

Experiment Number: 50051 - 01

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

Date Report Requested: 01/08/2020

Test Type: 14-WEEK

Ionic Liquid: 1-Butyl-1-methylpyrrolidinium Chloride

Time Report Requested: 11:04:53

Route: DOSED WATER

CAS Number: 479500-35-1

First Dose M/F: 08/22/13 / 08/23/13

Species/Strain: RATS/HSD

Lab: BAT

Final_1 - BMPY Rats

NTP Study Number: C05051
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

0.3 mg/mL male

1 mg/mL male

3 mg/mL male

Disposition Summary

Animals Initially In Study	10	10	10	10
Early Deaths				
Survivors				
Terminal Sacrifice	10	10	10	10
Animals Examined Microscopically	10	1		10

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)
Extramedullary Hematopoiesis	2 [1.0]			1 [1.0]
Hepatodiaphragmatic Nodule		1		
Inflammation, Chronic Active	2 [1.0]			2 [1.0]
Pancreas	(10)	(0)	(0)	(10)
Atrophy	1 [1.0]			
Basophilic Focus				1
Acinus, Hyperplasia				1 [1.0]
Salivary Glands	(10)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(10)
Dilation	1 [1.0]			

CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(10)

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	0 mg/mL male	0.3 mg/mL male	1 mg/mL male	3 mg/mL male
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ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(0)	(10)
Hypertrophy, Focal	1 [1.0]			
Adrenal Medulla	(10)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(10)
Hyperplasia	1 [1.0]			2 [1.0]
Parathyroid Gland	(6)	(0)	(0)	(8)
Pituitary Gland	(10)	(0)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(10)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Epididymis	(10)	(0)	(0)	(10)
Preputial Gland	(10)	(0)	(0)	(10)
Infiltration Cellular, Mononuclear Cell				1 [1.0]
Inflammation, Chronic Active	4 [1.5]			1 [1.0]
Prostate	(10)	(0)	(0)	(10)
Seminal Vesicle	(10)	(0)	(0)	(10)
Testis	(10)	(1)	(0)	(10)

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)

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Lab: BAT

Harlan Sprague Dawley RATS MALE	0 mg/mL male	0.3 mg/mL male	1 mg/mL male	3 mg/mL male
INTEGUMENTARY SYSTEM				
Mammary Gland	(10)	(0)	(0)	(10)
Skin	(10)	(0)	(0)	(10)
MUSCULOSKELETAL SYSTEM				
Bone	(10)	(0)	(0)	(10)
NERVOUS SYSTEM				
Brain	(10)	(0)	(0)	(10)
RESPIRATORY SYSTEM				
Lung	(10)	(0)	(0)	(10)
Infiltration Cellular, Histiocyte	1 [1.0]			1 [1.0]
Inflammation, Chronic Active				2 [1.0]
Nose	(10)	(0)	(0)	(10)
Olfactory Epithelium, Accumulation, Hyaline Droplet	4 [1.0]			5 [1.0]
Trachea	(10)	(0)	(0)	(10)
SPECIAL SENSES SYSTEM				
Eye	(10)	(0)	(0)	(10)
Retina, Dysplasia	1 [1.0]			
Harderian Gland	(10)	(0)	(0)	(10)
Inflammation, Chronic Active	1 [1.0]			
URINARY SYSTEM				
Kidney	(10)	(1)	(0)	(10)

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	0.3 mg/mL male	1 mg/mL male	3 mg/mL male
Inflammation, Chronic Active		1 [2.0]		
Nephropathy, Chronic Progressive	10 [1.1]	1 [1.0]		9 [1.0]
Papilla, Mineral				1 [1.0]
Pelvis, Dilation		1 [2.0]		
Ureter	(0)	(1)	(0)	(0)
Inflammation, Chronic Active		1 [2.0]		
Urinary Bladder	(10)	(1)	(0)	(10)
Inflammation, Chronic Active		1 [3.0]		
Urothelium, Hyperplasia		1 [3.0]		

*** END OF MALE ***

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Lab: BAT

Harlan Sprague Dawley RATS FEMALE

0 mg/mL female

1 mg/mL female

3 mg/mL female

6 mg/mL female

Disposition Summary

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

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)
Extramedullary Hematopoiesis	1 [1.0]			
Hepatodiaphragmatic Nodule				1
Inflammation, Chronic Active	4 [1.0]			3 [1.0]
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)
Tooth	(0)	(0)	(0)	(1)
Necrosis				1 [2.0]

CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(10)

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0 mg/mL female

1 mg/mL female

3 mg/mL female

6 mg/mL female

ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(0)	(10)
Bilateral, Hypertrophy, Focal	1 [2.0]			
Adrenal Medulla	(10)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(10)
Hyperplasia	1 [1.0]			1 [1.0]
Parathyroid Gland	(8)	(0)	(0)	(6)
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	3 [1.0]			1 [1.0]
Inflammation, Chronic Active	1 [2.0]			
Ovary	(10)	(0)	(0)	(10)
Uterus	(10)	(0)	(0)	(10)

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

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Mammary Gland	(10)	(0)	(0)	(10)
Duct, Dilation	1 [2.0]			
Skin	(10)	(0)	(0)	(10)

MUSCULOSKELETAL SYSTEM

Bone	(10)	(0)	(0)	(10)
Maxilla, Inflammation, Chronic Active				1 [2.0]
Skeletal Muscle	(0)	(0)	(0)	(1)

NERVOUS SYSTEM

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

Lung	(10)	(0)	(0)	(10)
Inflammation, Chronic Active	4 [1.0]			2 [1.0]
Nose	(10)	(0)	(0)	(10)
Olfactory Epithelium, Accumulation, Hyaline Droplet	3 [1.0]			4 [1.0]
Trachea	(10)	(0)	(0)	(10)

SPECIAL SENSES SYSTEM

Eye	(10)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(10)

URINARY SYSTEM

Kidney	(10)	(0)	(0)	(10)
Nephropathy, Chronic Progressive	5 [1.0]			6 [1.0]
Renal Tubule, Mineral				1 [1.0]

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Harlan Sprague Dawley RATS FEMALE	0 mg/mL female	1 mg/mL female	3 mg/mL female	6 mg/mL female
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)