 0%        | 4.75%     | 0%        | 0%        |
| TERMINAL                         | 0/33 (0%) | 1/29 (3%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE                  | ---       | 725       | ---       | ---       |
| <b>STATISTICAL TESTS</b>         |           |           |           |           |
| POLY 3                           | P=0.869   | P=0.230   |           |           |
| POLY 1.5                         | P=0.871   | P=0.230   |           |           |
| POLY 6                           | P=0.866   | P=0.231   |           |           |
| COCH-ARM / FISHERS               | P=0.876   | P=0.242   |           |           |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals |           |            |           |           |
|-----------------------|-----------|------------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm    | 200 ppm   | 400 ppm   |
| LIVER                 |           |            |           |           |
| BASOPHILIC FOCUS      |           |            |           |           |
| LESION RATES          |           |            |           |           |
| OVERALL               | 1/50 (2%) | 4/50 (8%)  | 1/38 (3%) | 0/50 (0%) |
| POLY 3 RATE           | 1/44.07   | 4/42.29    | 1/33.75   | 0/41.64   |
| POLY 3 PERCENT        | 2.27%     | 9.46%      | 2.96%     | 0%        |
| TERMINAL              | 0/33 (0%) | 3/29 (10%) | 1/24 (4%) | 0/24 (0%) |
| FIRST INCIDENCE       | 515       | 726        | 731 (T)   | ---       |
| STATISTICAL TESTS     |           |            |           |           |
| POLY 3                | P=0.919   | P=0.166    | P=0.700   | P=0.976   |
| POLY 1.5              | P=0.923   | P=0.169    | P=0.699   | P=0.976   |
| POLY 6                | P=0.915   | P=0.164    | P=0.701   | P=0.975   |
| COCH-ARM / FISHERS    | P=0.929   | P=0.181    | P=0.680   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LIVER                 |           |           |           |           |
| CLEAR CELL FOCUS      |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 1/50 (2%) | 2/50 (4%) | 2/38 (5%) | 2/50 (4%) |
| POLY 3 RATE           | 1/43.47   | 2/42.27   | 2/33.75   | 2/41.64   |
| POLY 3 PERCENT        | 2.3%      | 4.73%     | 5.93%     | 4.8%      |
| TERMINAL              | 0/33 (0%) | 2/29 (7%) | 2/24 (8%) | 2/24 (8%) |
| FIRST INCIDENCE       | 719       | 731 (T)   | 731 (T)   | 731 (T)   |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.394   | P=0.490   | P=0.412   | P=0.485   |
| POLY 1.5              | P=0.400   | P=0.492   | P=0.409   | P=0.489   |
| POLY 6                | P=0.386   | P=0.490   | P=0.414   | P=0.479   |
| COCH-ARM / FISHERS    | P=0.414   | P=0.500   | P=0.397   | P=0.500   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals |           |           |            |            |
|-----------------------|-----------|-----------|------------|------------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm    | 400 ppm    |
| LIVER                 |           |           |            |            |
| EOSINOPHILIC FOCUS    |           |           |            |            |
| LESION RATES          |           |           |            |            |
| OVERALL               | 1/50 (2%) | 2/50 (4%) | 3/38 (8%)  | 4/50 (8%)  |
| POLY 3 RATE           | 1/43.42   | 2/42.27   | 3/33.75    | 4/42.03    |
| POLY 3 PERCENT        | 2.3%      | 4.73%     | 8.89%      | 9.52%      |
| TERMINAL              | 1/33 (3%) | 2/29 (7%) | 3/24 (13%) | 3/24 (13%) |
| FIRST INCIDENCE       | 731 (T)   | 731 (T)   | 731 (T)    | 619        |
| STATISTICAL TESTS     |           |           |            |            |
| POLY 3                | P=0.106   | P=0.491   | P=0.218    | P=0.168    |
| POLY 1.5              | P=0.108   | P=0.492   | P=0.216    | P=0.171    |
| POLY 6                | P=0.103   | P=0.491   | P=0.220    | P=0.165    |
| COCH-ARM / FISHERS    | P=0.114   | P=0.500   | P=0.213    | P=0.181    |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals        |           |           |           |           |
|------------------------------|-----------|-----------|-----------|-----------|
| DOSE                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LIVER                        |           |           |           |           |
| EXTRAMEDULLARY HEMATOPOIESIS |           |           |           |           |
| LESION RATES                 |           |           |           |           |
| OVERALL                      | 0/50 (0%) | 2/50 (4%) | 1/38 (3%) | 0/50 (0%) |
| POLY 3 RATE                  | 0/43.42   | 2/42.27   | 1/34.46   | 0/41.64   |
| POLY 3 PERCENT               | 0%        | 4.73%     | 2.9%      | 0%        |
| TERMINAL                     | 0/33 (0%) | 2/29 (7%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE              | ---       | 731 (T)   | 484       | ---       |
| STATISTICAL TESTS            |           |           |           |           |
| POLY 3                       | P=0.783   | P=0.231   | P=0.454   |           |
| POLY 1.5                     | P=0.788   | P=0.232   | P=0.450   |           |
| POLY 6                       | P=0.777   | P=0.231   | P=0.457   |           |
| COCH-ARM / FISHERS           | P=0.800   | P=0.247   | P=0.432   |           |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals |           |           |            |            |
|-----------------------|-----------|-----------|------------|------------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm    | 400 ppm    |
| LIVER                 |           |           |            |            |
| FATTY CHANGE: DIFFUSE |           |           |            |            |
| LESION RATES          |           |           |            |            |
| OVERALL               | 2/50 (4%) | 1/50 (2%) | 4/38 (11%) | 6/50 (12%) |
| POLY 3 RATE           | 2/43.42   | 1/42.6    | 4/33.75    | 6/41.82    |
| POLY 3 PERCENT        | 4.61%     | 2.35%     | 11.85%     | 14.35%     |
| TERMINAL              | 2/33 (6%) | 0/29 (0%) | 4/24 (17%) | 5/24 (21%) |
| FIRST INCIDENCE       | 731 (T)   | 640       | 731 (T)    | 683        |
| STATISTICAL TESTS     |           |           |            |            |
| POLY 3                | P=0.032*  | P=0.875   | P=0.226    | P=0.120    |
| POLY 1.5              | P=0.033*  | P=0.875   | P=0.223    | P=0.123    |
| POLY 6                | P=0.030*  | P=0.876   | P=0.229    | P=0.115    |
| COCH-ARM / FISHERS    | P=0.037*  | P=0.879   | P=0.218    | P=0.134    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals        |           |           |           |           |
|------------------------------|-----------|-----------|-----------|-----------|
| DOSE                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LIVER                        |           |           |           |           |
| INFLAMMATION: CHRONIC-ACTIVE |           |           |           |           |
| LESION RATES                 |           |           |           |           |
| OVERALL                      | 0/50 (0%) | 1/50 (2%) | 0/38 (0%) | 0/50 (0%) |
| POLY 3 RATE                  | 0/43.42   | 1/42.29   | 0/33.75   | 0/41.64   |
| POLY 3 PERCENT               | 0%        | 2.36%     | 0%        | 0%        |
| TERMINAL                     | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE              | ---       | 725       | ---       | ---       |
| STATISTICAL TESTS            |           |           |           |           |
| POLY 3                       | P=0.864   | P=0.495   |           |           |
| POLY 1.5                     | P=0.866   | P=0.495   |           |           |
| POLY 6                       | P=0.861   | P=0.495   |           |           |
| COCH-ARM / FISHERS           | P=0.873   | P=0.500   |           |           |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LIVER                 |           |           |           |           |
| INFLAMMATION: FOCAL   |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 3/50 (6%) | 0/50 (0%) | 0/38 (0%) | 0/50 (0%) |
| POLY 3 RATE           | 3/43.42   | 0/42.27   | 0/33.75   | 0/41.64   |
| POLY 3 PERCENT        | 6.91%     | 0%        | 0%        | 0%        |
| TERMINAL              | 3/33 (9%) | 0/29 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE       | 731 (T)   | ---       | ---       | ---       |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.992   | P=0.990   | P=0.985   | P=0.990   |
| POLY 1.5              | P=0.992   | P=0.990   | P=0.984   | P=0.990   |
| POLY 6                | P=0.992   | P=0.991   | P=0.985   | P=0.990   |
| COCH-ARM / FISHERS    | P=0.991   | P=1.000   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LIVER                 |           |           |           |           |
| MIXED CELL FOCUS      |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 1/50 (2%) | 2/50 (4%) | 1/38 (3%) | 2/50 (4%) |
| POLY 3 RATE           | 1/43.42   | 2/42.27   | 1/33.75   | 2/41.64   |
| POLY 3 PERCENT        | 2.3%      | 4.73%     | 2.96%     | 4.8%      |
| TERMINAL              | 1/33 (3%) | 2/29 (7%) | 1/24 (4%) | 2/24 (8%) |
| FIRST INCIDENCE       | 731 (T)   | 731 (T)   | 731 (T)   | 731 (T)   |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.421   | P=0.491   | P=0.704   | P=0.485   |
| POLY 1.5              | P=0.425   | P=0.492   | P=0.702   | P=0.489   |
| POLY 6                | P=0.414   | P=0.491   | P=0.706   | P=0.480   |
| COCH-ARM / FISHERS    | P=0.436   | P=0.500   | P=0.680   | P=0.500   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals    |           |           |           |           |
|--------------------------|-----------|-----------|-----------|-----------|
| DOSE                     | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| <b>LIVER</b>             |           |           |           |           |
| <b>NECROSIS</b>          |           |           |           |           |
| <b>LESION RATES</b>      |           |           |           |           |
| OVERALL                  | 2/50 (4%) | 4/50 (8%) | 1/38 (3%) | 1/50 (2%) |
| POLY 3 RATE              | 2/43.7    | 4/43.18   | 1/33.75   | 1/41.75   |
| POLY 3 PERCENT           | 4.58%     | 9.26%     | 2.96%     | 2.4%      |
| TERMINAL                 | 0/33 (0%) | 0/29 (0%) | 1/24 (4%) | 0/24 (0%) |
| FIRST INCIDENCE          | 688       | 518       | 731 (T)   | 704       |
| <b>STATISTICAL TESTS</b> |           |           |           |           |
| POLY 3                   | P=0.864   | P=0.331   | P=0.829   | P=0.870   |
| POLY 1.5                 | P=0.867   | P=0.331   | P=0.827   | P=0.872   |
| POLY 6                   | P=0.859   | P=0.334   | P=0.830   | P=0.867   |
| COCH-ARM / FISHERS       | P=0.876   | P=0.339   | P=0.821   | P=0.879   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LIVER                 |           |           |           |           |
| TENSION LIPIDOSIS     |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 3/50 (6%) | 0/50 (0%) | 0/38 (0%) | 3/50 (6%) |
| POLY 3 RATE           | 3/43.42   | 0/42.27   | 0/33.75   | 3/42.71   |
| POLY 3 PERCENT        | 6.91%     | 0%        | 0%        | 7.02%     |
| TERMINAL              | 3/33 (9%) | 0/29 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE       | 731 (T)   | ---       | ---       | 459       |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.440   | P=0.990   | P=0.985   | P=0.655   |
| POLY 1.5              | P=0.438   | P=0.990   | P=0.984   | P=0.655   |
| POLY 6                | P=0.439   | P=0.991   | P=0.985   | P=0.655   |
| COCH-ARM / FISHERS    | P=0.436   | P=1.000   | P=1.000   | P=0.661   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals          |           |           |           |           |
|--------------------------------|-----------|-----------|-----------|-----------|
| DOSE                           | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LIVER: CENTRIOLOBULAR NECROSIS |           |           |           |           |
| LESION RATES                   |           |           |           |           |
| OVERALL                        | 0/50 (0%) | 0/50 (0%) | 0/38 (0%) | 2/50 (4%) |
| POLY 3 RATE                    | 0/43.42   | 0/42.27   | 0/33.75   | 2/41.86   |
| POLY 3 PERCENT                 | 0%        | 0%        | 0%        | 4.78%     |
| TERMINAL                       | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE                | ---       | ---       | ---       | 683       |
| STATISTICAL TESTS              |           |           |           |           |
| POLY 3                         | P=0.048*  |           |           | P=0.229   |
| POLY 1.5                       | P=0.048*  |           |           | P=0.231   |
| POLY 6                         | P=0.047*  |           |           | P=0.226   |
| COCH-ARM / FISHERS             | P=0.050*  |           |           | P=0.247   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LUNG                  |           |           |           |           |
| HEMORRHAGE            |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 0/50 (0%) | 1/50 (2%) | 1/39 (3%) | 1/50 (2%) |
| POLY 3 RATE           | 0/43.42   | 1/42.27   | 1/34.11   | 1/41.82   |
| POLY 3 PERCENT        | 0%        | 2.37%     | 2.93%     | 2.39%     |
| TERMINAL              | 0/33 (0%) | 1/29 (3%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE       | ---       | 731 (T)   | 683       | 683       |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.367   | P=0.495   | P=0.452   | P=0.493   |
| POLY 1.5              | P=0.370   | P=0.495   | P=0.451   | P=0.494   |
| POLY 6                | P=0.362   | P=0.495   | P=0.454   | P=0.490   |
| COCH-ARM / FISHERS    | P=0.381   | P=0.500   | P=0.438   | P=0.500   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals                                         |           |             |            |             |
|---------------------------------------------------------------|-----------|-------------|------------|-------------|
| DOSE                                                          | 0 ppm     | 100 ppm     | 200 ppm    | 400 ppm     |
| <b>LUNG: ALVEOLAR/BRONCHIOLAR, EPITHELIUM<br/>HYPERPLASIA</b> |           |             |            |             |
| <b>LESION RATES</b>                                           |           |             |            |             |
| OVERALL                                                       | 0/50 (0%) | 10/50 (20%) | 6/39 (15%) | 17/50 (34%) |
| POLY 3 RATE                                                   | 0/43.42   | 10/42.27    | 6/34.01    | 17/41.86    |
| POLY 3 PERCENT                                                | 0%        | 23.66%      | 17.64%     | 40.61%      |
| TERMINAL                                                      | 0/33 (0%) | 10/29 (34%) | 5/24 (21%) | 14/24 (58%) |
| FIRST INCIDENCE                                               | ---       | 731 (T)     | 710        | 683         |
| <b>STATISTICAL TESTS</b>                                      |           |             |            |             |
| POLY 3                                                        | P<0.001** | P=0.001**   | P=0.005**  | P<0.001**   |
| POLY 1.5                                                      | P<0.001** | P=0.001**   | P=0.005**  | P<0.001**   |
| POLY 6                                                        | P<0.001** | P=0.001**   | P=0.005**  | P<0.001**   |
| COCH-ARM / FISHERS                                            | P<0.001** | P=0.001**   | P=0.006**  | P<0.001**   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals             |           |           |           |           |
|-----------------------------------|-----------|-----------|-----------|-----------|
| DOSE                              | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LUNG: ALVEOLUS                    |           |           |           |           |
| INFILTRATION CELLULAR: HISTIOCYTE |           |           |           |           |
| LESION RATES                      |           |           |           |           |
| OVERALL                           | 0/50 (0%) | 2/50 (4%) | 0/39 (0%) | 0/50 (0%) |
| POLY 3 RATE                       | 0/43.42   | 2/42.91   | 0/33.93   | 0/41.64   |
| POLY 3 PERCENT                    | 0%        | 4.66%     | 0%        | 0%        |
| TERMINAL                          | 0/33 (0%) | 1/29 (3%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE                   | ---       | 518       | ---       | ---       |
| STATISTICAL TESTS                 |           |           |           |           |
| POLY 3                            | P=0.868   | P=0.234   |           |           |
| POLY 1.5                          | P=0.870   | P=0.234   |           |           |
| POLY 6                            | P=0.866   | P=0.236   |           |           |
| COCH-ARM / FISHERS                | P=0.876   | P=0.247   |           |           |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals                                         |            |           |           |           |
|---------------------------------------------------------------|------------|-----------|-----------|-----------|
| DOSE                                                          | 0 ppm      | 100 ppm   | 200 ppm   | 400 ppm   |
| LUNG: PERIVASCULAR<br>INFILTRATION CELLULAR: MONONUCLEAR CELL |            |           |           |           |
| LESION RATES                                                  |            |           |           |           |
| OVERALL                                                       | 4/50 (8%)  | 0/50 (0%) | 0/39 (0%) | 0/50 (0%) |
| POLY 3 RATE                                                   | 4/43.42    | 0/42.27   | 0/33.93   | 0/41.64   |
| POLY 3 PERCENT                                                | 9.21%      | 0%        | 0%        | 0%        |
| TERMINAL                                                      | 4/33 (12%) | 0/29 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE                                               | 731 (T)    | ---       | ---       | ---       |
| STATISTICAL TESTS                                             |            |           |           |           |
| POLY 3                                                        | P=0.997    | P=0.995   | P=0.991   | P=0.995   |
| POLY 1.5                                                      | P=0.997    | P=0.995   | P=0.991   | P=0.995   |
| POLY 6                                                        | P=0.997    | P=0.995   | P=0.991   | P=0.994   |
| COCH-ARM / FISHERS                                            | P=0.996    | P=1.000   | P=1.000   | P=1.000   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals                            |            |           |           |           |
|--------------------------------------------------|------------|-----------|-----------|-----------|
| DOSE                                             | 0 ppm      | 100 ppm   | 200 ppm   | 400 ppm   |
| LYMPH NODE, BRONCHIAL<br>HYPERPLASIA: LYMPHOCYTE |            |           |           |           |
| LESION RATES                                     |            |           |           |           |
| OVERALL                                          | 4/46 (9%)  | 1/46 (2%) | 0/37 (0%) | 0/44 (0%) |
| POLY 3 RATE                                      | 4/40.97    | 1/40.01   | 0/31.15   | 0/37.96   |
| POLY 3 PERCENT                                   | 9.76%      | 2.5%      | 0%        | 0%        |
| TERMINAL                                         | 4/33 (12%) | 1/27 (4%) | 0/22 (0%) | 0/23 (0%) |
| FIRST INCIDENCE                                  | 731 (T)    | 731 (T)   | ---       | ---       |
| STATISTICAL TESTS                                |            |           |           |           |
| POLY 3                                           | P=0.995    | P=0.966   | P=0.990   | P=0.994   |
| POLY 1.5                                         | P=0.995    | P=0.966   | P=0.990   | P=0.994   |
| POLY 6                                           | P=0.995    | P=0.965   | P=0.990   | P=0.994   |
| COCH-ARM / FISHERS                               | P=0.995    | P=0.972   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals                             |           |           |           |           |
|---------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                              | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LYMPH NODE, MANDIBULAR<br>HYPERPLASIA: LYMPHOCYTE |           |           |           |           |
| LESION RATES                                      |           |           |           |           |
| OVERALL                                           | 2/42 (5%) | 4/47 (9%) | 0/39 (0%) | 1/45 (2%) |
| POLY 3 RATE                                       | 2/36.29   | 4/40.18   | 0/33.08   | 1/36.89   |
| POLY 3 PERCENT                                    | 5.51%     | 9.96%     | 0%        | 2.71%     |
| TERMINAL                                          | 2/29 (7%) | 1/28 (4%) | 0/23 (0%) | 1/21 (5%) |
| FIRST INCIDENCE                                   | 731 (T)   | 650       | ---       | 731 (T)   |
| STATISTICAL TESTS                                 |           |           |           |           |
| POLY 3                                            | P=0.909   | P=0.384   | P=0.982   | P=0.882   |
| POLY 1.5                                          | P=0.911   | P=0.383   | P=0.982   | P=0.884   |
| POLY 6                                            | P=0.905   | P=0.389   | P=0.982   | P=0.878   |
| COCH-ARM / FISHERS                                | P=0.916   | P=0.394   | P=1.000   | P=0.892   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals          |           |           |           |           |
|--------------------------------|-----------|-----------|-----------|-----------|
| DOSE                           | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LYMPH NODE, MANDIBULAR PIGMENT |           |           |           |           |
| LESION RATES                   |           |           |           |           |
| OVERALL                        | 0/42 (0%) | 1/47 (2%) | 0/39 (0%) | 0/45 (0%) |
| POLY 3 RATE                    | 0/36.29   | 1/39.62   | 0/33.08   | 0/36.89   |
| POLY 3 PERCENT                 | 0%        | 2.52%     | 0%        | 0%        |
| TERMINAL                       | 0/29 (0%) | 1/28 (4%) | 0/23 (0%) | 0/21 (0%) |
| FIRST INCIDENCE                | ---       | 731 (T)   | ---       | ---       |
| STATISTICAL TESTS              |           |           |           |           |
| POLY 3                         | P=0.871   | P=0.517   |           |           |
| POLY 1.5                       | P=0.874   | P=0.518   |           |           |
| POLY 6                         | P=0.867   | P=0.517   |           |           |
| COCH-ARM / FISHERS             | P=0.882   | P=0.528   |           |           |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals                              |           |           |           |           |
|----------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                               | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LYMPH NODE, MEDIASTINAL<br>HYPERPLASIA: LYMPHOCYTE |           |           |           |           |
| LESION RATES                                       |           |           |           |           |
| OVERALL                                            | 2/49 (4%) | 3/47 (6%) | 0/39 (0%) | 2/43 (5%) |
| POLY 3 RATE                                        | 2/42.59   | 3/41.7    | 0/33.99   | 2/35.89   |
| POLY 3 PERCENT                                     | 4.7%      | 7.19%     | 0%        | 5.57%     |
| TERMINAL                                           | 2/33 (6%) | 1/29 (3%) | 0/24 (0%) | 2/23 (9%) |
| FIRST INCIDENCE                                    | 731 (T)   | 650       | ---       | 731 (T)   |
| STATISTICAL TESTS                                  |           |           |           |           |
| POLY 3                                             | P=0.654   | P=0.490   | P=0.977   | P=0.631   |
| POLY 1.5                                           | P=0.657   | P=0.484   | P=0.977   | P=0.634   |
| POLY 6                                             | P=0.652   | P=0.499   | P=0.977   | P=0.630   |
| COCH-ARM / FISHERS                                 | P=0.668   | P=0.480   | P=1.000   | P=0.641   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals                                        |           |           |           |           |
|--------------------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LYMPH NODE, MEDIASTINAL<br>INFILTRATION CELLULAR: HISTIOCYTE |           |           |           |           |
| LESION RATES                                                 |           |           |           |           |
| OVERALL                                                      | 2/49 (4%) | 1/47 (2%) | 0/39 (0%) | 0/43 (0%) |
| POLY 3 RATE                                                  | 2/42.9    | 1/41.61   | 0/33.99   | 0/35.89   |
| POLY 3 PERCENT                                               | 4.66%     | 2.4%      | 0%        | 0%        |
| TERMINAL                                                     | 1/33 (3%) | 0/29 (0%) | 0/24 (0%) | 0/23 (0%) |
| FIRST INCIDENCE                                              | 646       | 668       | ---       | ---       |
| STATISTICAL TESTS                                            |           |           |           |           |
| POLY 3                                                       | P=0.973   | P=0.873   | P=0.977   | P=0.978   |
| POLY 1.5                                                     | P=0.973   | P=0.871   | P=0.977   | P=0.979   |
| POLY 6                                                       | P=0.972   | P=0.875   | P=0.977   | P=0.978   |
| COCH-ARM / FISHERS                                           | P=0.975   | P=0.871   | P=1.000   | P=1.000   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals                        |           |           |           |           |
|----------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| <b>LYMPH NODE, MESENTERIC<br/>HEMORRHAGE</b> |           |           |           |           |
| <b>LESION RATES</b>                          |           |           |           |           |
| OVERALL                                      | 1/48 (2%) | 0/48 (0%) | 0/39 (0%) | 1/44 (2%) |
| POLY 3 RATE                                  | 1/41.85   | 0/41.7    | 0/33.08   | 1/37.84   |
| POLY 3 PERCENT                               | 2.39%     | 0%        | 0%        | 2.64%     |
| TERMINAL                                     | 0/32 (0%) | 0/29 (0%) | 0/23 (0%) | 1/24 (4%) |
| FIRST INCIDENCE                              | 646       | ---       | ---       | 731 (T)   |
| <b>STATISTICAL TESTS</b>                     |           |           |           |           |
| POLY 3                                       | P=0.568   | P=0.977   | P=0.971   | P=0.738   |
| POLY 1.5                                     | P=0.569   | P=0.977   | P=0.971   | P=0.739   |
| POLY 6                                       | P=0.567   | P=0.977   | P=0.971   | P=0.737   |
| COCH-ARM / FISHERS                           | P=0.571   | P=1.000   | P=1.000   | P=0.731   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals                             |           |           |           |           |
|---------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                              | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| LYMPH NODE, MESENTERIC<br>HYPERPLASIA: LYMPHOCYTE |           |           |           |           |
| LESION RATES                                      |           |           |           |           |
| OVERALL                                           | 2/48 (4%) | 2/48 (4%) | 0/39 (0%) | 1/44 (2%) |
| POLY 3 RATE                                       | 2/41.54   | 2/41.7    | 0/33.08   | 1/37.84   |
| POLY 3 PERCENT                                    | 4.82%     | 4.8%      | 0%        | 2.64%     |
| TERMINAL                                          | 2/32 (6%) | 2/29 (7%) | 0/23 (0%) | 1/24 (4%) |
| FIRST INCIDENCE                                   | 731 (T)   | 731 (T)   | ---       | 731 (T)   |
| STATISTICAL TESTS                                 |           |           |           |           |
| POLY 3                                            | P=0.849   | P=0.696   | P=0.977   | P=0.861   |
| POLY 1.5                                          | P=0.849   | P=0.693   | P=0.977   | P=0.861   |
| POLY 6                                            | P=0.849   | P=0.700   | P=0.977   | P=0.862   |
| COCH-ARM / FISHERS                                | P=0.852   | P=0.692   | P=1.000   | P=0.862   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals       |           |           |           |           |
|-----------------------------|-----------|-----------|-----------|-----------|
| DOSE                        | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| MAMMARY GLAND               |           |           |           |           |
| HYPERPLASIA: LOBULOALVEOLAR |           |           |           |           |
| LESION RATES                |           |           |           |           |
| OVERALL                     | 3/48 (6%) | 0/46 (0%) | 0/40 (0%) | 0/48 (0%) |
| POLY 3 RATE                 | 3/41.97   | 0/38.59   | 0/34.08   | 0/39.77   |
| POLY 3 PERCENT              | 7.15%     | 0%        | 0%        | 0%        |
| TERMINAL                    | 3/32 (9%) | 0/27 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE             | 731 (T)   | ---       | ---       | ---       |
| STATISTICAL TESTS           |           |           |           |           |
| POLY 3                      | P=0.992   | P=0.989   | P=0.986   | P=0.990   |
| POLY 1.5                    | P=0.992   | P=0.989   | P=0.986   | P=0.990   |
| POLY 6                      | P=0.992   | P=0.989   | P=0.986   | P=0.989   |
| COCH-ARM / FISHERS          | P=0.992   | P=1.000   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals        |           |           |           |           |
|------------------------------|-----------|-----------|-----------|-----------|
| DOSE                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| MAMMARY GLAND: DUCT DILATION |           |           |           |           |
| LESION RATES                 |           |           |           |           |
| OVERALL                      | 2/48 (4%) | 4/46 (9%) | 0/40 (0%) | 2/48 (4%) |
| POLY 3 RATE                  | 2/42.64   | 4/38.96   | 0/34.08   | 2/39.87   |
| POLY 3 PERCENT               | 4.69%     | 10.27%    | 0%        | 5.02%     |
| TERMINAL                     | 1/32 (3%) | 1/27 (4%) | 0/24 (0%) | 1/24 (4%) |
| FIRST INCIDENCE              | 508       | 668       | ---       | 704       |
| STATISTICAL TESTS            |           |           |           |           |
| POLY 3                       | P=0.738   | P=0.296   | P=0.977   | P=0.670   |
| POLY 1.5                     | P=0.745   | P=0.301   | P=0.977   | P=0.677   |
| POLY 6                       | P=0.730   | P=0.295   | P=0.977   | P=0.661   |
| COCH-ARM / FISHERS           | P=0.761   | P=0.318   | P=1.000   | P=0.692   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| NOSE                  |           |           |           |           |
| FOREIGN BODY          |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 0/50 (0%) | 1/49 (2%) | 0/38 (0%) | 1/49 (2%) |
| POLY 3 RATE           | 0/43.42   | 1/42.17   | 0/33.75   | 1/41.12   |
| POLY 3 PERCENT        | 0%        | 2.37%     | 0%        | 2.43%     |
| TERMINAL              | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 1/24 (4%) |
| FIRST INCIDENCE       | ---       | 702       | ---       | 731 (T)   |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.390   | P=0.494   |           | P=0.489   |
| POLY 1.5              | P=0.392   | P=0.494   |           | P=0.491   |
| POLY 6                | P=0.388   | P=0.496   |           | P=0.487   |
| COCH-ARM / FISHERS    | P=0.399   | P=0.495   |           | P=0.495   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals                                |           |           |           |           |
|------------------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                                 | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| NOSE: NASOLACRIMAL DUCT<br>INFLAMMATION: SUPPURATIVE |           |           |           |           |
| LESION RATES                                         |           |           |           |           |
| OVERALL                                              | 1/50 (2%) | 1/49 (2%) | 1/38 (3%) | 2/49 (4%) |
| POLY 3 RATE                                          | 1/43.54   | 1/42.22   | 1/33.86   | 2/41.18   |
| POLY 3 PERCENT                                       | 2.3%      | 2.37%     | 2.95%     | 4.86%     |
| TERMINAL                                             | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 1/24 (4%) |
| FIRST INCIDENCE                                      | 701       | 689       | 705       | 716       |
| STATISTICAL TESTS                                    |           |           |           |           |
| POLY 3                                               | P=0.331   | P=0.754   | P=0.704   | P=0.481   |
| POLY 1.5                                             | P=0.334   | P=0.753   | P=0.702   | P=0.483   |
| POLY 6                                               | P=0.327   | P=0.755   | P=0.707   | P=0.477   |
| COCH-ARM / FISHERS                                   | P=0.342   | P=0.747   | P=0.680   | P=0.492   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals             |            |           |            |            |
|-----------------------------------|------------|-----------|------------|------------|
| DOSE                              | 0 ppm      | 100 ppm   | 200 ppm    | 400 ppm    |
| <b>NOSE: OLFACTORY EPITHELIUM</b> |            |           |            |            |
| <b>METAPLASIA: RESPIRATORY</b>    |            |           |            |            |
| <b>LESION RATES</b>               |            |           |            |            |
| OVERALL                           | 7/50 (14%) | 0/49 (0%) | 6/38 (16%) | 6/49 (12%) |
| POLY 3 RATE                       | 7/43.54    | 0/42.06   | 6/34.32    | 6/41.83    |
| POLY 3 PERCENT                    | 16.08%     | 0%        | 17.48%     | 14.34%     |
| TERMINAL                          | 6/33 (18%) | 0/29 (0%) | 4/24 (17%) | 4/24 (17%) |
| FIRST INCIDENCE                   | 702        | ---       | 603        | 619        |
| <b>STATISTICAL TESTS</b>          |            |           |            |            |
| POLY 3                            | P=0.353    | P=0.999   | P=0.556    | P=0.699    |
| POLY 1.5                          | P=0.353    | P=0.999   | P=0.543    | P=0.698    |
| POLY 6                            | P=0.353    | P=0.999   | P=0.570    | P=0.701    |
| COCH-ARM / FISHERS                | P=0.363    | P=1.000   | P=0.523    | P=0.710    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals                       |             |           |           |           |
|---------------------------------------------|-------------|-----------|-----------|-----------|
| DOSE                                        | 0 ppm       | 100 ppm   | 200 ppm   | 400 ppm   |
| NOSE: RESPIRATORY EPITHELIUM<br>HYPERPLASIA |             |           |           |           |
| LESION RATES                                |             |           |           |           |
| OVERALL                                     | 19/50 (38%) | 0/49 (0%) | 3/38 (8%) | 3/49 (6%) |
| POLY 3 RATE                                 | 19/44.05    | 0/42.06   | 3/34.25   | 3/41.61   |
| POLY 3 PERCENT                              | 43.13%      | 0%        | 8.76%     | 7.21%     |
| TERMINAL                                    | 16/33 (48%) | 0/29 (0%) | 2/24 (8%) | 1/24 (4%) |
| FIRST INCIDENCE                             | 646         | ---       | 581       | 628       |
| STATISTICAL TESTS                           |             |           |           |           |
| POLY 3                                      | P=1.000     | P=1.000   | P=1.000   | P=1.000   |
| POLY 1.5                                    | P=1.000     | P=1.000   | P=1.000   | P=1.000   |
| POLY 6                                      | P=1.000     | P=1.000   | P=1.000   | P=1.000   |
| COCH-ARM / FISHERS                          | P=1.000     | P=1.000   | P=1.000   | P=1.000   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals               |            |            |            |            |
|-------------------------------------|------------|------------|------------|------------|
| DOSE                                | 0 ppm      | 100 ppm    | 200 ppm    | 400 ppm    |
| <b>NOSE: RESPIRATORY EPITHELIUM</b> |            |            |            |            |
| <b>INFLAMMATION: SUPPURATIVE</b>    |            |            |            |            |
| <b>LESION RATES</b>                 |            |            |            |            |
| OVERALL                             | 4/50 (8%)  | 5/49 (10%) | 8/38 (21%) | 9/49 (18%) |
| POLY 3 RATE                         | 4/43.42    | 5/43.15    | 8/34.9     | 9/42.73    |
| POLY 3 PERCENT                      | 9.21%      | 11.59%     | 22.92%     | 21.06%     |
| TERMINAL                            | 4/33 (12%) | 3/29 (10%) | 4/24 (17%) | 4/24 (17%) |
| FIRST INCIDENCE                     | 731 (T)    | 306        | 563        | 417        |
| <b>STATISTICAL TESTS</b>            |            |            |            |            |
| POLY 3                              | P=0.059    | P=0.496    | P=0.084    | P=0.107    |
| POLY 1.5                            | P=0.058    | P=0.490    | P=0.078    | P=0.105    |
| POLY 6                              | P=0.058    | P=0.503    | P=0.093    | P=0.106    |
| COCH-ARM / FISHERS                  | P=0.061    | P=0.487    | P=0.074    | P=0.109    |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals               |           |            |            |            |
|-------------------------------------|-----------|------------|------------|------------|
| DOSE                                | 0 ppm     | 100 ppm    | 200 ppm    | 400 ppm    |
| <b>NOSE: RESPIRATORY EPITHELIUM</b> |           |            |            |            |
| <b>METAPLASIA: SQUAMOUS</b>         |           |            |            |            |
| <b>LESION RATES</b>                 |           |            |            |            |
| OVERALL                             | 2/50 (4%) | 6/49 (12%) | 6/38 (16%) | 6/49 (12%) |
| POLY 3 RATE                         | 2/43.42   | 6/43.15    | 6/34.84    | 6/41.52    |
| POLY 3 PERCENT                      | 4.61%     | 13.91%     | 17.22%     | 14.45%     |
| TERMINAL                            | 2/33 (6%) | 4/29 (14%) | 3/24 (13%) | 2/24 (8%)  |
| FIRST INCIDENCE                     | 731 (T)   | 306        | 563        | 680        |
| <b>STATISTICAL TESTS</b>            |           |            |            |            |
| POLY 3                              | P=0.140   | P=0.130    | P=0.070    | P=0.117    |
| POLY 1.5                            | P=0.143   | P=0.128    | P=0.066    | P=0.119    |
| POLY 6                              | P=0.139   | P=0.132    | P=0.075    | P=0.117    |
| COCH-ARM / FISHERS                  | P=0.157   | P=0.128    | P=0.063    | P=0.128    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals       |           |           |           |           |
|-----------------------------|-----------|-----------|-----------|-----------|
| DOSE                        | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| NOSE: STENO'S GLAND ATROPHY |           |           |           |           |
| LESION RATES                |           |           |           |           |
| OVERALL                     | 0/50 (0%) | 0/49 (0%) | 3/38 (8%) | 2/49 (4%) |
| POLY 3 RATE                 | 0/43.42   | 0/42.06   | 3/33.78   | 2/41.12   |
| POLY 3 PERCENT              | 0%        | 0%        | 8.88%     | 4.86%     |
| TERMINAL                    | 0/33 (0%) | 0/29 (0%) | 2/24 (8%) | 2/24 (8%) |
| FIRST INCIDENCE             | ---       | ---       | 725       | 731 (T)   |
| STATISTICAL TESTS           |           |           |           |           |
| POLY 3                      | P=0.086   |           | P=0.076   | P=0.225   |
| POLY 1.5                    | P=0.088   |           | P=0.075   | P=0.227   |
| POLY 6                      | P=0.083   |           | P=0.077   | P=0.223   |
| COCH-ARM / FISHERS          | P=0.097   |           | P=0.077   | P=0.242   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| OVARY                 |           |           |           |           |
| ANGIECTASIS           |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 1/48 (2%) | 0/49 (0%) | 2/36 (6%) | 0/46 (0%) |
| POLY 3 RATE           | 1/41.9    | 0/42.06   | 2/32.72   | 0/38.49   |
| POLY 3 PERCENT        | 2.39%     | 0%        | 6.11%     | 0%        |
| TERMINAL              | 0/32 (0%) | 0/29 (0%) | 2/24 (8%) | 0/22 (0%) |
| FIRST INCIDENCE       | 646       | ---       | 731 (T)   | ---       |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.777   | P=0.977   | P=0.414   | P=0.975   |
| POLY 1.5              | P=0.782   | P=0.977   | P=0.410   | P=0.975   |
| POLY 6                | P=0.767   | P=0.977   | P=0.415   | P=0.974   |
| COCH-ARM / FISHERS    | P=0.792   | P=1.000   | P=0.392   | P=1.000   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals    |            |           |            |            |
|--------------------------|------------|-----------|------------|------------|
| DOSE                     | 0 ppm      | 100 ppm   | 200 ppm    | 400 ppm    |
| <b>OVARY</b>             |            |           |            |            |
| <b>CYST</b>              |            |           |            |            |
| <b>LESION RATES</b>      |            |           |            |            |
| OVERALL                  | 4/48 (8%)  | 2/49 (4%) | 4/36 (11%) | 4/46 (9%)  |
| POLY 3 RATE              | 4/41.59    | 2/42.06   | 4/32.87    | 4/38.88    |
| POLY 3 PERCENT           | 9.62%      | 4.76%     | 12.17%     | 10.29%     |
| TERMINAL                 | 4/32 (13%) | 2/29 (7%) | 2/24 (8%)  | 3/22 (14%) |
| FIRST INCIDENCE          | 731 (T)    | 731 (T)   | 710        | 619        |
| <b>STATISTICAL TESTS</b> |            |           |            |            |
| POLY 3                   | P=0.404    | P=0.900   | P=0.509    | P=0.607    |
| POLY 1.5                 | P=0.408    | P=0.899   | P=0.499    | P=0.609    |
| POLY 6                   | P=0.397    | P=0.901   | P=0.519    | P=0.602    |
| COCH-ARM / FISHERS       | P=0.417    | P=0.903   | P=0.473    | P=0.619    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| OVARY                 |           |           |           |           |
| CYST: BURSAL          |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 4/48 (8%) | 2/49 (4%) | 0/36 (0%) | 0/46 (0%) |
| POLY 3 RATE           | 4/41.64   | 2/42.06   | 0/32.72   | 0/38.49   |
| POLY 3 PERCENT        | 9.61%     | 4.76%     | 0%        | 0%        |
| TERMINAL              | 3/32 (9%) | 2/29 (7%) | 0/24 (0%) | 0/22 (0%) |
| FIRST INCIDENCE       | 719       | 731 (T)   | ---       | ---       |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.995   | P=0.900   | P=0.991   | P=0.994   |
| POLY 1.5              | P=0.995   | P=0.899   | P=0.991   | P=0.994   |
| POLY 6                | P=0.994   | P=0.901   | P=0.991   | P=0.994   |
| COCH-ARM / FISHERS    | P=0.994   | P=0.903   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| OVARY                 |           |           |           |           |
| CYST: FOLLICULAR      |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 3/48 (6%) | 0/49 (0%) | 0/36 (0%) | 0/46 (0%) |
| POLY 3 RATE           | 3/41.59   | 0/42.06   | 0/32.72   | 0/38.49   |
| POLY 3 PERCENT        | 7.21%     | 0%        | 0%        | 0%        |
| TERMINAL              | 3/32 (9%) | 0/29 (0%) | 0/24 (0%) | 0/22 (0%) |
| FIRST INCIDENCE       | 731 (T)   | ---       | ---       | ---       |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.991   | P=0.991   | P=0.985   | P=0.989   |
| POLY 1.5              | P=0.991   | P=0.991   | P=0.985   | P=0.989   |
| POLY 6                | P=0.991   | P=0.992   | P=0.986   | P=0.989   |
| COCH-ARM / FISHERS    | P=0.991   | P=1.000   | P=1.000   | P=1.000   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals             |           |             |             |             |
|-----------------------------------|-----------|-------------|-------------|-------------|
| DOSE                              | 0 ppm     | 100 ppm     | 200 ppm     | 400 ppm     |
| <b>OVARY</b>                      |           |             |             |             |
| <b>HYPERPLASIA: TUBULOSTROMAL</b> |           |             |             |             |
| <b>LESION RATES</b>               |           |             |             |             |
| OVERALL                           | 1/48 (2%) | 10/49 (20%) | 12/36 (33%) | 20/46 (43%) |
| POLY 3 RATE                       | 1/41.59   | 10/42.39    | 12/33.08    | 20/40.05    |
| POLY 3 PERCENT                    | 2.4%      | 23.59%      | 36.27%      | 49.94%      |
| TERMINAL                          | 1/32 (3%) | 9/29 (31%)  | 9/24 (38%)  | 12/22 (55%) |
| FIRST INCIDENCE                   | 731 (T)   | 640         | 669         | 619         |
| <b>STATISTICAL TESTS</b>          |           |             |             |             |
| POLY 3                            | P<0.001** | P=0.004**   | P<0.001**   | P<0.001**   |
| POLY 1.5                          | P<0.001** | P=0.004**   | P<0.001**   | P<0.001**   |
| POLY 6                            | P<0.001** | P=0.004**   | P<0.001**   | P<0.001**   |
| COCH-ARM / FISHERS                | P<0.001** | P=0.004**   | P<0.001**   | P<0.001**   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals                                  |           |             |             |             |
|--------------------------------------------------------|-----------|-------------|-------------|-------------|
| DOSE                                                   | 0 ppm     | 100 ppm     | 200 ppm     | 400 ppm     |
| <b>OVARY</b>                                           |           |             |             |             |
| <b>HYPERPLASIA; TUBULOSTROMAL (INCLUDES BILATERAL)</b> |           |             |             |             |
| <b>LESION RATES</b>                                    |           |             |             |             |
| OVERALL                                                | 1/48 (2%) | 18/49 (37%) | 21/36 (58%) | 28/46 (61%) |
| POLY 3 RATE                                            | 1/41.59   | 18/42.95    | 21/34.32    | 28/40.4     |
| POLY 3 PERCENT                                         | 2.4%      | 41.91%      | 61.19%      | 69.31%      |
| TERMINAL                                               | 1/32 (3%) | 15/29 (52%) | 14/24 (58%) | 18/22 (82%) |
| FIRST INCIDENCE                                        | 731 (T)   | 562         | 563         | 619         |
| <b>STATISTICAL TESTS</b>                               |           |             |             |             |
| POLY 3                                                 | P<0.001** | P<0.001**   | P<0.001**   | P<0.001**   |
| POLY 1.5                                               | P<0.001** | P<0.001**   | P<0.001**   | P<0.001**   |
| POLY 6                                                 | P<0.001** | P<0.001**   | P<0.001**   | P<0.001**   |
| COCH-ARM / FISHERS                                     | P<0.001** | P<0.001**   | P<0.001**   | P<0.001**   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| OVARY                 |           |           |           |           |
| THROMBUS              |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 0/48 (0%) | 2/49 (4%) | 1/36 (3%) | 1/46 (2%) |
| POLY 3 RATE           | 0/41.59   | 2/42.06   | 1/32.72   | 1/38.82   |
| POLY 3 PERCENT        | 0%        | 4.76%     | 3.06%     | 2.58%     |
| TERMINAL              | 0/32 (0%) | 2/29 (7%) | 1/24 (4%) | 0/22 (0%) |
| FIRST INCIDENCE       | ---       | 731 (T)   | 731 (T)   | 639       |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.463   | P=0.239   | P=0.452   | P=0.486   |
| POLY 1.5              | P=0.466   | P=0.239   | P=0.449   | P=0.487   |
| POLY 6                | P=0.458   | P=0.240   | P=0.454   | P=0.484   |
| COCH-ARM / FISHERS    | P=0.475   | P=0.253   | P=0.429   | P=0.489   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals             |           |            |            |            |
|-----------------------------------|-----------|------------|------------|------------|
| DOSE                              | 0 ppm     | 100 ppm    | 200 ppm    | 400 ppm    |
| <b>OVARY: BILATERAL</b>           |           |            |            |            |
| <b>HYPERPLASIA: TUBULOSTROMAL</b> |           |            |            |            |
| <b>LESION RATES</b>               |           |            |            |            |
| OVERALL                           | 0/48 (0%) | 8/49 (16%) | 9/36 (25%) | 8/46 (17%) |
| POLY 3 RATE                       | 0/41.59   | 8/42.62    | 9/33.96    | 8/38.84    |
| POLY 3 PERCENT                    | 0%        | 18.77%     | 26.5%      | 20.6%      |
| TERMINAL                          | 0/32 (0%) | 6/29 (21%) | 5/24 (21%) | 6/22 (27%) |
| FIRST INCIDENCE                   | ---       | 562        | 563        | 645        |
| <b>STATISTICAL TESTS</b>          |           |            |            |            |
| POLY 3                            | P=0.013*  | P=0.004**  | P<0.001**  | P=0.002**  |
| POLY 1.5                          | P=0.014*  | P=0.004**  | P<0.001**  | P=0.002**  |
| POLY 6                            | P=0.012*  | P=0.004**  | P<0.001**  | P=0.002**  |
| COCH-ARM / FISHERS                | P=0.020*  | P=0.003**  | P<0.001**  | P=0.002**  |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals               |           |           |           |           |
|-------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| PITUITARY GLAND: PARS DISTALIS CYST |           |           |           |           |
| LESION RATES                        |           |           |           |           |
| OVERALL                             | 2/48 (4%) | 0/46 (0%) | 0/38 (0%) | 0/44 (0%) |
| POLY 3 RATE                         | 2/41.81   | 0/39.88   | 0/32.37   | 0/36.86   |
| POLY 3 PERCENT                      | 4.78%     | 0%        | 0%        | 0%        |
| TERMINAL                            | 2/33 (6%) | 0/28 (0%) | 0/24 (0%) | 0/23 (0%) |
| FIRST INCIDENCE                     | 731 (T)   | ---       | ---       | ---       |
| STATISTICAL TESTS                   |           |           |           |           |
| POLY 3                              | P=0.981   | P=0.983   | P=0.976   | P=0.980   |
| POLY 1.5                            | P=0.981   | P=0.983   | P=0.976   | P=0.981   |
| POLY 6                              | P=0.980   | P=0.983   | P=0.976   | P=0.980   |
| COCH-ARM / FISHERS                  | P=0.981   | P=1.000   | P=1.000   | P=1.000   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals                 |           |           |           |           |
|---------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| <b>PITUITARY GLAND: PARS DISTALIS</b> |           |           |           |           |
| <b>HYPERPLASIA</b>                    |           |           |           |           |
| <b>LESION RATES</b>                   |           |           |           |           |
| OVERALL                               | 1/48 (2%) | 2/46 (4%) | 2/38 (5%) | 0/44 (0%) |
| POLY 3 RATE                           | 1/41.81   | 2/39.88   | 2/32.59   | 0/36.86   |
| POLY 3 PERCENT                        | 2.39%     | 5.01%     | 6.14%     | 0%        |
| TERMINAL                              | 1/33 (3%) | 2/28 (7%) | 0/24 (0%) | 0/23 (0%) |
| FIRST INCIDENCE                       | 731 (T)   | 731 (T)   | 697       | ---       |
| <b>STATISTICAL TESTS</b>              |           |           |           |           |
| POLY 3                                | P=0.839   | P=0.484   | P=0.413   | P=0.974   |
| POLY 1.5                              | P=0.844   | P=0.482   | P=0.414   | P=0.974   |
| POLY 6                                | P=0.830   | P=0.486   | P=0.415   | P=0.973   |
| COCH-ARM / FISHERS                    | P=0.852   | P=0.484   | P=0.412   | P=1.000   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals                   |           |           |           |           |
|-----------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                    | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| SALIVARY GLAND                          |           |           |           |           |
| INFILTRATION CELLULAR: MONONUCLEAR CELL |           |           |           |           |
| LESION RATES                            |           |           |           |           |
| OVERALL                                 | 1/49 (2%) | 0/50 (0%) | 0/40 (0%) | 0/50 (0%) |
| POLY 3 RATE                             | 1/42.59   | 0/42.27   | 0/34.08   | 0/41.64   |
| POLY 3 PERCENT                          | 2.35%     | 0%        | 0%        | 0%        |
| TERMINAL                                | 1/33 (3%) | 0/29 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE                         | 731 (T)   | ---       | ---       | ---       |
| STATISTICAL TESTS                       |           |           |           |           |
| POLY 3                                  | P=0.964   | P=0.977   | P=0.971   | P=0.977   |
| POLY 1.5                                | P=0.965   | P=0.977   | P=0.971   | P=0.977   |
| POLY 6                                  | P=0.964   | P=0.977   | P=0.971   | P=0.976   |
| COCH-ARM / FISHERS                      | P=0.965   | P=1.000   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals     |           |           |           |           |
|---------------------------|-----------|-----------|-----------|-----------|
| DOSE                      | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| SKIN                      |           |           |           |           |
| INFLAMMATION: SUPPURATIVE |           |           |           |           |
| LESION RATES              |           |           |           |           |
| OVERALL                   | 0/50 (0%) | 1/50 (2%) | 1/40 (3%) | 2/50 (4%) |
| POLY 3 RATE               | 0/43.42   | 1/42.29   | 1/34.79   | 2/41.83   |
| POLY 3 PERCENT            | 0%        | 2.36%     | 2.87%     | 4.78%     |
| TERMINAL                  | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 1/24 (4%) |
| FIRST INCIDENCE           | ---       | 726       | 484       | 680       |
| STATISTICAL TESTS         |           |           |           |           |
| POLY 3                    | P=0.147   | P=0.495   | P=0.456   | P=0.229   |
| POLY 1.5                  | P=0.149   | P=0.495   | P=0.455   | P=0.231   |
| POLY 6                    | P=0.145   | P=0.495   | P=0.457   | P=0.226   |
| COCH-ARM / FISHERS        | P=0.154   | P=0.500   | P=0.444   | P=0.247   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals    |           |           |           |           |
|--------------------------|-----------|-----------|-----------|-----------|
| DOSE                     | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| <b>SKIN</b>              |           |           |           |           |
| <b>ULCER</b>             |           |           |           |           |
| <b>LESION RATES</b>      |           |           |           |           |
| OVERALL                  | 2/50 (4%) | 0/50 (0%) | 0/40 (0%) | 1/50 (2%) |
| POLY 3 RATE              | 2/44.31   | 0/42.27   | 0/34.08   | 1/41.83   |
| POLY 3 PERCENT           | 4.51%     | 0%        | 0%        | 2.39%     |
| TERMINAL                 | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE          | 479       | ---       | ---       | 680       |
| <b>STATISTICAL TESTS</b> |           |           |           |           |
| POLY 3                   | P=0.800   | P=0.983   | P=0.976   | P=0.868   |
| POLY 1.5                 | P=0.801   | P=0.983   | P=0.976   | P=0.871   |
| POLY 6                   | P=0.799   | P=0.982   | P=0.975   | P=0.864   |
| COCH-ARM / FISHERS       | P=0.802   | P=1.000   | P=1.000   | P=0.879   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals                   |            |            |            |            |
|-----------------------------------------|------------|------------|------------|------------|
| DOSE                                    | 0 ppm      | 100 ppm    | 200 ppm    | 400 ppm    |
| SPLEEN                                  |            |            |            |            |
| EXTRAMEDULLARY HEMATOPOIESIS: INCREASED |            |            |            |            |
| LESION RATES                            |            |            |            |            |
| OVERALL                                 | 7/50 (14%) | 6/48 (13%) | 6/39 (15%) | 9/50 (18%) |
| POLY 3 RATE                             | 7/44.78    | 6/42.4     | 6/34.62    | 9/42.82    |
| POLY 3 PERCENT                          | 15.63%     | 14.15%     | 17.33%     | 21.02%     |
| TERMINAL                                | 2/33 (6%)  | 3/29 (10%) | 2/23 (9%)  | 2/24 (8%)  |
| FIRST INCIDENCE                         | 559        | 650        | 484        | 484        |
| STATISTICAL TESTS                       |            |            |            |            |
| POLY 3                                  | P=0.255    | P=0.689    | P=0.541    | P=0.354    |
| POLY 1.5                                | P=0.265    | P=0.687    | P=0.540    | P=0.365    |
| POLY 6                                  | P=0.240    | P=0.692    | P=0.543    | P=0.339    |
| COCH-ARM / FISHERS                      | P=0.287    | P=0.696    | P=0.544    | P=0.393    |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals            |           |           |           |            |
|----------------------------------|-----------|-----------|-----------|------------|
| DOSE                             | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm    |
| STOMACH, FORESTOMACH: EPITHELIUM |           |           |           |            |
| HYPERPLASIA: FOCAL               |           |           |           |            |
| LESION RATES                     |           |           |           |            |
| OVERALL                          | 0/49 (0%) | 0/49 (0%) | 0/38 (0%) | 5/49 (10%) |
| POLY 3 RATE                      | 0/42.7    | 0/42.06   | 0/33.75   | 5/41.32    |
| POLY 3 PERCENT                   | 0%        | 0%        | 0%        | 12.1%      |
| TERMINAL                         | 0/33 (0%) | 0/29 (0%) | 0/24 (0%) | 3/24 (13%) |
| FIRST INCIDENCE                  | ---       | ---       | ---       | 628        |
| STATISTICAL TESTS                |           |           |           |            |
| POLY 3                           | P=0.001** |           |           | P=0.027*   |
| POLY 1.5                         | P=0.001** |           |           | P=0.028*   |
| POLY 6                           | P=0.001** |           |           | P=0.027*   |
| COCH-ARM / FISHERS               | P=0.001** |           |           | P=0.028*   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**  
**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

| Females: Core Animals |           |           |           |           |
|-----------------------|-----------|-----------|-----------|-----------|
| DOSE                  | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| THYMUS ATROPHY        |           |           |           |           |
| LESION RATES          |           |           |           |           |
| OVERALL               | 0/49 (0%) | 2/41 (5%) | 0/39 (0%) | 0/42 (0%) |
| POLY 3 RATE           | 0/42.59   | 2/36.23   | 0/33.99   | 0/35.01   |
| POLY 3 PERCENT        | 0%        | 5.52%     | 0%        | 0%        |
| TERMINAL              | 0/33 (0%) | 0/26 (0%) | 0/24 (0%) | 0/22 (0%) |
| FIRST INCIDENCE       | ---       | 562       | ---       | ---       |
| STATISTICAL TESTS     |           |           |           |           |
| POLY 3                | P=0.861   | P=0.201   |           |           |
| POLY 1.5              | P=0.862   | P=0.198   |           |           |
| POLY 6                | P=0.862   | P=0.205   |           |           |
| COCH-ARM / FISHERS    | P=0.867   | P=0.205   |           |           |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
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Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals            |           |           |           |           |
|----------------------------------|-----------|-----------|-----------|-----------|
| DOSE                             | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| THYROID GLAND: FOLLICLE DILATION |           |           |           |           |
| LESION RATES                     |           |           |           |           |
| OVERALL                          | 2/50 (4%) | 0/49 (0%) | 0/40 (0%) | 0/50 (0%) |
| POLY 3 RATE                      | 2/43.42   | 0/42.06   | 0/34.08   | 0/41.64   |
| POLY 3 PERCENT                   | 4.61%     | 0%        | 0%        | 0%        |
| TERMINAL                         | 2/33 (6%) | 0/29 (0%) | 0/24 (0%) | 0/24 (0%) |
| FIRST INCIDENCE                  | 731 (T)   | ---       | ---       | ---       |
| STATISTICAL TESTS                |           |           |           |           |
| POLY 3                           | P=0.982   | P=0.983   | P=0.976   | P=0.983   |
| POLY 1.5                         | P=0.982   | P=0.983   | P=0.977   | P=0.983   |
| POLY 6                           | P=0.982   | P=0.983   | P=0.977   | P=0.983   |
| COCH-ARM / FISHERS               | P=0.982   | P=1.000   | P=1.000   | P=1.000   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals             |             |             |             |             |
|-----------------------------------|-------------|-------------|-------------|-------------|
| DOSE                              | 0 ppm       | 100 ppm     | 200 ppm     | 400 ppm     |
| URINARY BLADDER                   |             |             |             |             |
| INFILTRATION CELLULAR: LYMPHOCYTE |             |             |             |             |
| LESION RATES                      |             |             |             |             |
| OVERALL                           | 17/45 (38%) | 13/43 (30%) | 16/34 (47%) | 22/46 (48%) |
| POLY 3 RATE                       | 17/41.65    | 13/39.26    | 16/32.12    | 22/40.07    |
| POLY 3 PERCENT                    | 40.82%      | 33.11%      | 49.81%      | 54.9%       |
| TERMINAL                          | 13/33 (39%) | 12/28 (43%) | 12/23 (52%) | 16/24 (67%) |
| FIRST INCIDENCE                   | 508         | 684         | 660         | 519         |
| STATISTICAL TESTS                 |             |             |             |             |
| POLY 3                            | P=0.055     | P=0.829     | P=0.296     | P=0.143     |
| POLY 1.5                          | P=0.066     | P=0.832     | P=0.293     | P=0.165     |
| POLY 6                            | P=0.045*    | P=0.819     | P=0.287     | P=0.118     |
| COCH-ARM / FISHERS                | P=0.099     | P=0.834     | P=0.275     | P=0.225     |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals        |           |           |           |           |
|------------------------------|-----------|-----------|-----------|-----------|
| DOSE                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| URINARY BLADDER              |           |           |           |           |
| INFLAMMATION: CHRONIC-ACTIVE |           |           |           |           |
| LESION RATES                 |           |           |           |           |
| OVERALL                      | 1/45 (2%) | 1/43 (2%) | 0/34 (0%) | 0/46 (0%) |
| POLY 3 RATE                  | 1/40.55   | 1/39.08   | 0/31.39   | 0/38.38   |
| POLY 3 PERCENT               | 2.47%     | 2.56%     | 0%        | 0%        |
| TERMINAL                     | 0/33 (0%) | 1/28 (4%) | 0/23 (0%) | 0/24 (0%) |
| FIRST INCIDENCE              | 688       | 731 (T)   | ---       | ---       |
| STATISTICAL TESTS            |           |           |           |           |
| POLY 3                       | P=0.941   | P=0.753   | P=0.971   | P=0.976   |
| POLY 1.5                     | P=0.943   | P=0.752   | P=0.970   | P=0.976   |
| POLY 6                       | P=0.938   | P=0.752   | P=0.970   | P=0.975   |
| COCH-ARM / FISHERS           | P=0.948   | P=0.741   | P=1.000   | P=1.000   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals                        |           |           |           |           |
|----------------------------------------------|-----------|-----------|-----------|-----------|
| DOSE                                         | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| URINARY BLADDER<br>INFLAMMATION: SUPPURATIVE |           |           |           |           |
| LESION RATES                                 |           |           |           |           |
| OVERALL                                      | 0/45 (0%) | 1/43 (2%) | 0/34 (0%) | 0/46 (0%) |
| POLY 3 RATE                                  | 0/40.38   | 1/39.1    | 0/31.39   | 0/38.38   |
| POLY 3 PERCENT                               | 0%        | 2.56%     | 0%        | 0%        |
| TERMINAL                                     | 0/33 (0%) | 0/28 (0%) | 0/23 (0%) | 0/24 (0%) |
| FIRST INCIDENCE                              | ---       | 726       | ---       | ---       |
| STATISTICAL TESTS                            |           |           |           |           |
| POLY 3                                       | P=0.860   | P=0.494   |           |           |
| POLY 1.5                                     | P=0.864   | P=0.493   |           |           |
| POLY 6                                       | P=0.854   | P=0.494   |           |           |
| COCH-ARM / FISHERS                           | P=0.874   | P=0.489   |           |           |

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
**TERMINAL REMOVAL DAYS: SD 731 - 733**

| Females: Core Animals                              |           |            |             |             |
|----------------------------------------------------|-----------|------------|-------------|-------------|
| DOSE                                               | 0 ppm     | 100 ppm    | 200 ppm     | 400 ppm     |
| <b>URINARY BLADDER: UROTHELIUM<br/>HYPERPLASIA</b> |           |            |             |             |
| <b>LESION RATES</b>                                |           |            |             |             |
| OVERALL                                            | 0/45 (0%) | 5/43 (12%) | 11/34 (32%) | 20/46 (43%) |
| POLY 3 RATE                                        | 0/40.38   | 5/40.03    | 11/31.52    | 20/39.78    |
| POLY 3 PERCENT                                     | 0%        | 12.49%     | 34.89%      | 50.28%      |
| TERMINAL                                           | 0/33 (0%) | 3/28 (11%) | 10/23 (43%) | 15/24 (63%) |
| FIRST INCIDENCE                                    | ---       | 306        | 697         | 484         |
| <b>STATISTICAL TESTS</b>                           |           |            |             |             |
| POLY 3                                             | P<0.001** | P=0.029*   | P<0.001**   | P<0.001**   |
| POLY 1.5                                           | P<0.001** | P=0.028*   | P<0.001**   | P<0.001**   |
| POLY 6                                             | P<0.001** | P=0.029*   | P<0.001**   | P<0.001**   |
| COCH-ARM / FISHERS                                 | P<0.001** | P=0.025*   | P<0.001**   | P<0.001**   |

Study Number: C20302B-01  
Test Type: TOX  
Route: Whole-Body Inhalation  
Species/Strain: Mouse/B6C3F1/N

PA10: Statistical Analysis of Non-Neoplastic Lesions  
Test Compound: alpha-Pinene  
CAS Number: 80-56-8  
Final  
STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

Date Report Requested: 08/20/2024  
Time Report Requested: 14:56:12  
Lab: Battelle with EPL

| Females: Core Animals |            |           |           |           |
|-----------------------|------------|-----------|-----------|-----------|
| DOSE                  | 0 ppm      | 100 ppm   | 200 ppm   | 400 ppm   |
| UTERUS DILATION       |            |           |           |           |
| LESION RATES          |            |           |           |           |
| OVERALL               | 4/50 (8%)  | 1/50 (2%) | 2/39 (5%) | 1/50 (2%) |
| POLY 3 RATE           | 4/43.42    | 1/42.91   | 2/34.19   | 1/41.64   |
| POLY 3 PERCENT        | 9.21%      | 2.33%     | 5.85%     | 2.4%      |
| TERMINAL              | 4/33 (12%) | 0/29 (0%) | 1/24 (4%) | 1/24 (4%) |
| FIRST INCIDENCE       | 731 (T)    | 518       | 660       | 731 (T)   |
| STATISTICAL TESTS     |            |           |           |           |
| POLY 3                | P=0.913    | P=0.967   | P=0.835   | P=0.964   |
| POLY 1.5              | P=0.915    | P=0.966   | P=0.832   | P=0.965   |
| POLY 6                | P=0.910    | P=0.967   | P=0.839   | P=0.963   |
| COCH-ARM / FISHERS    | P=0.919    | P=0.972   | P=0.830   | P=0.972   |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals |              |              |             |              |
|-----------------------|--------------|--------------|-------------|--------------|
| DOSE                  | 0 ppm        | 100 ppm      | 200 ppm     | 400 ppm      |
| UTERUS: ENDOMETRIUM   |              |              |             |              |
| HYPERPLASIA: CYSTIC   |              |              |             |              |
| LESION RATES          |              |              |             |              |
| OVERALL               | 49/50 (98%)  | 47/50 (94%)  | 38/39 (97%) | 49/50 (98%)  |
| POLY 3 RATE           | 49/49.34     | 47/48.82     | 38/39       | 49/49.36     |
| POLY 3 PERCENT        | 99.32%       | 96.27%       | 97.44%      | 99.27%       |
| TERMINAL              | 33/33 (100%) | 29/29 (100%) | 23/24 (96%) | 24/24 (100%) |
| FIRST INCIDENCE       | 394          | 268          | 335         | 227          |
| STATISTICAL TESTS     |              |              |             |              |
| POLY 3                | P=0.525      | P=0.985      | P=0.959     | P=0.980      |
| POLY 1.5              | P=0.488      | P=0.970      | P=0.919     | P=0.887      |
| POLY 6                | P=0.596      | P=0.996      | P=0.978     | P=1.000      |
| COCH-ARM / FISHERS    | P=0.455      | P=0.941      | P=0.811     | P=0.753      |

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

TERMINAL REMOVAL DAYS: SD 731 - 733

| Females: Core Animals     |           |           |           |           |
|---------------------------|-----------|-----------|-----------|-----------|
| DOSE                      | 0 ppm     | 100 ppm   | 200 ppm   | 400 ppm   |
| VAGINA                    |           |           |           |           |
| INFLAMMATION: SUPPURATIVE |           |           |           |           |
| LESION RATES              |           |           |           |           |
| OVERALL                   | 2/49 (4%) | 0/50 (0%) | 1/40 (3%) | 2/50 (4%) |
| POLY 3 RATE               | 2/42.59   | 0/42.27   | 1/34.08   | 2/42.37   |
| POLY 3 PERCENT            | 4.7%      | 0%        | 2.93%     | 4.72%     |
| TERMINAL                  | 2/33 (6%) | 0/29 (0%) | 1/24 (4%) | 0/24 (0%) |
| FIRST INCIDENCE           | 731 (T)   | ---       | 731 (T)   | 484       |
| STATISTICAL TESTS         |           |           |           |           |
| POLY 3                    | P=0.466   | P=0.984   | P=0.836   | P=0.692   |
| POLY 1.5                  | P=0.466   | P=0.984   | P=0.836   | P=0.694   |
| POLY 6                    | P=0.463   | P=0.984   | P=0.836   | P=0.689   |
| COCH-ARM / FISHERS        | P=0.468   | P=1.000   | P=0.838   | P=0.699   |

**Study Number:** C20302B-01  
**Test Type:** TOX  
**Route:** Whole-Body Inhalation  
**Species/Strain:** Mouse/B6C3F1/N

**PA10: Statistical Analysis of Non-Neoplastic Lesions**  
**Test Compound:** alpha-Pinene  
**CAS Number:** 80-56-8  
**Final**

**Date Report Requested:** 08/20/2024  
**Time Report Requested:** 14:56:12  
**Lab:** Battelle with EPL

## LEGEND

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Censored animals are animals not in one of the other disposition categories that are removed prior to the end of the study. The censored animals are included in the pathology data if microscopic examination of tissues was performed.

### LESION RATES

Overall lesion rate: number of lesion-bearing animals/number of animals examined at site (percent lesion rate)

Poly 3 rate: number of lesion-bearing animals/poly-3 adjusted number of animals

Poly 3 percent: adjusted lifetime lesion incidence

Terminal lesion rate: number of lesion-bearing animals at terminal sacrifice/number of animals examined at site (percent lesion rate)

First incidence: earliest study day for removal of lesion-bearing animal (T = Terminal Sacrifice)

### STATISTICAL TESTS

The Poly-3, Poly-1.5, and Poly-6 statistics apply intercurrent mortality adjustments to the Cochran-Armitage test.

The Cochran-Armitage and Fisher Exact tests directly compare the overall incidence rates.

All trend and pairwise p-values are reported as one-sided.

No statistical analysis is reported unless there are at least two lesions in one or more of the dose groups

Some organs did not receive a histopathologic evaluation unless a gross lesion was found. These organs are not included on this report.

Trend test p-values shown for the control group; pairwise test p-values shown for the dose groups

\*Statistically significant at  $P \leq 0.05$

\*\* Statistically significant at  $P \leq 0.01$

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