

Experiment Number: 05049 - 03
Test Type: 14-DAY
Route: DOSED WATER
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Ionic liquid Toxicity
CAS Number: IONICLIQUIDS

Date Report Requested: 04/24/2020
Time Report Requested: 12:07:24
First Dose M/F: 03/09/09 / 03/10/09
Lab: MBA

NTP Study Number: C05049
Lock Date: 12/04/2009
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include 001 Control Male Include 005 3.0 mg/ml Emim Include 006 10.0 mg/ml Emim
Include 007 30.0 mg/ml Emim Include 008 100.0 mg/ml Emim Include 015 Control Female
Include 019 3.0 mg/ml Emim Include 020 10.0 mg/ml Emim Include 021 30.0 mg/ml Emim
Include 022 100.0 mg/ml Emim
Study Gender: Both
TDMSE Version: 3.0.2.3_002
PWG Approval Date: NONE

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SUMMARY OF STATISTICALLY SIGNIFICANT ($P \leq .05$) RESULTS IN THE ANALYSIS OF IONIC LIQUID TOXICITY

MALE RATS

Organ

Heart
Liver
Spleen
Testes
Thymus

Morphology

Cardiomyopathy
Depletion Glycogen
Depletion Cellular
Degeneration
Atrophy
Necrosis

FEMALE RATS

Organ

Heart
Liver
Lung
Spleen
Thymus

Morphology

Cardiomyopathy
Depletion Glycogen
Hemorrhage
Depletion Cellular
Atrophy
Necrosis

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Males				
	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Heart					
Cardiomyopathy					
LESION RATES					
OVERALL (a)	8/10 (80%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/5 (20%)
POLY-3 RATE (b)	8/10.00	0/0.00	0/0.00	0/0.00	1/5.00
POLY-3 PERCENT (g)	80%	0%	0%	0%	20%
TERMINAL (d)	8/10 (80%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/5 (20%)
FIRST INCIDENCE	15 (T)	---	---	---	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.028N*
POLY 1.5	(e)	(e)	(e)	(e)	P=0.028N*
POLY 6	(e)	(e)	(e)	(e)	P=0.028N*
COCH-ARM / FISHERS	P=0.033N*	(e)	(e)	(e)	P=0.047N*
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.013N*

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DOSE	Males				
	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
<hr/>					
Liver Congestion					
<hr/>					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)	0/5 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/5.00	0/5.00	0/5.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)	0/5 (0%)
FIRST INCIDENCE	---	---	---	---	---
<hr/>					
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

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DOSE	Males				
	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Liver					
Depletion Glycogen					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/5 (0%)	5/5 (100%)	5/5 (100%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/5.00	5/5.00	5/5.00
POLY-3 PERCENT (g)	0%	0%	0%	100%	100%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/5 (0%)	5/5 (100%)	5/5 (100%)
FIRST INCIDENCE	---	---	---	15 (T)	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	P<0.001**	P<0.001**
POLY 1.5	(e)	(e)	(e)	P<0.001**	P<0.001**
POLY 6	(e)	(e)	(e)	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	P<0.001**	P<0.001**
MAX-ISO-POLY-3	(e)	(e)	(e)	P<0.001**	P<0.001**

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DOSE	Males				
	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Liver					
Necrosis Focal					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)	1/5 (20%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/5.00	0/5.00	1/5.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	20%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)	1/5 (20%)
FIRST INCIDENCE	---	---	---	---	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.356
POLY 1.5	(e)	(e)	(e)	(e)	P=0.356
POLY 6	(e)	(e)	(e)	(e)	P=0.356
COCH-ARM / FISHERS	P=0.158	(e)	(e)	(e)	P=0.333
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.100

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TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Males				
	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
<hr/>					
Liver: Hepatocyte Necrosis					
<hr/>					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)	1/5 (20%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/5.00	0/5.00	1/5.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	20%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)	1/5 (20%)
FIRST INCIDENCE	---	---	---	---	15 (T)
<hr/>					
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.356
POLY 1.5	(e)	(e)	(e)	(e)	P=0.356
POLY 6	(e)	(e)	(e)	(e)	P=0.356
COCH-ARM / FISHERS	P=0.158	(e)	(e)	(e)	P=0.333
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.100

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TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Males				
	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Lung Hemorrhage					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/5.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)
FIRST INCIDENCE	---	---	---	---	---
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

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TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Males				
	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Lung					
Metaplasia Osseous					
LESION RATES					
OVERALL (a)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)
POLY-3 RATE (b)	1/10.00	0/0.00	0/0.00	0/0.00	0/5.00
POLY-3 PERCENT (g)	10%	0%	0%	0%	0%
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)
FIRST INCIDENCE	15 (T)	---	---	---	---
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.636N
POLY 1.5	(e)	(e)	(e)	(e)	P=0.636N
POLY 6	(e)	(e)	(e)	(e)	P=0.636N
COCH-ARM / FISHERS	P=0.515N	(e)	(e)	(e)	P=0.667N
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.274N

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TERMINAL SACRIFICE AT 3 WEEKS

DOSE	Males				
	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Spleen					
Depletion Cellular					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	3/4 (75%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/5.00	3/4.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	75%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	3/4 (75%)
FIRST INCIDENCE	---	---	---	---	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P<0.001**
POLY 1.5	(e)	(e)	(e)	(e)	P<0.001**
POLY 6	(e)	(e)	(e)	(e)	P<0.001**
COCH-ARM / FISHERS	P=0.002**	(e)	(e)	(e)	P=0.011*
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P<0.001**

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TERMINAL SACRIFICE AT 3 WEEKS

DOSE	Males				
	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Spleen					
Infiltration Cellular					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	1/4 (25%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/5.00	1/4.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	25%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	1/4 (25%)
FIRST INCIDENCE	---	---	---	---	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.306
POLY 1.5	(e)	(e)	(e)	(e)	P=0.306
POLY 6	(e)	(e)	(e)	(e)	P=0.306
COCH-ARM / FISHERS	P=0.170	(e)	(e)	(e)	P=0.286
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.078

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TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Males				
	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Testes					
Degeneration					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	5/5 (100%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/5.00	5/5.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	100%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	5/5 (100%)
FIRST INCIDENCE	---	---	---	---	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P<0.001**
POLY 1.5	(e)	(e)	(e)	(e)	P<0.001**
POLY 6	(e)	(e)	(e)	(e)	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	(e)	P<0.001**
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P<0.001**

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TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Males				
	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Thymus Atrophy					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)	2/2 (100%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/5.00	0/5.00	2/2.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	100%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)	2/2 (100%)
FIRST INCIDENCE	---	---	---	---	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.015*
POLY 1.5	(e)	(e)	(e)	(e)	P=0.015*
POLY 6	(e)	(e)	(e)	(e)	P=0.015*
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	(e)	P=0.015*
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P<0.001**

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TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Males				
	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Thymus Necrosis					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/5 (0%)	4/5 (80%)	2/2 (100%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/5.00	4/5.00	2/2.00
POLY-3 PERCENT (g)	0%	0%	0%	80%	100%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/5 (0%)	4/5 (80%)	2/2 (100%)
FIRST INCIDENCE	---	---	---	15 (T)	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	P<0.001**	P=0.015*
POLY 1.5	(e)	(e)	(e)	P<0.001**	P=0.015*
POLY 6	(e)	(e)	(e)	P<0.001**	P=0.015*
COCH-ARM / FISHERS	P=0.002**	(e)	(e)	P=0.004**	P=0.015*
MAX-ISO-POLY-3	(e)	(e)	(e)	P<0.001**	P<0.001**

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TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Females				
	Control Female	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Heart					
Cardiomyopathy					
LESION RATES					
OVERALL (a)	10/10 (100%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	2/5 (40%)
POLY-3 RATE (b)	10/10.00	0/0.00	0/0.00	0/0.00	2/5.00
POLY-3 PERCENT (g)	100%	0%	0%	0%	40%
TERMINAL (d)	10/10 (100%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	2/5 (40%)
FIRST INCIDENCE	15 (T)	---	---	---	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.003N**
POLY 1.5	(e)	(e)	(e)	(e)	P=0.003N**
POLY 6	(e)	(e)	(e)	(e)	P=0.003N**
COCH-ARM / FISHERS	P=0.012N*	(e)	(e)	(e)	P=0.022N*
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P<0.001N**

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P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic liquid Toxicity

CAS Number: IONICLIQUIDS

Date Report Requested: 04/24/2020

Time Report Requested: 12:07:24

First Dose M/F: 03/09/09 / 03/10/09

Lab: MBA

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Females				
	Control Female	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Liver Congestion					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	1/5 (20%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/5.00	1/5.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	20%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	1/5 (20%)
FIRST INCIDENCE	---	---	---	---	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P=0.356
POLY 1.5	(e)	(e)	(e)	(e)	P=0.356
POLY 6	(e)	(e)	(e)	(e)	P=0.356
COCH-ARM / FISHERS	P=0.207	(e)	(e)	(e)	P=0.333
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P=0.100

Experiment Number: 05049 - 03

Test Type: 14-DAY

Route: DOSED WATER

Species/Strain: RATS/HSD

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TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Females				
	Control Female	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Liver					
Depletion Glycogen					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	5/5 (100%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/5.00	5/5.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	100%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	5/5 (100%)
FIRST INCIDENCE	---	---	---	---	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P<0.001**
POLY 1.5	(e)	(e)	(e)	(e)	P<0.001**
POLY 6	(e)	(e)	(e)	(e)	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	(e)	P<0.001**
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P<0.001**

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Females				
	Control Female	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Liver					
Necrosis Focal					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/5.00	0/5.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)
FIRST INCIDENCE	---	---	---	---	---
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

Experiment Number: 05049 - 03

Test Type: 14-DAY

Route: DOSED WATER

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Females				
	Control Female	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Liver: Hepatocyte Necrosis					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/5.00	0/5.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)
FIRST INCIDENCE	---	---	---	---	---
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

Experiment Number: 05049 - 03

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Females				
	Control Female	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Lung Hemorrhage					
LESION RATES					
OVERALL (a)	0/10 (0%)	1/1 (100%)	0/0 (0%)	0/0 (0%)	0/5 (0%)
POLY-3 RATE (b)	0/10.00	1/1.00	0/0.00	0/0.00	0/5.00
POLY-3 PERCENT (g)	0%	100%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	1/1 (100%)	0/0 (0%)	0/0 (0%)	0/5 (0%)
FIRST INCIDENCE	---	15 (T)	---	---	---
STATISTICAL TESTS					
POLY 3	(e)	P=0.091	(e)	(e)	(e)
POLY 1.5	(e)	P=0.091	(e)	(e)	(e)
POLY 6	(e)	P=0.091	(e)	(e)	(e)
COCH-ARM / FISHERS	P=0.558N	P=0.091	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	P<0.001**	(e)	(e)	(e)

Experiment Number: 05049 - 03

Test Type: 14-DAY

Route: DOSED WATER

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Ionic liquid Toxicity

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First Dose M/F: 03/09/09 / 03/10/09

Lab: MBA

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Females				
	Control Female	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
<hr/>					
Lung					
Metaplasia Osseous					
<hr/>					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/1 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)
POLY-3 RATE (b)	0/10.00	0/1.00	0/0.00	0/0.00	0/5.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/1 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)
FIRST INCIDENCE	---	---	---	---	---
<hr/>					
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

Experiment Number: 05049 - 03

Test Type: 14-DAY

Route: DOSED WATER

Species/Strain: RATS/HSD

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Females				
	Control Female	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Spleen					
Depletion Cellular					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	5/5 (100%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/5.00	5/5.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	100%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	5/5 (100%)
FIRST INCIDENCE	---	---	---	---	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P<0.001**
POLY 1.5	(e)	(e)	(e)	(e)	P<0.001**
POLY 6	(e)	(e)	(e)	(e)	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	(e)	P<0.001**
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P<0.001**

Experiment Number: 05049 - 03

Test Type: 14-DAY

Route: DOSED WATER

Species/Strain: RATS/HSD

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TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Females				
	Control Female	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Spleen					
Infiltration Cellular					
<hr/>					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/5.00	0/5.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)
FIRST INCIDENCE	---	---	---	---	---
<hr/>					
STATISTICAL TESTS					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

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TERMINAL SACRIFICE AT 3 WEEKS**

DOSE	Females				
	Control Female	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Thymus Atrophy					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)	5/5 (100%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/5.00	0/5.00	5/5.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	100%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/5 (0%)	0/5 (0%)	5/5 (100%)
FIRST INCIDENCE	---	---	---	---	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	(e)	P<0.001**
POLY 1.5	(e)	(e)	(e)	(e)	P<0.001**
POLY 6	(e)	(e)	(e)	(e)	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	(e)	P<0.001**
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	P<0.001**

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TERMINAL SACRIFICE AT 3 WEEKS

DOSE	Females				
	Control Female	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Thymus Necrosis					
LESION RATES					
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/5 (0%)	1/5 (20%)	5/5 (100%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/5.00	1/5.00	5/5.00
POLY-3 PERCENT (g)	0%	0%	0%	20%	100%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/5 (0%)	1/5 (20%)	5/5 (100%)
FIRST INCIDENCE	---	---	---	15 (T)	15 (T)
STATISTICAL TESTS					
POLY 3	(e)	(e)	(e)	P=0.356	P<0.001**
POLY 1.5	(e)	(e)	(e)	P=0.356	P<0.001**
POLY 6	(e)	(e)	(e)	P=0.356	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	P=0.333	P<0.001**
MAX-ISO-POLY-3	(e)	(e)	(e)	P=0.100	P<0.001**

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LEGEND

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

*** END OF REPORT ***