

Experiment Number: 05049 - 03

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**

Date Report Requested: 04/24/2020

Test Type: 14-DAY

Ionic liquid Toxicity

Time Report Requested: 12:07:24

Route: DOSED WATER

CAS Number: IONICLIQUIDS

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

Species/Strain: RATS/HSD

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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Lab: MBA

Harlan Sprague Dawley RATS MALE

Control Male

3.0 mg/ml Emim

10.0 mg/ml Emim

30.0 mg/ml Emim

100.0 mg/ml Emim

Disposition Summary

Animals Initially In Study	10	5	5	5	5
Early Deaths					
Survivors					
Terminal Sacrifice	10	5	5	5	5
Animals Examined Microscopically	10	5	5	5	5

ALIMENTARY SYSTEM

Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(5)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(5)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(5)
Liver	(10)	(0)	(5)	(5)	(5)
Depletion Glycogen				5 [1.0]	5 [2.0]
Necrosis, Multifocal					1 [1.0]
Hepatocyte, Necrosis					1 [1.0]
Stomach, Forestomach	(10)	(0)	(0)	(0)	(5)
Stomach, Glandular	(10)	(0)	(0)	(0)	(5)

CARDIOVASCULAR SYSTEM

Heart	(10)	(0)	(0)	(0)	(5)
Cardiomyopathy	8 [1.0]				1 [1.0]

ENDOCRINE SYSTEM

None

GENERAL BODY SYSTEM

None

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

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Harlan Sprague Dawley RATS MALE	Control Male	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
GENITAL SYSTEM					
Testes	(10)	(0)	(0)	(5)	(5)
Degeneration					5 [1.6]
HEMATOPOIETIC SYSTEM					
Spleen	(10)	(0)	(0)	(5)	(4)
Depletion Cellular					3 [1.0]
Infiltration Cellular					1 [1.0]
Thymus	(10)	(0)	(5)	(5)	(2)
Atrophy					2 [3.0]
Necrosis				4 [1.0]	2 [3.0]
INTEGUMENTARY SYSTEM					
None					
MUSCULOSKELETAL SYSTEM					
None					
NERVOUS SYSTEM					
Brain	(10)	(0)	(0)	(0)	(5)
RESPIRATORY SYSTEM					
Lung	(10)	(0)	(0)	(0)	(5)
Metaplasia, Osseous	1 [1.0]				

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Harlan Sprague Dawley RATS MALE

Control Male

3.0 mg/ml Emim

10.0 mg/ml Emim

30.0 mg/ml Emim

100.0 mg/ml Emim

SPECIAL SENSES SYSTEM

None

URINARY SYSTEM

Kidney

(10)

(0)

(0)

(0)

(5)

*** END OF MALE ***

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Harlan Sprague Dawley RATS FEMALE

Control Female

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Disposition Summary

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Early Deaths					
Survivors					
Terminal Sacrifice	10	5	5	5	5
Animals Examined Microscopically	10	5	5	5	5

ALIMENTARY SYSTEM

Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(5)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(5)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(5)
Liver	(10)	(0)	(0)	(5)	(5)
Congestion					1 [2.0]
Depletion Glycogen					5 [1.0]
Stomach, Forestomach	(10)	(0)	(0)	(0)	(5)
Stomach, Glandular	(10)	(0)	(0)	(0)	(5)

CARDIOVASCULAR SYSTEM

Heart	(10)	(0)	(0)	(0)	(5)
Cardiomyopathy	10 [1.0]				2 [1.0]

ENDOCRINE SYSTEM

None

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

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Harlan Sprague Dawley RATS FEMALE	Control Female	3.0 mg/ml Emim	10.0 mg/ml Emim	30.0 mg/ml Emim	100.0 mg/ml Emim
Ovary	(10)	(0)	(0)	(0)	(5)
Uterus	(0)	(0)	(0)	(0)	(1)

HEMATOPOIETIC SYSTEM

Spleen	(10)	(0)	(0)	(5)	(5)
Depletion Cellular					5 [1.2]
Thymus	(10)	(0)	(5)	(5)	(5)
Atrophy					5 [2.2]
Necrosis				1 [2.0]	5 [2.0]

INTEGUMENTARY SYSTEM

None

MUSCULOSKELETAL SYSTEM

None

NERVOUS SYSTEM

Brain	(10)	(0)	(0)	(0)	(5)
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RESPIRATORY SYSTEM

Lung	(10)	(1)	(0)	(0)	(5)
Hemorrhage		1 [1.0]			

SPECIAL SENSES SYSTEM

None

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30.0 mg/ml Emim

100.0 mg/ml Emim

URINARY SYSTEM

Kidney

(10)

(0)

(0)

(0)

(5)

*** END OF REPORT ***

a - Number of animals examined microscopically at site and number of animals with lesion

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)