

**Experiment Number:** 50050 - 01

**Test Type:** 14-WEEK

**Route:** DOSED WATER

**Species/Strain:** RATS/HSD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

**CAS Number:** 79917-90-1

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

**Time Report Requested:** 11:06:43

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

**Lab:** BAT

Final\_1 - BMIM Rats

**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

Note: Animals arranged according to days on test.

Experiment Number: 50050 - 01  
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 Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride  
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Date Report Requested: 01/08/2020  
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 First Dose M/F: 04/25/13 / 04/26/13  
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 0 mg/mL male	DAY ON TEST	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
ANIMAL ID		9	9	9	9	9	9	9	9	9	9
		2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1
		0	0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9	0

\* TOTALS

## ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	10

## CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	+	10

\* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

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

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0
<b>HARLAN SPRAGUE DAWLEY RATS</b>		0	0	0	0	0	0	0	0	0	0	0
<b>MALE</b>		9	9	9	9	9	9	9	9	9	9	9
<b>0 mg/mL male</b>		2	2	2	2	2	2	2	2	2	2	2
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1	1
		0	0	0	0	0	0	0	0	0	1	1
		1	2	3	4	5	6	7	8	9	0	*

\* TOTALS

### ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	M	M	+		8
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	10

### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	10
Testis	+	+	+	+	+	+	+	+	+	+	+	10

### HEMATOPOIETIC SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
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Route: DOSED WATER

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

Lab: BAT

	DAY ON TEST													* TOTALS													
		0 0 9 2	0 0 9 2	0 0 9 2	0 0 9 2	0 0 9 2	0 0 9 2	0 0 9 2	0 0 9 2	0 0 9 2	0 0 9 2	0 0 9 2	0 0 9 2														
HARLAN SPRAGUE DAWLEY RATS MALE <b>0 mg/mL male</b>	ANIMAL ID	0 0 1 0 1	0 0 1 0 1	0 0 1 0 1	0 0 1 0 1	0 0 1 0 1	0 0 1 0 1	0 0 1 0 1	0 0 1 0 1	0 0 1 0 1	0 0 1 0 1	0 0 1 0 1	0 0 1 0 1	* TOTALS													
		Bone Marrow												10													
		Lymph Node, Mandibular												10													
		Lymph Node, Mesenteric												10													
		Spleen												10													
		Thymus												10													
<b>INTEGUMENTARY SYSTEM</b>																											
Mammary Gland																											
Skin																											
<b>MUSCULOSKELETAL SYSTEM</b>																											
Bone																											
<b>NERVOUS SYSTEM</b>																											
Brain																											
<b>RESPIRATORY SYSTEM</b>																											
Lung																											
Nose																											
Trachea																											

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

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Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0
<b>HARLAN SPRAGUE DAWLEY RATS</b>		0	0	0	0	0	0	0	0	0	0	0
<b>MALE</b>		9	9	9	9	9	9	9	9	9	9	9
<b>0 mg/mL male</b>		2	2	2	2	2	2	2	2	2	2	2
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1	1
		0	0	0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9	0	*

\* TOTALS

**SPECIAL SENSES SYSTEM**

Eye	+	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	10

**URINARY SYSTEM**

Kidney	+	+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	10

**SYSTEMIC LESIONS**

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	10
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+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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Time Report Requested: 11:06:43

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

Lab: BAT

DAY ON TEST

HARLAN SPRAGUE DAWLEY RATS  
MALE

0.1 mg/mL male

ANIMAL ID

\* TOTALS

**ALIMENTARY SYSTEM**

NONE

**CARDIOVASCULAR SYSTEM**

NONE

**ENDOCRINE SYSTEM**

NONE

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

NONE

**HEMATOPOIETIC SYSTEM**

NONE

**INTEGUMENTARY SYSTEM**

NONE

**MUSCULOSKELETAL SYSTEM**

NONE

**NERVOUS SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

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

Lab: BAT

DAY ON TEST

HARLAN SPRAGUE DAWLEY RATS  
MALE

0.1 mg/mL male

ANIMAL ID

\* TOTALS

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

Multiple Organ

0

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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

Lab: BAT

DAY ON TEST

HARLAN SPRAGUE DAWLEY RATS  
MALE

0.3 mg/mL male

ANIMAL ID

\* TOTALS

**ALIMENTARY SYSTEM**

NONE

**CARDIOVASCULAR SYSTEM**

NONE

**ENDOCRINE SYSTEM**

NONE

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

NONE

**HEMATOPOIETIC SYSTEM**

NONE

**INTEGUMENTARY SYSTEM**

NONE

**MUSCULOSKELETAL SYSTEM**

NONE

**NERVOUS SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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BLANK .. Not examined microscopically

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

Lab: BAT

DAY ON TEST

HARLAN SPRAGUE DAWLEY RATS  
MALE

0.3 mg/mL male

ANIMAL ID

\* TOTALS

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

Multiple Organ

0

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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

HARLAN SPRAGUE DAWLEY RATS MALE <b>1 mg/mL male</b>	DAY ON TEST ANIMAL ID	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9
		2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1
		3	3	3	3	3	3	3	3	3	4
		1	2	3	4	5	6	7	8	9	0
		<b>* TOTALS</b>									

### ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

### CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

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Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0
<b>HARLAN SPRAGUE DAWLEY RATS</b>		0	0	0	0	0	0	0	0	0	0	0
<b>MALE</b>		9	9	9	9	9	9	9	9	9	9	9
<b>1 mg/mL male</b>		2	2	2	2	2	2	2	2	2	2	2
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1	1
		3	3	3	3	3	3	3	3	3	3	4
		1	2	3	4	5	6	7	8	9	0	*

\* TOTALS

### ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	10

### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	10
Testis	+	+	+	+	+	+	+	+	+	+	+	10

### HEMATOPOIETIC SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 1 mg/mL male	DAY ON TEST ANIMAL ID	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9
		2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
INTEGUMENTARY SYSTEM		1	1	1	1	1	1	1	1	1	1
		3	3	3	3	3	3	3	3	3	4
		1	2	3	4	5	6	7	8	9	0
		* TOTALS									
		Bone Marrow	+	+	+	+	+	+	+	+	10
		Lymph Node, Mandibular	+	+	+	+	+	+	+	+	10
MUSCULOSKELETAL SYSTEM		Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	10
		Spleen	+	+	+	+	+	+	+	+	10
		Thymus	+	+	+	+	+	+	+	+	10
		* TOTALS									
		Mammary Gland	+	+	+	+	+	+	+	+	10
		Skin	+	+	+	+	+	+	+	+	10
NERVOUS SYSTEM		* TOTALS									
		Bone	+	+	+	+	+	+	+	+	10
		Brain	+	+	+	+	+	+	+	+	10
		* TOTALS									
		Lung	+	+	+	+	+	+	+	+	10
		Nose	+	+	+	+	+	+	+	+	10
RESPIRATORY SYSTEM		Trachea	+	+	+	+	+	+	+	+	10
		* TOTALS									

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Lab: BAT

<b>HARLAN SPRAGUE DAWLEY RATS MALE 1 mg/mL male</b>	<b>DAY ON TEST</b>	0	0	0	0	0	0	0	0	0	0
	<b>ANIMAL ID</b>	0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9
		2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1
		3	3	3	3	3	3	3	3	3	4
		1	2	3	4	5	6	7	8	9	0
		<b>* TOTALS</b>									

**SPECIAL SENSES SYSTEM**

Eye	+	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	10

**URINARY SYSTEM**

Kidney	+	+	+	+	+	+	+	+	+	+	+	10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	10

**SYSTEMIC LESIONS**

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	10
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\*\*\* END OF MALE DATA \*\*\*

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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

HARLAN SPRAGUE DAWLEY RATS FEMALE <b>0 mg/mL female</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
ANIMAL ID		9	9	9	9	9	9	9	9	9	9
		2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1
		4	4	4	4	4	4	4	4	4	5
		1	2	3	4	5	6	7	8	9	0

\* TOTALS

## ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	10

## CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	+	10

\* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 50050 - 01  
Test Type: 14-WEEK  
Route: DOSED WATER  
Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)  
Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride  
CAS Number: 79917-90-1

Date Report Requested: 01/08/2020  
Time Report Requested: 11:06:43  
First Dose M/F: 04/25/13 / 04/26/13  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE  0 mg/mL female	DAY ON TEST  ANIMAL ID	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9
		2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1
		4	4	4	4	4	4	4	4	4	5
		1	2	3	4	5	6	7	8	9	0
		* TOTALS									

### ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	M	M	M	M	+	M	+	5
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	10

### HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:06:43

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

Lab: BAT

	DAY ON TEST													* TOTALS	
		0 0 9 2	0 0 9 2	0 0 9 2	0 0 9 2										
HARLAN SPRAGUE DAWLEY RATS FEMALE <b>0 mg/mL female</b>	ANIMAL ID	0 0 1 4 1	0 0 1 4 2	0 0 1 4 3	0 0 1 4 4	0 0 1 4 5	0 0 1 4 6	0 0 1 4 7	0 0 1 4 8	0 0 1 4 9	0 0 1 5	0 0 1 0	0 0 1 0		
Lymph Node, Mesenteric		+ + + + + + + + + + +													10
Spleen		+ + + + + + + + + + +													10
Thymus		+ + + + + + + + + + +													10
<b>INTEGUMENTARY SYSTEM</b>															
Mammary Gland		+ + + + + + + + + + +													10
Skin		+ + + + + + + + + + +													10
<b>MUSCULOSKELETAL SYSTEM</b>															
Bone		+ + + + + + + + + + +													10
<b>NERVOUS SYSTEM</b>															
Brain		+ + + + + + + + + + +													10
<b>RESPIRATORY SYSTEM</b>															
Lung		+ + + + + + + + + + +													10
Nose		+ + + + + + + + + + +													10
Trachea		+ + + + + + + + + + +													10
<b>SPECIAL SENSES SYSTEM</b>															
Eye		+ + + + + + + + + + +													10

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 50050 - 01  
Test Type: 14-WEEK  
Route: DOSED WATER  
Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)  
Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride  
CAS Number: 79917-90-1

Date Report Requested: 01/08/2020  
Time Report Requested: 11:06:43  
First Dose M/F: 04/25/13 / 04/26/13  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE <b>0 mg/mL female</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1
		4	4	4	4	4	4	4	4	4	5
		1	2	3	4	5	6	7	8	9	0
		* TOTALS									
	Harderian Gland	+	+	+	+	+	+	+	+	+	10
	Kidney	+	+	+	+	+	+	+	+	+	10
	Urinary Bladder	+	+	+	+	+	+	+	+	+	10
	Multiple Organ	+	+	+	+	+	+	+	+	+	10

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:06:43

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

Lab: BAT

DAY ON TEST

HARLAN SPRAGUE DAWLEY RATS  
FEMALE

0.1 mg/mL female

ANIMAL ID

\* TOTALS

**ALIMENTARY SYSTEM**

NONE

**CARDIOVASCULAR SYSTEM**

NONE

**ENDOCRINE SYSTEM**

NONE

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

NONE

**HEMATOPOIETIC SYSTEM**

NONE

**INTEGUMENTARY SYSTEM**

NONE

**MUSCULOSKELETAL SYSTEM**

NONE

**NERVOUS SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:06:43

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

Lab: BAT

DAY ON TEST

HARLAN SPRAGUE DAWLEY RATS  
FEMALE

0.1 mg/mL female

ANIMAL ID

\* TOTALS

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

SYSTEMIC LESIONS

Multiple Organ

0

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:06:43

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

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE  0.3 mg/mL female	ANIMAL ID	DAY ON TEST											
		0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9	9	9
		2	2	2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1	1	1
		6	6	6	6	6	6	6	6	6	6	6	7
		1	2	3	4	5	6	7	8	9	0		

\* TOTALS

## ALIMENTARY SYSTEM

Liver + 1

## CARDIOVASCULAR SYSTEM

NONE

## ENDOCRINE SYSTEM

NONE

## GENERAL BODY SYSTEM

NONE

## GENITAL SYSTEM

NONE

## HEMATOPOIETIC SYSTEM

NONE

## INTEGUMENTARY SYSTEM

NONE

## MUSCULOSKELETAL SYSTEM

NONE

## NERVOUS SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 50050 - 01  
Test Type: 14-WEEK  
Route: DOSED WATER  
Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)  
Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride  
CAS Number: 79917-90-1

Date Report Requested: 01/08/2020  
Time Report Requested: 11:06:43  
First Dose M/F: 04/25/13 / 04/26/13  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE  0.3 mg/mL female	DAY ON TEST  ANIMAL ID	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9
		2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	*
		0	0	0	0	0	0	0	0	0	TOTALS
		1	1	1	1	1	1	1	1	1	
		6	6	6	6	6	6	6	6	7	
		1	2	3	4	5	6	7	8	9	

NONE

### RESPIRATORY SYSTEM

NONE

### SPECIAL SENSES SYSTEM

NONE

### URINARY SYSTEM

NONE

### SYSTEMIC LESIONS

Multiple Organ

+

1

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

Experiment Number: 50050 - 01  
 Test Type: 14-WEEK  
 Route: DOSED WATER  
 Species/Strain: RATS/HSD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**  
 Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride  
 CAS Number: 79917-90-1

Date Report Requested: 01/08/2020  
 Time Report Requested: 11:06:43  
 First Dose M/F: 04/25/13 / 04/26/13  
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 1 mg/mL female	DAY ON TEST	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
ANIMAL ID		9	9	9	9	9	9	9	9	9	9
		2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1
		7	7	7	7	7	7	7	7	7	8
		1	2	3	4	5	6	7	8	9	0

\* TOTALS

## ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	10

## CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	+	10

\* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

X .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

Experiment Number: 50050 - 01  
 Test Type: 14-WEEK  
 Route: DOSED WATER  
 Species/Strain: RATS/HSD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**  
 Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride  
 CAS Number: 79917-90-1

Date Report Requested: 01/08/2020  
 Time Report Requested: 11:06:43  
 First Dose M/F: 04/25/13 / 04/26/13  
 Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE <b>1 mg/mL female</b>	DAY ON TEST ANIMAL ID	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9
		2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1
		7	7	7	7	7	7	7	7	7	8
		1	2	3	4	5	6	7	8	9	0
		<b>* TOTALS</b>									

### ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	10

### HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

Experiment Number: 50050 - 01

Test Type: 14-WEEK

Route: DOSED WATER

Species/Strain: RATS/HSD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride

CAS Number: 79917-90-1

Date Report Requested: 01/08/2020

Time Report Requested: 11:06:43

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

Lab: BAT

	DAY ON TEST													* TOTALS
		0 0 9 2	0 0 9 2											
HARLAN SPRAGUE DAWLEY RATS FEMALE 1 mg/mL female	ANIMAL ID	0 0 1 7 1	0 0 1 7 2	0 0 1 7 3	0 0 1 7 4	0 0 1 7 5	0 0 1 7 6	0 0 1 7 7	0 0 1 7 8	0 0 1 7 9	0 0 1 8 0			
Lymph Node, Mesenteric		+ + + + + + + + + +												10
Spleen		+ + + + + + + + + +												10
Thymus		+ + + + + + + + + +												10
<b>INTEGUMENTARY SYSTEM</b>														
Mammary Gland		+ + + + + + + + + +												10
Skin		+ + + + + + + + + +												10
<b>MUSCULOSKELETAL SYSTEM</b>														
Bone		+ + + + + + + + + +												10
<b>NERVOUS SYSTEM</b>														
Brain		+ + + + + + + + + +												10
<b>RESPIRATORY SYSTEM</b>														
Lung		+ + + + + + + + + +												10
Nose		+ + + + + + + + + +												10
Trachea		+ + + + + + + + + +												10
<b>SPECIAL SENSES SYSTEM</b>														
Eye		+ + + + + + + + + +												10

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

Experiment Number: 50050 - 01  
Test Type: 14-WEEK  
Route: DOSED WATER  
Species/Strain: RATS/HSD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)  
Ionic Liquid: 1-Butyl-3-methylimidazolium Chloride  
CAS Number: 79917-90-1

Date Report Requested: 01/08/2020  
Time Report Requested: 11:06:43  
First Dose M/F: 04/25/13 / 04/26/13  
Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE <b>1 mg/mL female</b>	DAY ON TEST ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		2	2	2	2	2	2	2	2	2	2	
		0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	1	
		7	7	7	7	7	7	7	7	7	8	
		1	2	3	4	5	6	7	8	9	0	
		* TOTALS										
Harderian Gland		+	+	+	+	+	+	+	+	+	10	
<b>URINARY SYSTEM</b>												
Kidney		+	+	+	+	+	+	+	+	+	10	
Urinary Bladder		+	+	+	+	+	+	+	+	+	10	
<b>SYSTEMIC LESIONS</b>												
Multiple Organ		+	+	+	+	+	+	+	+	+	10	

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

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically