

**Experiment Number:** 07018 - 01  
**Test Type:** 14-WEEK  
**Route:** DOSED WATER  
**Species/Strain:** RATS/HSD

**P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)**

Ionic Liquid: 1-Ethyl-3-methylimidazolium Chloride

**CAS Number:** 65039-09-0

**Date Report Requested:** 01/08/2020

**Time Report Requested:** 11:06:12

**First Dose M/F:** 05/09/13 / 05/10/13

**Lab:** BAT

Final\_1 - EMIM Rats

**NTP Study Number:** C07018  
**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

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Harlan Sprague Dawley RATS MALE

0 mg/mL male

1 mg/mL male

3 mg/mL male

10 mg/mL male

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**Disposition Summary**

<b>Animals Initially In Study</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>Early Deaths</b>				
<b>Survivors</b>				
<b>Terminal Sacrifice</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>Animals Examined Microscopically</b>	<b>10</b>			<b>10</b>

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ALIMENTARY SYSTEM

Esophagus	(10)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(10)
Liver	(10)	(0)	(0)	(10)
Infiltration Cellular, Mixed Cell	1 (10%)			2 (20%)
Pancreas	(10)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear Cell				1 (10%)
Acinus, Atrophy	1 (10%)			
Salivary Glands	(10)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(10)
Mineral				3 (30%)

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CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(10)
Cardiomyopathy	1 (10%)			3 (30%)

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ENDOCRINE SYSTEM

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

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Harlan Sprague Dawley RATS MALE	0 mg/mL male	1 mg/mL male	3 mg/mL male	10 mg/mL male
Adrenal Cortex	(10)	(0)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(10)
Parathyroid Gland	(2)	(0)	(0)	(4)
Pituitary Gland	(10)	(0)	(0)	(10)
Pars Distalis, Cyst				1 (10%)
Thyroid Gland	(10)	(0)	(0)	(10)

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GENERAL BODY SYSTEM

None

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GENITAL SYSTEM

Epididymis	(10)	(0)	(0)	(10)
Preputial Gland	(10)	(0)	(0)	(10)
Inflammation, Chronic Active	2 (20%)			
Prostate	(10)	(0)	(0)	(10)
Seminal Vesicle	(10)	(0)	(0)	(10)
Testis	(10)	(0)	(0)	(10)

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HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(0)	(0)	(10)
Lymph Node, Mandibular	(10)	(0)	(0)	(10)
Lymph Node, Mesenteric	(10)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(10)
Thymus	(10)	(0)	(0)	(10)
Atrophy				1 (10%)

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INTEGUMENTARY SYSTEM

Mammary Gland	(10)	(0)	(0)	(10)
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Harlan Sprague Dawley RATS MALE	0 mg/mL male	1 mg/mL male	3 mg/mL male	10 mg/mL male
Skin	(10)	(0)	(0)	(10)
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone	(10)	(0)	(0)	(10)
<b>NERVOUS SYSTEM</b>				
Brain	(10)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>				
Lung	(10)	(0)	(0)	(10)
Infiltration Cellular, Histiocyte	2 (20%)			
Nose	(10)	(0)	(0)	(10)
Olfactory Epithelium, Accumulation, Hyaline Droplet	5 (50%)			7 (70%)
Trachea	(10)	(0)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(10)	(0)	(0)	(10)
Retina, Dysplasia	1 (10%)			1 (10%)
Harderian Gland	(10)	(0)	(0)	(10)
Infiltration Cellular, Lymphocyte	1 (10%)			
Infiltration Cellular, Mononuclear Cell	1 (10%)			1 (10%)
<b>URINARY SYSTEM</b>				
Kidney	(10)	(0)	(0)	(10)
Nephropathy, Chronic Progressive	9 (90%)			8 (80%)
Urinary Bladder	(10)	(0)	(0)	(10)

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Harlan Sprague Dawley RATS MALE

0 mg/mL male

1 mg/mL male

3 mg/mL male

10 mg/mL male

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\*\*\* END OF MALE \*\*\*

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Harlan Sprague Dawley RATS FEMALE

0 mg/mL female

1 mg/mL female

3 mg/mL female

10 mg/mL female

---

**Disposition Summary**

<b>Animals Initially In Study</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>Early Deaths</b>				
<b>Survivors</b>				
<b>Terminal Sacrifice</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>Animals Examined Microscopically</b>	<b>10</b>	<b>2</b>		<b>10</b>

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ALIMENTARY SYSTEM

Esophagus	(10)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(10)
Liver	(10)	(1)	(0)	(10)
Clear Cell Focus	1 (10%)			
Hepatodiaphragmatic Nodule		1 (100%)		
Infiltration Cellular, Mixed Cell	2 (20%)			2 (20%)
Pancreas	(10)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(1)	(0)	(10)
Cyst		1 (100%)		
Stomach, Glandular	(10)	(0)	(0)	(10)

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CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(10)
Valve, Fibrosis	1 (10%)			

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ENDOCRINE SYSTEM

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Harlan Sprague Dawley RATS FEMALE	0 mg/mL female	1 mg/mL female	3 mg/mL female	10 mg/mL female
Adrenal Cortex	(10)	(0)	(0)	(10)
Hypertrophy, Focal	1 (10%)			
Bilateral, Hypertrophy, Focal	1 (10%)			1 (10%)
Adrenal Medulla	(10)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(10)
Parathyroid Gland	(3)	(0)	(0)	(4)
Pituitary Gland	(10)	(0)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(10)

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GENERAL BODY SYSTEM

None

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GENITAL SYSTEM

Clitoral Gland	(10)	(0)	(0)	(10)
Inflammation, Chronic Active	1 (10%)			
Ovary	(10)	(0)	(0)	(10)
Uterus	(10)	(0)	(0)	(10)

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HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(0)	(0)	(10)
Lymph Node	(1)	(0)	(0)	(0)
Mediastinal, Hemorrhage	1 (100%)			
Lymph Node, Mandibular	(10)	(0)	(0)	(10)
Lymph Node, Mesenteric	(10)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(10)
Thymus	(10)	(0)	(0)	(10)

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INTEGUMENTARY SYSTEM

Mammary Gland	(10)	(0)	(0)	(10)
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Skin	(10)	(0)	(0)	(10)
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone	(10)	(0)	(0)	(10)
<b>NERVOUS SYSTEM</b>				
Brain	(10)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>				
Lung	(10)	(0)	(0)	(10)
Infiltration Cellular, Histiocyte	1 (10%)			1 (10%)
Inflammation, Chronic	1 (10%)			
Nose	(10)	(0)	(0)	(10)
Goblet Cell, Respiratory Epithelium, Hyperplasia	1 (10%)			
Olfactory Epithelium, Accumulation, Hyaline Droplet	7 (70%)			7 (70%)
Respiratory Epithelium, Inflammation, Suppurative	3 (30%)			
Respiratory Epithelium, Metaplasia, Squamous	1 (10%)			
Transitional Epithelium, Inflammation, Suppurative	1 (10%)			
Trachea	(10)	(0)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(10)	(0)	(0)	(10)
Retina, Dysplasia	1 (10%)			
Harderian Gland	(10)	(0)	(0)	(10)

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0 mg/mL female

1 mg/mL female

3 mg/mL female

10 mg/mL female

---

URINARY SYSTEM

Kidney	(10)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear Cell	1 (10%)			
Nephropathy, Chronic Progressive	4 (40%)			1 (10%)
Urinary Bladder	(10)	(0)	(0)	(10)

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

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