Experiment Number: 50052 - 01 Test Type: 14-WEEK Route: DOSED WATER Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

NBUPY Rats - Final 2

| NTP Study Number: | C05052 |
|----------------------|-------------|
| Lock Date: | 05/25/2018 |
| Cage Range: | ALL |
| Date Range: | ALL |
| Reasons For Removal: | ALL |
| Removal Date Range: | ALL |
| Treatment Groups: | Include ALL |
| Study Gender: | Both |
| TDMSE Version: | 3.0.2.3_002 |
| PWG Approval Date: | NONE |
| | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

SUMMARY OF STATISTICALLY SIGNIFICANT (P<=.05) RESULTS IN THE ANALYSIS OF IONIC LIQUID: N-BUTYLPYRIDINIUM CHLORIDE

MALE RATS

Organ

Adrenal Cortex Liver

FEMALE RATS

Organ

Lung Nose: Epithelium Nose: Olfactory Epithelium Spleen

Uterus

Morphology

Hypertrophy Focal Inflammation Chronic

Morphology

Inflammation Chronic Inflammation Chronic Accumulation, Hyaline Droplet Atrophy Fibrosis Pigment Dilation

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|-------------------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Adrenal Cortex Hypertrophy Focal | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 3/10 (30%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 3/9.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 33.3% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 3/9 (33%) | |
| FIRST INCIDENCE | | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.076 | |
| POLY 1.5 | (e) | (e) | P=0.076 | |
| POLY 6 | (e) | (e) | P=0.076 | |
| COCH-ARM / FISHERS | P=0.072 | (e) | P=0.105 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.023* | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Epididymis: Duct Exfoliated Germ Cell | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 10% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | | | 6 | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.500 | |
| POLY 1.5 | (e) | (e) | P=0.500 | |
| POLY 6 | (e) | (e) | P=0.500 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.158 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Esophagus Infiltration Cellular Mononue | clear Cell | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/9.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | | | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Gut Associated Lymphoid T Hyperplasia | ïssue | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/0 (0%) | 1/1 (100%) | 0/0 (0%) | |
| POLY-3 RATE (b) | 0/0.00 | 1/1.00 | 0/0.00 | |
| POLY-3 PERCENT (g) | 0% | 100% | 0% | |
| TERMINAL (d) | 0/0 (0%) | 1/1 (100%) | 0/0 (0%) | |
| FIRST INCIDENCE | | 92 (T) | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | (e) | |
| POLY 1.5 | (e) | (e) | (e) | |
| POLY 6 | (e) | (e) | (e) | |
| COCH-ARM / FISHERS | (e) | (e) | (e) | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|---|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Harderian Gland Infiltration Cellular Mononu | clear Cell | | | |
| LESION RATES | | | | |
| OVERALL (a) | 2/10 (20%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 2/10.00 | 0/0.00 | 1/9.00 | |
| POLY-3 PERCENT (g) | 20% | 0% | 11.1% | |
| TERMINAL (d) | 2/10 (20%) | 0/0 (0%) | 1/9 (11%) | |
| FIRST INCIDENCE | 92 (T) | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.538N | |
| POLY 1.5 | (e) | (e) | P=0.537N | |
| POLY 6 | (e) | (e) | P=0.538N | |
| COCH-ARM / FISHERS | P=0.417N | (e) | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.314N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|---|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Harderian Gland Inflammation Chronic | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 0/9.00 | |
| POLY-3 PERCENT (g) | 10% | 0% | 0% | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | 92 (T) | | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.521N | |
| POLY 1.5 | (e) | (e) | P=0.521N | |
| POLY 6 | (e) | (e) | P=0.521N | |
| COCH-ARM / FISHERS | P=0.366N | (e) | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.184N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|-------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Heart Cardiomyopathy | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 1/9.00 | |
| POLY-3 PERCENT (g) | 10% | 0% | 11.1% | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 1/9 (11%) | |
| FIRST INCIDENCE | 92 (T) | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.737 | |
| POLY 1.5 | (e) | (e) | P=0.737 | |
| POLY 6 | (e) | (e) | P=0.737 | |
| COCH-ARM / FISHERS | P=0.690 | (e) | P=0.763N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.469 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| Males | | | | |
|--------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Heart | | | | |
| Inflammation | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 10% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | | | 6 | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.500 | |
| POLY 1.5 | (e) | (e) | P=0.500 | |
| POLY 6 | (e) | (e) | P=0.500 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.158 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Heart: Valve, Endothelium Hyperplasia | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 0/9.00 | |
| POLY-3 PERCENT (g) | 10% | 0% | 0% | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | 92 (T) | | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.521N | |
| POLY 1.5 | (e) | (e) | P=0.521N | |
| POLY 6 | (e) | (e) | P=0.521N | |
| COCH-ARM / FISHERS | P=0.366N | (e) | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.184N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Kidney Infarct | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 10% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | | | 6 | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.500 | |
| POLY 1.5 | (e) | (e) | P=0.500 | |
| POLY 6 | (e) | (e) | P=0.500 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.158 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| Males | | | | | |
|--------------------|--------------|--------------|--------------|--|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | | |
| Kidney | | | | | |
| Inflammation | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/10.00 | | |
| POLY-3 PERCENT (g) | 0% | 0% | 10% | | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/9 (0%) | | |
| FIRST INCIDENCE | | | 6 | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | P=0.500 | | |
| POLY 1.5 | (e) | (e) | P=0.500 | | |
| POLY 6 | (e) | (e) | P=0.500 | | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.158 | | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|-------------------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Kidney Nephropathy Chronic Progr | essive | | | |
| LESION RATES | | | | |
| OVERALL (a) | 10/10 (100%) | 0/0 (0%) | 10/10 (100%) | |
| POLY-3 RATE (b) | 10/10.00 | 0/0.00 | 10/10.00 | |
| POLY-3 PERCENT (g) | 100% | 0% | 100% | |
| TERMINAL (d) | 10/10 (100%) | 0/0 (0%) | 9/9 (100%) | |
| FIRST INCIDENCE | 92 (T) | | 6 | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | (e) | |
| POLY 1.5 | (e) | (e) | (e) | |
| POLY 6 | (e) | (e) | (e) | |
| COCH-ARM / FISHERS | (e) | (e) | (e) | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|----------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Kidney: Papilla Mineral | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 0/9.00 | |
| POLY-3 PERCENT (g) | 10% | 0% | 0% | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | 92 (T) | | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.521N | |
| POLY 1.5 | (e) | (e) | P=0.521N | |
| POLY 6 | (e) | (e) | P=0.521N | |
| COCH-ARM / FISHERS | P=0.366N | (e) | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.184N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Liver | | | | |
| Basophilic Focus | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/9.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 11.1% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 1/9 (11%) | |
| FIRST INCIDENCE | | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.479 | |
| POLY 1.5 | (e) | (e) | P=0.479 | |
| POLY 6 | (e) | (e) | P=0.479 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.157 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Liver | | | | |
| Eosinophilic Focus | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/9.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 11.1% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 1/9 (11%) | |
| FIRST INCIDENCE | | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.479 | |
| POLY 1.5 | (e) | (e) | P=0.479 | |
| POLY 6 | (e) | (e) | P=0.479 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.157 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|------------------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Liver Extramedullary Hematopoie | sis | | | |
| | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 1/9.00 | |
| POLY-3 PERCENT (g) | 10% | 0% | 11.1% | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 1/9 (11%) | |
| FIRST INCIDENCE | 92 (T) | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.737 | |
| POLY 1.5 | (e) | (e) | P=0.737 | |
| POLY 6 | (e) | (e) | P=0.737 | |
| COCH-ARM / FISHERS | P=0.690 | (e) | P=0.763N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.469 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|------------------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Liver Hepatodiaphragmatic Nodul | | | | |
| | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 0/9.00 | |
| POLY-3 PERCENT (g) | 10% | 0% | 0% | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | 92 (T) | | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.521N | |
| POLY 1.5 | (e) | (e) | P=0.521N | |
| POLY 6 | (e) | (e) | P=0.521N | |
| COCH-ARM / FISHERS | P=0.366N | (e) | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.184N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|---|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Liver Infiltration Cellular Mixed Ce | ell | | | |
| LESION RATES | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 0/9.00 | |
| POLY-3 PERCENT (g) | 10% | 0% | 0% | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | 92 (T) | | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.521N | |
| POLY 1.5 | (e) | (e) | P=0.521N | |
| POLY 6 | (e) | (e) | P=0.521N | |
| COCH-ARM / FISHERS | P=0.366N | (e) | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.184N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|-------------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Liver Inflammation Chronic | | | | |
| | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 3/10 (30%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 3/10.00 | 0/0.00 | 0/9.00 | |
| POLY-3 PERCENT (g) | 30% | 0% | 0% | |
| TERMINAL (d) | 3/10 (30%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | 92 (T) | | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.115N | |
| POLY 1.5 | (e) | (e) | P=0.115N | |
| POLY 6 | (e) | (e) | P=0.115N | |
| COCH-ARM / FISHERS | P=0.072N | (e) | P=0.105N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.039N* | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Lung Infiltration Cellular Histiocy | te | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/9.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 11.1% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 1/9 (11%) | |
| FIRST INCIDENCE | | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.479 | |
| POLY 1.5 | (e) | (e) | P=0.479 | |
| POLY 6 | (e) | (e) | P=0.479 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.157 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|------------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Lung Inflammation Chronic | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/9.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | | | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|----------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Lung Metaplasia Osseous | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/9.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 11.1% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 1/9 (11%) | |
| FIRST INCIDENCE | | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.479 | |
| POLY 1.5 | (e) | (e) | P=0.479 | |
| POLY 6 | (e) | (e) | P=0.479 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.157 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|---|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Lymph Node, Mandibular Necrosis Lymphoid | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 10% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | | | 6 | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.500 | |
| POLY 1.5 | (e) | (e) | P=0.500 | |
| POLY 6 | (e) | (e) | P=0.500 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.158 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|------------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Mammary Gland Hyperplasia | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/8 (13%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/8.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 12.5% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 1/8 (13%) | |
| FIRST INCIDENCE | | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.455 | |
| POLY 1.5 | (e) | (e) | P=0.455 | |
| POLY 6 | (e) | (e) | P=0.455 | |
| COCH-ARM / FISHERS | P=0.323 | (e) | P=0.444 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.142 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Nose: Epithelium Inflammation Chronic | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/9.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | | | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|---|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Nose: Glands, Respiratory I Dilation | Epithelium | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/9.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 11.1% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 1/9 (11%) | |
| FIRST INCIDENCE | | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.479 | |
| POLY 1.5 | (e) | (e) | P=0.479 | |
| POLY 6 | (e) | (e) | P=0.479 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.157 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Nose: Olfactory Epithelium Accumulation, Hyaline Drop | let | | | |
| LESION RATES | | | | |
| OVERALL (a) | 6/10 (60%) | 0/0 (0%) | 4/10 (40%) | |
| POLY-3 RATE (b) | 6/10.00 | 0/0.00 | 4/9.00 | |
| POLY-3 PERCENT (g) | 60% | 0% | 44.4% | |
| TERMINAL (d) | 6/10 (60%) | 0/0 (0%) | 4/9 (44%) | |
| FIRST INCIDENCE | 92 (T) | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.417N | |
| POLY 1.5 | (e) | (e) | P=0.416N | |
| POLY 6 | (e) | (e) | P=0.417N | |
| COCH-ARM / FISHERS | P=0.275N | (e) | P=0.328N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.268N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|-----------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Pancreas: Acinus Atrophy | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/9.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 11.1% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 1/9 (11%) | |
| FIRST INCIDENCE | | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.479 | |
| POLY 1.5 | (e) | (e) | P=0.479 | |
| POLY 6 | (e) | (e) | P=0.479 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.157 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Preputial Gland Infiltration Cellular Mononue | clear Cell | | | |
| LESION RATES | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 1/9.00 | |
| POLY-3 PERCENT (g) | 10% | 0% | 11.1% | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 1/9 (11%) | |
| FIRST INCIDENCE | 92 (T) | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.737 | |
| POLY 1.5 | (e) | (e) | P=0.737 | |
| POLY 6 | (e) | (e) | P=0.737 | |
| COCH-ARM / FISHERS | P=0.690 | (e) | P=0.763N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.469 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Preputial Gland | | | | |
| Inflammation | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 10% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | | | 6 | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.500 | |
| POLY 1.5 | (e) | (e) | P=0.500 | |
| POLY 6 | (e) | (e) | P=0.500 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.158 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|---|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Preputial Gland Inflammation Chronic | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 2/10 (20%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 2/10.00 | 0/0.00 | 1/9.00 | |
| POLY-3 PERCENT (g) | 20% | 0% | 11.1% | |
| TERMINAL (d) | 2/10 (20%) | 0/0 (0%) | 1/9 (11%) | |
| FIRST INCIDENCE | 92 (T) | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.538N | |
| POLY 1.5 | (e) | (e) | P=0.537N | |
| POLY 6 | (e) | (e) | P=0.538N | |
| COCH-ARM / FISHERS | P=0.417N | (e) | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.314N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Prostate | | | | |
| Inflammation | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 10% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | | | 6 | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.500 | |
| POLY 1.5 | (e) | (e) | P=0.500 | |
| POLY 6 | (e) | (e) | P=0.500 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.158 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|-------------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Prostate Inflammation Chronic | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 0/9.00 | |
| POLY-3 PERCENT (g) | 10% | 0% | 0% | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | 92 (T) | | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.521N | |
| POLY 1.5 | (e) | (e) | P=0.521N | |
| POLY 6 | (e) | (e) | P=0.521N | |
| COCH-ARM / FISHERS | P=0.366N | (e) | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.184N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Spleen Atrophy | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/9.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | | | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Spleen Fibrosis | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/9.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | | | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|--------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Spleen Pigment | | | | |
| | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 0/9.00 | |
| POLY-3 PERCENT (g) | 10% | 0% | 0% | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | 92 (T) | | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.521N | |
| POLY 1.5 | (e) | (e) | P=0.521N | |
| POLY 6 | (e) | (e) | P=0.521N | |
| COCH-ARM / FISHERS | P=0.366N | (e) | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.184N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|-------------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Stomach, Glandular Mineral | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 2/10 (20%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 2/10.00 | 0/0.00 | 1/9.00 | |
| POLY-3 PERCENT (g) | 20% | 0% | 11.1% | |
| TERMINAL (d) | 2/10 (20%) | 0/0 (0%) | 1/9 (11%) | |
| FIRST INCIDENCE | 92 (T) | | 92 (T) | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.538N | |
| POLY 1.5 | (e) | (e) | P=0.537N | |
| POLY 6 | (e) | (e) | P=0.538N | |
| COCH-ARM / FISHERS | P=0.417N | (e) | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.314N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | | | | |
|---|--------------|--------------|--------------|--|--|--|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | | | | |
| Stomach, Glandular: Muscu Degeneration | laris | | | | | | |
| LESION RATES | | | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | | | | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/9.00 | | | | |
| POLY-3 PERCENT (g) | 0% | 0% | 11.1% | | | | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 1/9 (11%) | | | | |
| FIRST INCIDENCE | | | 92 (T) | | | | |
| STATISTICAL TESTS | | | | | | | |
| POLY 3 | (e) | (e) | P=0.479 | | | | |
| POLY 1.5 | (e) | (e) | P=0.479 | | | | |
| POLY 6 | (e) | (e) | P=0.479 | | | | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | | | | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.157 | | | | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|---|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Testis: Germinal Epithelium Degeneration | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 2/10 (20%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 2/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 20% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 1/9 (11%) | |
| FIRST INCIDENCE | | | 6 | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.227 | |
| POLY 1.5 | (e) | (e) | P=0.227 | |
| POLY 6 | (e) | (e) | P=0.227 | |
| COCH-ARM / FISHERS | P=0.160 | (e) | P=0.237 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.066 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|-------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| | | | | |
| Urethra Inflammation | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/0 (0%) | 0/0 (0%) | 1/1 (100%) | |
| POLY-3 RATE (b) | 0/0.00 | 0/0.00 | 1/1.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 100% | |
| TERMINAL (d) | 0/0 (0%) | 0/0 (0%) | 0/0 (0%) | |
| FIRST INCIDENCE | | | 6 | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | (e) | |
| POLY 1.5 | (e) | (e) | (e) | |
| POLY 6 | (e) | (e) | (e) | |
| COCH-ARM / FISHERS | (e) | (e) | (e) | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Males | |
|---------------------------------|--------------|--------------|--------------|--|
| DOSE | 0 mg/mL male | 1 mg/mL male | 3 mg/mL male | |
| Urinary Bladder Inflammation | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 10% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/9 (0%) | |
| FIRST INCIDENCE | | | 6 | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | (e) | P=0.500 | |
| POLY 1.5 | (e) | (e) | P=0.500 | |
| POLY 6 | (e) | (e) | P=0.500 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.158 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|-------------------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Adrenal Cortex Hypertrophy Focal | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 2/10 (20%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 2/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 20% | 0% | 0% | 0% | |
| TERMINAL (d) | 2/10 (20%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | 92 (T) | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | (e) | P=0.227N | |
| POLY 1.5 | (e) | (e) | (e) | P=0.227N | |
| POLY 6 | (e) | (e) | (e) | P=0.227N | |
| COCH-ARM / FISHERS | P=0.160N | (e) | (e) | P=0.237N | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | P=0.066N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|---|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Clitoral Gland Infiltration Cellular Mononue | clear Cell | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 2/10 (20%) | 0/0 (0%) | 0/0 (0%) | 3/10 (30%) | |
| POLY-3 RATE (b) | 2/10.00 | 0/0.00 | 0/0.00 | 3/10.00 | |
| POLY-3 PERCENT (g) | 20% | 0% | 0% | 30% | |
| TERMINAL (d) | 2/10 (20%) | 0/0 (0%) | 0/0 (0%) | 3/10 (30%) | |
| FIRST INCIDENCE | 92 (T) | | | 92 (T) | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | (e) | P=0.500 | |
| POLY 1.5 | (e) | (e) | (e) | P=0.500 | |
| POLY 6 | (e) | (e) | (e) | P=0.500 | |
| COCH-ARM / FISHERS | P=0.432 | (e) | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | P=0.310 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | Females | | | | | | |
|--|----------------|------------------|----------------|----------------|--|--|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | | | |
| Esophagus Infiltration Cellular Mononue | clear Cell | | | | | | |
| LESION RATES | | | | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | | | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | | | |
| POLY-3 PERCENT (g) | 10% | 0% | 0% | 0% | | | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | | | |
| FIRST INCIDENCE | 92 (T) | | | | | | |
| STATISTICAL TESTS | | | | | | | |
| POLY 3 | (e) | (e) | (e) | P=0.500N | | | |
| POLY 1.5 | (e) | (e) | (e) | P=0.500N | | | |
| POLY 6 | (e) | (e) | (e) | P=0.500N | | | |
| COCH-ARM / FISHERS | P=0.366N | (e) | (e) | P=0.500N | | | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | P=0.158N | | | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|--|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Gut Associated Lymphoid T Hyperplasia | īissue | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/0 (0%) | 0/0 (0%) | 0/0 (0%) | 0/0 (0%) | |
| POLY-3 RATE (b) | 0/0.00 | 0/0.00 | 0/0.00 | 0/0.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/0 (0%) | 0/0 (0%) | 0/0 (0%) | 0/0 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|---|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Harderian Gland Infiltration Cellular Mononu | clear Cell | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 1/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 10% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 1/10 (10%) | |
| FIRST INCIDENCE | | | | 92 (T) | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | (e) | P=0.500 | |
| POLY 1.5 | (e) | (e) | (e) | P=0.500 | |
| POLY 6 | (e) | (e) | (e) | P=0.500 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | P=0.158 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|---|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Harderian Gland Inflammation Chronic | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|-------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Heart Cardiomyopathy | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|-----------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Heart Inflammation | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|--|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Heart: Valve, Endothelium Hyperplasia | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|--------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Kidney Infarct | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Kidney Inflammation | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|-------------------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Kidney Nephropathy Chronic Progr | essive | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 4/10 (40%) | 0/0 (0%) | 0/0 (0%) | 6/10 (60%) | |
| POLY-3 RATE (b) | 4/10.00 | 0/0.00 | 0/0.00 | 6/10.00 | |
| POLY-3 PERCENT (g) | 40% | 0% | 0% | 60% | |
| TERMINAL (d) | 4/10 (40%) | 0/0 (0%) | 0/0 (0%) | 6/10 (60%) | |
| FIRST INCIDENCE | 92 (T) | | | 92 (T) | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | (e) | P=0.333 | |
| POLY 1.5 | (e) | (e) | (e) | P=0.333 | |
| POLY 6 | (e) | (e) | (e) | P=0.333 | |
| COCH-ARM / FISHERS | P=0.275 | (e) | (e) | P=0.328 | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | P=0.193 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|----------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Kidney: Papilla Mineral | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|---------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Liver Basophilic Focus | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|-----------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Liver Eosinophilic Focus | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|------------------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Liver Extramedullary Hematopoie | sis | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 3/10 (30%) | 0/0 (0%) | 0/0 (0%) | 2/10 (20%) | |
| POLY-3 RATE (b) | 3/10.00 | 0/0.00 | 0/0.00 | 2/10.00 | |
| POLY-3 PERCENT (g) | 30% | 0% | 0% | 20% | |
| TERMINAL (d) | 3/10 (30%) | 0/0 (0%) | 0/0 (0%) | 2/10 (20%) | |
| FIRST INCIDENCE | 92 (T) | | | 92 (T) | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | (e) | P=0.500N | |
| POLY 1.5 | (e) | (e) | (e) | P=0.500N | |
| POLY 6 | (e) | (e) | (e) | P=0.500N | |
| COCH-ARM / FISHERS | P=0.432N | (e) | (e) | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | P=0.310N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|------------------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Liver Hepatodiaphragmatic Nodul | e | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|---|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Liver Infiltration Cellular Mixed Ce | ell | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 10% | 0% | 0% | 0% | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | 92 (T) | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | (e) | P=0.500N | |
| POLY 1.5 | (e) | (e) | (e) | P=0.500N | |
| POLY 6 | (e) | (e) | (e) | P=0.500N | |
| COCH-ARM / FISHERS | P=0.366N | (e) | (e) | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | P=0.158N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|-------------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Liver Inflammation Chronic | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 2/10 (20%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 2/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 20% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 2/10 (20%) | |
| FIRST INCIDENCE | | | | 92 (T) | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | (e) | P=0.227 | |
| POLY 1.5 | (e) | (e) | (e) | P=0.227 | |
| POLY 6 | (e) | (e) | (e) | P=0.227 | |
| COCH-ARM / FISHERS | P=0.160 | (e) | (e) | P=0.237 | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | P=0.066 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|---|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Lung Infiltration Cellular Histiocyt | te | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 1/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 10% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 1/10 (10%) | |
| FIRST INCIDENCE | | | | 92 (T) | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | (e) | P=0.500 | |
| POLY 1.5 | (e) | (e) | (e) | P=0.500 | |
| POLY 6 | (e) | (e) | (e) | P=0.500 | |
| COCH-ARM / FISHERS | P=0.366 | (e) | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | P=0.158 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|------------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Lung Inflammation Chronic | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 3/10 (30%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 3/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 30% | 0% | 0% | 0% | |
| TERMINAL (d) | 3/10 (30%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | 92 (T) | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | (e) | P=0.095N | |
| POLY 1.5 | (e) | (e) | (e) | P=0.095N | |
| POLY 6 | (e) | (e) | (e) | P=0.095N | |
| COCH-ARM / FISHERS | P=0.072N | (e) | (e) | P=0.105N | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | P=0.025N* | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|----------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Lung Metaplasia Osseous | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|---|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Lymph Node, Mandibular Necrosis Lymphoid | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|------------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Mammary Gland Hyperplasia | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | |
|--|----------------|------------------|----------------|----------------|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female |
| Nose: Epithelium Inflammation Chronic | | | | |
| LESION RATES | | | | |
| OVERALL (a) | 5/10 (50%) | 9/9 (100%) | 0/0 (0%) | 0/10 (0%) |
| POLY-3 RATE (b) | 5/10.00 | 9/9.00 | 0/0.00 | 0/10.00 |
| POLY-3 PERCENT (g) | 50% | 100% | 0% | 0% |
| TERMINAL (d) | 5/10 (50%) | 9/9 (100%) | 0/0 (0%) | 0/10 (0%) |
| FIRST INCIDENCE | 92 (T) | 92 (T) | | |
| STATISTICAL TESTS | | | | |
| POLY 3 | (e) | P=0.013* | (e) | P=0.008N** |
| POLY 1.5 | (e) | P=0.013* | (e) | P=0.008N** |
| POLY 6 | (e) | P=0.013* | (e) | P=0.008N** |
| COCH-ARM / FISHERS | P<0.001N** | P=0.022* | (e) | P=0.016N* |
| MAX-ISO-POLY-3 | (e) | P=0.003** | (e) | P<0.001N** |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|---|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Nose: Glands, Respiratory I Dilation | Epithelium | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/9 (0%) | 0/0 (0%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/9.00 | 0/0.00 | 1/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 10% | |
| TERMINAL (d) | 0/10 (0%) | 0/9 (0%) | 0/0 (0%) | 1/10 (10%) | |
| FIRST INCIDENCE | | | | 92 (T) | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | (e) | P=0.500 | |
| POLY 1.5 | (e) | (e) | (e) | P=0.500 | |
| POLY 6 | (e) | (e) | (e) | P=0.500 | |
| COCH-ARM / FISHERS | P=0.258 | (e) | (e) | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | P=0.158 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|--|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Nose: Olfactory Epithelium Accumulation, Hyaline Drop | let | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 4/10 (40%) | 0/9 (0%) | 0/0 (0%) | 8/10 (80%) | |
| POLY-3 RATE (b) | 4/10.00 | 0/9.00 | 0/0.00 | 8/10.00 | |
| POLY-3 PERCENT (g) | 40% | 0% | 0% | 80% | |
| TERMINAL (d) | 4/10 (40%) | 0/9 (0%) | 0/0 (0%) | 8/10 (80%) | |
| FIRST INCIDENCE | 92 (T) | | | 92 (T) | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | P=0.044N* | (e) | P=0.077 | |
| POLY 1.5 | (e) | P=0.044N* | (e) | P=0.077 | |
| POLY 6 | (e) | P=0.044N* | (e) | P=0.077 | |
| COCH-ARM / FISHERS | P=0.004** | P=0.054N | (e) | P=0.085 | |
| MAX-ISO-POLY-3 | (e) | P=0.012N* | (e) | P=0.029* | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|-----------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Ovary Duct Remnant | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 10% | 0% | 0% | 0% | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | 92 (T) | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | (e) | P=0.500N | |
| POLY 1.5 | (e) | (e) | (e) | P=0.500N | |
| POLY 6 | (e) | (e) | (e) | P=0.500N | |
| COCH-ARM / FISHERS | P=0.366N | (e) | (e) | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | P=0.158N | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|-----------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Pancreas: Acinus Atrophy | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | Females | | | | | |
|--------------------|----------------|------------------|----------------|----------------|--|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | | |
| Spleen Atrophy | | | | | | |
| LESION RATES | | | | | | |
| OVERALL (a) | 0/10 (0%) | 1/1 (100%) | 0/0 (0%) | 0/10 (0%) | | |
| POLY-3 RATE (b) | 0/10.00 | 1/1.00 | 0/0.00 | 0/10.00 | | |
| POLY-3 PERCENT (g) | 0% | 100% | 0% | 0% | | |
| TERMINAL (d) | 0/10 (0%) | 1/1 (100%) | 0/0 (0%) | 0/10 (0%) | | |
| FIRST INCIDENCE | | 92 (T) | | | | |
| STATISTICAL TESTS | | | | | | |
| POLY 3 | (e) | P=0.091 | (e) | (e) | | |
| POLY 1.5 | (e) | P=0.091 | (e) | (e) | | |
| POLY 6 | (e) | P=0.091 | (e) | (e) | | |
| COCH-ARM / FISHERS | P=0.461N | P=0.091 | (e) | (e) | | |
| MAX-ISO-POLY-3 | (e) | P<0.001** | (e) | (e) | | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| Females | | | | | |
|--------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Spleen Fibrosis | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 1/1 (100%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 1/1.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 100% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 1/1 (100%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | 92 (T) | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | P=0.091 | (e) | (e) | |
| POLY 1.5 | (e) | P=0.091 | (e) | (e) | |
| POLY 6 | (e) | P=0.091 | (e) | (e) | |
| COCH-ARM / FISHERS | P=0.461N | P=0.091 | (e) | (e) | |
| MAX-ISO-POLY-3 | (e) | P<0.001** | (e) | (e) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | Females | | | | | |
|--------------------|----------------|------------------|----------------|----------------|--|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | | |
| Spleen Pigment | | | | | | |
| LESION RATES | | | | | | |
| OVERALL (a) | 0/10 (0%) | 1/1 (100%) | 0/0 (0%) | 0/10 (0%) | | |
| POLY-3 RATE (b) | 0/10.00 | 1/1.00 | 0/0.00 | 0/10.00 | | |
| POLY-3 PERCENT (g) | 0% | 100% | 0% | 0% | | |
| TERMINAL (d) | 0/10 (0%) | 1/1 (100%) | 0/0 (0%) | 0/10 (0%) | | |
| FIRST INCIDENCE | | 92 (T) | | | | |
| STATISTICAL TESTS | | | | | | |
| POLY 3 | (e) | P=0.091 | (e) | (e) | | |
| POLY 1.5 | (e) | P=0.091 | (e) | (e) | | |
| POLY 6 | (e) | P=0.091 | (e) | (e) | | |
| COCH-ARM / FISHERS | P=0.461N | P=0.091 | (e) | (e) | | |
| MAX-ISO-POLY-3 | (e) | P<0.001** | (e) | (e) | | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | Females | | | | | |
|-------------------------------|----------------|------------------|----------------|----------------|--|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | | |
| Stomach, Glandular Mineral | | | | | | |
| LESION RATES | | | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | | |
| POLY-3 PERCENT (g) | 10% | 0% | 0% | 0% | | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | | |
| FIRST INCIDENCE | 92 (T) | | | | | |
| STATISTICAL TESTS | | | | | | |
| POLY 3 | (e) | (e) | (e) | P=0.500N | | |
| POLY 1.5 | (e) | (e) | (e) | P=0.500N | | |
| POLY 6 | (e) | (e) | (e) | P=0.500N | | |
| COCH-ARM / FISHERS | P=0.366N | (e) | (e) | P=0.500N | | |
| MAX-ISO-POLY-3 | (e) | (e) | (e) | P=0.158N | | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|---|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Stomach, Glandular: Muscu Degeneration | Ilaris | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | Females | | | | | |
|---|----------------|------------------|----------------|----------------|--|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | | |
| Testis: Germinal Epithelium Degeneration | | | | | | |
| LESION RATES | | | | | | |
| OVERALL (a) | 0/0 (0%) | 0/0 (0%) | 0/0 (0%) | 0/0 (0%) | | |
| POLY-3 RATE (b) | 0/0.00 | 0/0.00 | 0/0.00 | 0/0.00 | | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | | |
| TERMINAL (d) | 0/0 (0%) | 0/0 (0%) | 0/0 (0%) | 0/0 (0%) | | |
| FIRST INCIDENCE | | | | | | |
| STATISTICAL TESTS | | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | | |
| POLY 1.5 | (n) | (n) | (n) | (n) | | |
| POLY 6 | (n) | (n) | (n) | (n) | | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | Females | | | | | |
|-------------------------|----------------|------------------|----------------|----------------|--|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | | |
| Urethra Inflammation | | | | | | |
| LESION RATES | | | | | | |
| OVERALL (a) | 0/0 (0%) | 0/0 (0%) | 0/0 (0%) | 0/0 (0%) | | |
| POLY-3 RATE (b) | 0/0.00 | 0/0.00 | 0/0.00 | 0/0.00 | | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | | |
| TERMINAL (d) | 0/0 (0%) | 0/0 (0%) | 0/0 (0%) | 0/0 (0%) | | |
| FIRST INCIDENCE | | | | | | |
| STATISTICAL TESTS | | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | | |
| POLY 1.5 | (n) | (n) | (n) | (n) | | |
| POLY 6 | (n) | (n) | (n) | (n) | | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| | | | Females | | |
|---------------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Urinary Bladder Inflammation | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 0/0.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 0% | 0% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 0/0 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (n) | (n) | (n) | (n) | |
| POLY 1.5 | (n) | (n) | (n) | (n) | |
| POLY 6 | (n) | (n) | (n) | (n) | |
| COCH-ARM / FISHERS | (n) | (n) | (n) | (n) | |
| MAX-ISO-POLY-3 | (n) | (n) | (n) | (n) | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| Females | | | | | |
|--------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Uterus Dilation | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 0/10 (0%) | 0/0 (0%) | 1/1 (100%) | 1/10 (10%) | |
| POLY-3 RATE (b) | 0/10.00 | 0/0.00 | 1/1.00 | 1/10.00 | |
| POLY-3 PERCENT (g) | 0% | 0% | 100% | 10% | |
| TERMINAL (d) | 0/10 (0%) | 0/0 (0%) | 1/1 (100%) | 1/10 (10%) | |
| FIRST INCIDENCE | | | 92 (T) | 92 (T) | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | P=0.091 | P=0.500 | |
| POLY 1.5 | (e) | (e) | P=0.091 | P=0.500 | |
| POLY 6 | (e) | (e) | P=0.091 | P=0.500 | |
| COCH-ARM / FISHERS | P=0.490 | (e) | P=0.091 | P=0.500 | |
| MAX-ISO-POLY-3 | (e) | (e) | P<0.001** | P=0.158 | |

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

| Females | | | | | |
|------------------------------|----------------|------------------|----------------|----------------|--|
| DOSE | 0 mg/mL female | 0.3 mg/mL female | 1 mg/mL female | 3 mg/mL female | |
| Uterus Inflammation Acute | | | | | |
| LESION RATES | | | | | |
| OVERALL (a) | 1/10 (10%) | 0/0 (0%) | 0/1 (0%) | 0/10 (0%) | |
| POLY-3 RATE (b) | 1/10.00 | 0/0.00 | 0/1.00 | 0/10.00 | |
| POLY-3 PERCENT (g) | 10% | 0% | 0% | 0% | |
| TERMINAL (d) | 1/10 (10%) | 0/0 (0%) | 0/1 (0%) | 0/10 (0%) | |
| FIRST INCIDENCE | 92 (T) | | | | |
| STATISTICAL TESTS | | | | | |
| POLY 3 | (e) | (e) | P=0.913N | P=0.500N | |
| POLY 1.5 | (e) | (e) | P=0.913N | P=0.500N | |
| POLY 6 | (e) | (e) | P=0.913N | P=0.500N | |
| COCH-ARM / FISHERS | P=0.370N | (e) | P=0.909N | P=0.500N | |
| MAX-ISO-POLY-3 | (e) | (e) | P=0.409N | P=0.158N | |

Experiment Number: 50052 - 01 Test Type: 14-WEEK Route: DOSED WATER Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic Liquid: N-Butylpyridinium Chloride CAS Number: 1124-64-7 Date Report Requested: 10/05/2020 Time Report Requested: 13:00:12 First Dose M/F: 09/19/13 / 09/20/13 Lab: BAT

LEGEND

| (a) | Number of tumor-bearing animals/number of animals examined at site. |
|-----|--|
| (b) | Number of tumor-bearing animals/Poly-3 number |
| (d) | Observed incidence at terminal kill. |
| (e) | Value of statistic cannot be computed. |
| (f) | Beneath the control incidence are the P-values associated with the trend test. Beneath the dosed group incidence are the P-values corresponding to pairwise comparisons between the controls and that dosed group. |
| (g) | Poly-3 adjusted lifetime tumor incidence. |
| (n) | No statistics are calculated if all dose groups have fewer than two tumors. |
| (I) | Interim sacrifice |
| (T) | Terminal sacrifice |
| # | Tumor rates based on numbers of animals necropsied. |
| * | To the right of any statistical result, indicates significance at (P<=0.05). |
| ** | To the right of any statistical result, indicates significance at (P<=0.01). |
| Ν | Indicates a negative trend for all tests |
| | The Cochran-Armitage and Fishers exact tests compare directly the overall incidence rates. |
| | |

*** END OF REPORT ***