

Experiment Number: 50050 - 01

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

Date Report Requested: 10/05/2020

Test Type: 14-WEEK

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

Time Report Requested: 12:59:00

Route: DOSED WATER

CAS Number: 79917-90-1

First Dose M/F: 04/25/13 / 04/26/13

Species/Strain: RATS/HSD

Lab: BAT

BMIM Rats - Final 2

**NTP Study Number:** C50050  
**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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Species/Strain: RATS/HSD

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Harlan Sprague Dawley RATS MALE	0 mg/mL male	0.1 mg/mL male	0.3 mg/mL male	1 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>

## 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)
Pancreas	(10)	(0)	(0)	(10)
Acinus, Atrophy				1 [1.0]
Salivary Glands	(10)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(10)
Inflammation, Chronic Active	1 [1.0]			
Mineral	1 [1.0]			

## CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(10)
Cardiomyopathy	1 [1.0]			1 [1.0]

## ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(0)	(10)
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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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Lab: BAT

Harlan Sprague Dawley RATS MALE	0 mg/mL male	0.1 mg/mL male	0.3 mg/mL male	1 mg/mL male
Adrenal Medulla	(10)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(10)
Parathyroid Gland	(8)	(0)	(0)	(10)
Pituitary Gland	(10)	(0)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(10)

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Epididymis	(10)	(0)	(0)	(10)
Duct, Exfoliated Germ Cell	1 [1.0]			1 [1.0]
Preputial Gland	(10)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear Cell				1 [1.0]
Inflammation, Chronic Active	3 [1.3]			3 [2.7]
Prostate	(10)	(0)	(0)	(10)
Seminal Vesicle	(10)	(0)	(0)	(10)
Testis	(10)	(0)	(0)	(10)
Germinal Epithelium, Degeneration	1 [1.0]			1 [1.0]

## 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)

## INTEGUMENTARY SYSTEM

Mammary Gland	(10)	(0)	(0)	(10)
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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	0.1 mg/mL male	0.3 mg/mL male	1 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)
Nose	(10)	(0)	(0)	(10)
Olfactory Epithelium, Accumulation, Hyaline Droplet	7 [1.0]			6 [1.0]
Respiratory Epithelium, Inflammation, Chronic Active				1 [1.0]
Transitional Epithelium, Inflammation, Chronic Active				1 [2.0]
Trachea	(10)	(0)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(10)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(10)
<b>URINARY SYSTEM</b>				
Kidney	(10)	(0)	(0)	(10)
Nephropathy, Chronic Progressive	9 [1.0]			8 [1.0]
Urinary Bladder	(10)	(0)	(0)	(10)

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Lab: BAT

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Harlan Sprague Dawley RATS MALE

0 mg/mL male

0.1 mg/mL male

0.3 mg/mL male

1 mg/mL male

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

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

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Lab: BAT

Harlan Sprague Dawley RATS FEMALE

0 mg/mL female

0.1 mg/mL female

0.3 mg/mL female

1 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>10</b>	<b>7</b>	<b>10</b>

## 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)	(1)	(10)
Hepatodiaphragmatic Nodule			1	
Pancreas	(10)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(10)

## CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(10)
Cardiomyopathy	1 [1.0]			

## ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(0)	(10)
Hypertrophy, Focal	1 [1.0]			
Adrenal Medulla	(10)	(0)	(0)	(10)

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Harlan Sprague Dawley RATS FEMALE	0 mg/mL female	0.1 mg/mL female	0.3 mg/mL female	1 mg/mL female
Islets, Pancreatic	(10)	(0)	(0)	(10)
Parathyroid Gland	(5)	(0)	(0)	(10)
Pituitary Gland	(10)	(0)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(10)

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Clitoral Gland	(10)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear Cell	1 [1.0]			4 [1.5]
Inflammation, Chronic Active	2 [1.5]			
Ovary	(10)	(0)	(0)	(10)
Follicle, Cyst	1			
Uterus	(10)	(0)	(0)	(10)

## HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(0)	(0)	(10)
Lymph Node, Mandibular	(10)	(0)	(0)	(10)
Hyperplasia, Lymphocyte				1 [1.0]
Lymph Node, Mesenteric	(10)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(10)
Thymus	(10)	(0)	(0)	(10)

## INTEGUMENTARY SYSTEM

Mammary Gland	(10)	(0)	(0)	(10)
Skin	(10)	(0)	(0)	(10)

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

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<b>MUSCULOSKELETAL SYSTEM</b>				
Bone	(10)	(0)	(0)	(10)
Maxilla, Inflammation, Chronic Active	1 [3.0]			
<b>NERVOUS SYSTEM</b>				
Brain	(10)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>				
Lung	(10)	(0)	(0)	(10)
Nose	(10)	(10)	(7)	(10)
Epithelium, Inflammation, Chronic Active	9 [1.6]	10 [1.4]	7 [1.4]	
Olfactory Epithelium, Accumulation, Hyaline Droplet	5 [1.0]			4 [1.0]
Trachea	(10)	(0)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(10)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(10)
<b>URINARY SYSTEM</b>				
Kidney	(10)	(0)	(0)	(10)
Nephropathy, Chronic Progressive	5 [1.0]			2 [1.0]
Urinary Bladder	(10)	(0)	(0)	(10)

\*\*\* 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)