

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:38

First Dose M/F: NA / NA

Lab: TSI MASON

C Number: C55301B

Lock Date: Not Entered.

Cage Range: All

Date Range: All

Reasons For Removal: All

Removal Date Range: All

Treatment Groups: All

Study Gender: Male

PWG Approval Date NONE

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:38

First Dose M/F: NA / NA

Lab: TSI MASON

WISTAR OUTBR Rat Male 0 PPM	DAY ON TEST	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									
		0 0 0 0 0 0 0 0 0 0									
		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
Inflammation, Acute					1						1 1.0

Cardiovascular System

Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy	1		2	1	1			1		5	1.2

Endocrine System

Adrenal Gland, Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Gland, Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:38

First Dose M/F: NA / NA

Lab: TSI MASON

WISTAR OUTBR Rat Male 0 PPM	DAY ON TEST										
		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
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	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	2	3	4	5	6	7	8	9	0	
*TOTALS											
Parathyroid Gland		+	+	+	+	+	+	+	+	+	9
Pituitary Gland		+	+	+	+	+	+	+	+	+	10
Thyroid Gland		+	+	+	+	+	+	+	+	+	10
General Body System											
NONE											
Genital System											
Epididymis		+	+	+	+	+	+	+	+	+	9
Preputial Gland		+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active								1		1	1.0
Prostate		+	+	+	+	+	+	+	+	+	10
Seminal Vesicle		+	+	+	+	+	+	+	+	+	10
Testes		+	+	+	+	+	+	+	+	+	10
Seminif Tub, Giant Cell				2					1	2.0	
Hematopoietic System											
Bone Marrow		+	+	+	+	+	+	+	+	+	10
Lymph Node							+				1
Lumbar, Hyperplasia, Lymphoid						2			1	2.0	
Lymph Node, Mandibular		+	+	+	+	+	+	+	+	+	10
Hyperplasia, Lymphoid						2			1	2.0	
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	10
Hyperplasia, Lymphoid					2				1	2.0	

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:38

First Dose M/F: NA / NA

Lab: TSI MASON

WISTAR OUTBR Rat Male 0 PPM	DAY ON TEST	0	0	0	0	0	0	0	0	0
	ANIMAL ID	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0
		*TOTALS								
Spleen		+	+	+	+	+	+	+	+	+
Thymus		+	+	+	+	+	+	+	+	+
Integumentary System										
Mammary Gland		+	+	+	M	+	+	+	+	+
Skin		+	+	+	+	+	+	+	+	+
Musculoskeletal System										
Bone		+	+	+	+	+	+	+	+	+
Nervous System										
Brain		+	+	+	+	+	+	+	+	+
Respiratory System										
Lung		+	+	+	+	+	+	+	+	+
Hemorrhage						1	1		2	1.0
Infiltration Cellular, Histiocyte						1	1		1	1.0
Nose		+	+	+	+	+	+	+	+	10
Inflammation, Acute						1			1	1.0
Trachea		+	+	+	+	+	+	+	+	10
Special Senses System										
NONE										
Urinary System										

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:38

First Dose M/F: NA / NA

Lab: TSI MASON

WISTAR OUTBR Rat Male 0 PPM	DAY ON TEST	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										
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	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	2	3	4	5	6	7	8	9	0	

*TOTALS

Kidney	+	+	+	+	+	+	+	+	+	+	10
Casts					1		1		1		3 1.0
Hydronephrosis	1						2				2 1.5
Mineralization	1	1	1	1				1	1	1	7 1.0
Renal Tubule, Degeneration, Hyaline	1	1									2 1.0
Renal Tubule, Regeneration	1		1	1			1		1		5 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:38

First Dose M/F: NA / NA

Lab: TSI MASON

WISTAR OUTBR Rat Male 50 PPM	DAY ON TEST	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
		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	0	0	0	0	0
		1	1	1	1	1	1	1	1	2
*TOTALS										

Alimentary System

Liver	+	+	+	+	+	+	+	+	+	+	10
Necrosis, Focal											1
											1
											1.0

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Lymph Node, Mandibular	+		1
Hyperplasia, Lymphoid	2		1
			2.0

Integumentary System

Skin	+		1
------	---	--	---

Musculoskeletal System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:38

First Dose M/F: NA / NA

Lab: TSI MASON

WISTAR OUTBR Rat Male 50 PPM	DAY ON TEST	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
		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	0	0	0	0	0
		1	1	1	1	1	1	1	1	2
		1	2	3	4	5	6	7	8	9
										*TOTALS

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	10	
Casts				1		1				1	3	1.0
Hydronephrosis		1						1			2	1.0
Inflammation, Chronic									1		1	1.0
Mineralization				1	1			1	1	2	5	1.2
Renal Tubule, Regeneration	1	1		1	1		1		1		6	1.0

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:39

First Dose M/F: NA / NA

Lab: TSI MASON

WISTAR OUTBR Rat Male 100 PPM	DAY ON TEST	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
		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	0	0	0	0	0
		2	2	2	2	2	2	2	2	3
		1	2	3	4	5	6	7	8	9

*TOTALS

Alimentary System

Liver	+	+	+	+	+	+	+	+	+	+	10
Clear Cell Focus			X								1
Necrosis, Focal				1							2 1.0

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Lymph Node, Mandibular	+		1
Hyperplasia, Lymphoid	3		1 3.0

Integumentary System

NONE

Musculoskeletal System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:39

First Dose M/F: NA / NA

Lab: TSI MASON

WISTAR OUTBR Rat Male 100 PPM	DAY ON TEST	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	0	0	0	0	0	0	0
		2	2	2	2	2	2	2	2	2

*TOTALS

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

Kidney

+ + + + + + + + + + 10

Casts

1 1 1 1 4 1.0

Inflammation, Chronic

2 1 2.0

Mineralization

1 1 1 1 4 1.0

Renal Tubule, Regeneration

1 1 1 1 5 1.0

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:39

First Dose M/F: NA / NA

Lab: TSI MASON

| WISTAR OUTBR Rat Male
250 PPM | DAY ON TEST | 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 |
| | | 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 | 0 | 0 | 0 | 0 | 0 |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

*TOTALS

Alimentary System

| | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Liver | + | + | + | + | + | + | + | + | + | + | 10 |
| Clear Cell Focus | | | | | 1 | | | | | | 1 1.0 |
| Inflammation, Chronic | | | | | | 1 | 1 | | | | 2 1.0 |

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

| | | | |
|------------------------|---|--|-------|
| Lymph Node, Mandibular | + | | 1 |
| Angiectasis | 2 | | 1 2.0 |

Integumentary System

NONE

Musculoskeletal System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:39

First Dose M/F: NA / NA

Lab: TSI MASON

| WISTAR OUTBR Rat Male
250 PPM | DAY ON TEST | 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 | |
| | | 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 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| | | *TOTALS | | | | | | | | | |

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

| | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|-------|
| Kidney | + | + | + | + | + | + | + | + | + | + | 10 |
| Casts | 2 | | 1 | | 1 | | | 2 | | | 4 1.5 |
| Mineralization | 1 | | 2 | 1 | 1 | | 1 | 2 | 1 | 1 | 8 1.3 |
| Renal Tubule, Degeneration, Hyaline | | | | | 1 | | | | 1 | | 2 1.0 |
| Renal Tubule, Regeneration | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 9 1.0 |
| Urinary Bladder | + | | | | + | | | | 2 | | |
| Calculus Gross Observation | X | | | | | | | | | 1 | |
| Calculus Micro Observation Only | X | | | | | | | | | 1 | |
| Concretion | | | | | 2 | | | | | 1 | 2.0 |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

L ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:39

First Dose M/F: NA / NA

Lab: TSI MASON

| WISTAR OUTBR Rat Male
500 PPM | DAY ON TEST | | | | | | | | | | |
|----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 9 | 0 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | | 2 | 6 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Alimentary System

| | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|-----|
| Liver | + | + | + | + | + | + | + | + | + | 9 | |
| Centrilobular, Degeneration | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 9 | 1.7 |
| Centrilobular, Necrosis | | | | | 1 | | | | | 1 | 1.0 |
| Hypertrophy | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 1.0 |
| Inflammation, Chronic | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 9 | 1.7 |
| Pigmentation | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 1.0 |

Cardiovascular System

| | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|-----|
| Heart | + | + | + | + | + | + | + | + | + | 9 | |
| Cardiomyopathy | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8 | 1.0 |

Endocrine System

NONE

General Body System

NONE

Genital System

| | | | | | | | | | | | |
|--------|---|--|---|--|--|--|--|--|--|---|-----|
| Testes | + | | 1 | | | | | | | | |
| Edema | 1 | | | | | | | | | 1 | 1.0 |

Hematopoietic System

NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:39

First Dose M/F: NA / NA

Lab: TSI MASON

| WISTAR OUTBR Rat Male
500 PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------------------------------------------|--------------------|----------------|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 9 | 0 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | | 2 | 6 | 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 | 0 | 0 | 0 | 0 | 0 |
| | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | *TOTALS | | | | | | | | |

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

Kidney

+ + + + + + + + + 9

4 1.0

Casts

Mineralization

1 1 1 1 1 1 1 1 1 8 1.0

Renal Tubule, Degeneration, Hyaline

1 1 1 1 1 1 1 1 1 3 1.0

Renal Tubule, Regeneration

1 1 1 1 1 1 1 1 1 7 1.0

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:39

First Dose M/F: NA / NA

Lab: TSI MASON

| WISTAR OUTBR Rat Male
1000 PPM | DAY ON TEST | 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 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*TOTALS

Alimentary System

| | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|--------|
| Esophagus | + | M | + | + | + | + | + | + | + | + | 9 |
| 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 |
| Centrilobular, Degeneration | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | | 9 1.4 |
| Centrilobular, Necrosis | | | | 2 | | | | | | | 1 2.0 |
| Clear Cell Focus | | | | | X | | | | | | 1 |
| Hypertrophy | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 1.0 |
| Inflammation, Chronic | 2 | 4 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | | 9 2.2 |
| Pigmentation | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | | 9 1.3 |
| Regeneration | | | | | 2 | | | | | | 1 2.0 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | 10 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | 10 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | 10 |
| Inflammation, Acute | | | | | 1 | | | | | | 1 1.0 |

Cardiovascular System

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:39

First Dose M/F: NA / NA

Lab: TSI MASON

| WISTAR OUTBR Rat Male
1000 PPM | DAY ON TEST | 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 | | | | | | | | | | |
| ANIMAL ID | | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | |
| | | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | |
| | | 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | |
| | | 5 5 5 5 5 5 5 5 5 6 | | | | | | | | | | |
| | | 1 2 3 4 5 6 7 8 9 0 | | | | | | | | | | |

*TOTALS

| | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|----|
| Heart | + | + | + | + | + | + | + | + | + | + | 10 |
|-------|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | |
|----------------|--|--|--|--|--|--|---|--|---|--|---|-----|
| Cardiomyopathy | | | | | | | 1 | | 1 | | 2 | 1.0 |
|----------------|--|--|--|--|--|--|---|--|---|--|---|-----|

Endocrine System

| | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Gland, Cortex | + | + | + | + | + | + | + | + | + | + | 10 |
| Adrenal Gland, Medulla | + | + | + | + | + | + | + | + | + | + | 10 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | 10 |
| Parathyroid Gland | M | M | M | + | + | + | + | + | + | + | 7 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | 10 |

General Body System

NONE

Genital System

| | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|-----|----|
| Epididymis | + | + | + | + | + | + | + | + | + | + | 10 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | 10 |
| Inflammation, Chronic Active | | | | | 2 | | | | 1 | 2.0 | |
| Prostate | + | + | + | + | + | + | + | + | + | + | 10 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | 10 |
| Testes | + | + | + | + | + | + | + | + | + | + | 10 |

Hematopoietic System

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

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:39

First Dose M/F: NA / NA

Lab: TSI MASON

| WISTAR OUTBR Rat Male
1000 PPM | DAY ON TEST | | | | | | | | | | |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|-------|
| | | 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 | 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 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| *TOTALS | | | | | | | | | | | |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | 10 |
| Hyperplasia, Lymphoid | | | | | 2 | | | | | | 1 2.0 |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | 10 |
| Spleen | | + | + | + | + | + | + | + | + | + | 10 |
| Thymus | | + | + | + | + | + | + | + | + | + | 10 |
| Integumentary System | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | M | + | + | + | + | 9 |
| Skin | | + | + | + | + | + | + | + | + | + | 10 |
| Musculoskeletal System | | | | | | | | | | | |
| Bone | | + | + | + | + | + | + | + | + | + | 10 |
| Nervous System | | | | | | | | | | | |
| Brain | | + | + | + | + | + | + | + | + | + | 10 |
| Respiratory System | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | 10 |
| Edema | | | | | | | 1 | 1 | | | 2 1.0 |
| Hemorrhage | | | | | | | 1 | | | | 1 1.0 |
| Infiltration Cellular, Histiocyte | | | | | | 1 | | | | | 1 1.0 |
| Nose | | + | + | + | + | + | + | + | + | + | 10 |
| Trachea | | + | + | + | + | + | + | + | + | + | 10 |
| Special Senses System | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:39

First Dose M/F: NA / NA

Lab: TSI MASON

| WISTAR OUTBR Rat Male
1000 PPM | DAY ON TEST | 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 |
| | | 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 | 0 | 0 | 0 | 0 | 0 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | *TOTALS |

NONE

Urinary System

| | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|--------|
| Kidney | + | + | + | + | + | + | + | + | + | 10 |
| Casts | 1 | 1 | | | | | 1 | 1 | 1 | 5 1.0 |
| Casts Granular | | | | | | | 1 | | | 1 1.0 |
| Inflammation, Chronic | | | | | | 1 | 1 | | | 2 1.0 |
| Mineralization | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 1.0 |
| Renal Tubule, Degeneration, Hyaline | 1 | 1 | | 1 | | 1 | 1 | | | 6 1.0 |
| Renal Tubule, Regeneration | 1 | 1 | | 1 | 2 | 1 | 1 | 1 | | 8 1.1 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | 10 |
| Calculus Gross Observation | | | X | | | | | | | 1 |
| Calculus Micro Observation Only | | | X | | | | | | | 1 |
| Dilatation | | | 2 | | | | | | | 1 2.0 |

END OF MALE DATA

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

- 1) Minimal 3) Moderate
- 2) Mild 4) Marked

Experiment Number: 55301-03

Test Type: 90-DAY

Species/Strain: Rat/WISTAR OUTBR

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Pyridine

CAS Number: 110-86-1

Date Report Requested: 10/21/2014

Time Report Requested: 15:47:39

First Dose M/F: NA / NA

Lab: TSI MASON

** END OF REPORT **

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

M ..Missing tissue

X ..Lesion present

A ..Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked