

Experiment Number: 10119 - 01

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS  
ABRIDGED) (a)**

Date Report Requested: 06/03/2014

Test Type: CHRONIC

Furan

Time Report Requested: 08:43:51

Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

60 Week

**NTP Study Number:** C10119

**Lock Date:** 06/02/2014

**Cage Range:** ALL

**Date Range:** ALL

**Reasons For Removal:** ALL

**Removal Date Range:** ALL

<b>Treatment Groups:</b>	Include 009 0 Vehicle 60 wk	Include 010 0.02 Furan 60 wk	Include 011 0.044 Furan 60wk
	Include 012 0.092 Furan 60wk	Include 013 0.2 Furan 60 wk	Include 014 0.44 Furan 60 wk
	Include 015 0.92 Furan 60 wk	Include 016 2 Furan 60 wk	

**Study Gender:** Male

**TDMSE Version:** 3.0.2.0\_001

**PWG Approval Date:** NONE

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Furan

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Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE	0 Vehicle 60 wk	0.02 Furan 60 wk	0.044 Furan 60wk	0.092 Furan 60wk	0.2 Furan 60 wk	0.44 Furan 60 wk
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**Disposition Summary**

Animals Initially In Study	20	10	10	10	10	10
Scheduled Sacrifice	17	9	10	9	9	10
Early Deaths						
Moribund Sacrifice	2	1		1	1	
Natural Death	1					
Survivors						
Animals Examined Microscopically	20	10	10	10	10	10

## ALIMENTARY SYSTEM

Esophagus	(20)	(10)	(10)	(10)	(10)	(10)
Intestine Large, Cecum	(19)	(10)	(10)	(10)	(10)	(10)
Intestine Large, Colon	(19)	(10)	(10)	(10)	(10)	(10)
Intestine Large, Rectum	(19)	(10)	(10)	(10)	(10)	(10)
Intestine Small, Duodenum	(19)	(10)	(10)	(10)	(10)	(10)
Intestine Small, Ileum	(18)	(10)	(10)	(10)	(10)	(10)
Intestine Small, Jejunum	(19)	(10)	(10)	(10)	(10)	(10)
Liver	(20)	(10)	(10)	(10)	(10)	(10)
Mesentery	(4)	(1)	(1)	(2)	(0)	(0)
Pancreas	(20)	(10)	(10)	(10)	(10)	(10)
Acinar Cell, Adenoma		1 (10%)				
Salivary Glands	(20)	(10)	(10)	(10)	(10)	(10)
Stomach, Forestomach	(20)	(10)	(10)	(10)	(10)	(10)
Stomach, Glandular	(20)	(10)	(10)	(10)	(10)	(10)

## CARDIOVASCULAR SYSTEM

Blood Vessel	(20)	(10)	(10)	(10)	(10)	(10)
Heart	(20)	(10)	(10)	(10)	(10)	(10)
Schwannoma Malignant	1 (5%)					

## ENDOCRINE SYSTEM

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

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First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE	0 Vehicle 60 wk	0.02 Furan 60 wk	0.044 Furan 60wk	0.092 Furan 60wk	0.2 Furan 60 wk	0.44 Furan 60 wk
Adrenal Cortex	(20)	(10)	(10)	(10)	(10)	(10)
Adrenal Medulla	(20)	(10)	(10)	(10)	(10)	(10)
Pheochromocytoma Benign		1 (10%)				1 (10%)
Islets, Pancreatic	(20)	(10)	(10)	(10)	(10)	(10)
Adenoma						1 (10%)
Parathyroid Gland	(20)	(10)	(10)	(10)	(10)	(10)
Pituitary Gland	(20)	(10)	(10)	(10)	(10)	(10)
Pars Distalis, Adenoma	3 (15%)	3 (30%)	2 (20%)	1 (10%)		7 (70%)
Thyroid Gland	(20)	(10)	(10)	(10)	(10)	(10)
C-cell, Adenoma				1 (10%)	1 (10%)	

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Epididymis	(20)	(10)	(10)	(10)	(10)	(10)
Preputial Gland	(20)	(10)	(10)	(10)	(10)	(10)
Adenoma		1 (10%)		1 (10%)		
Carcinoma	1 (5%)	1 (10%)				
Prostate	(20)	(10)	(10)	(10)	(10)	(10)
Seminal Vesicle	(20)	(10)	(10)	(10)	(10)	(10)
Testes	(20)	(10)	(10)	(10)	(10)	(10)
Bilateral, Interstitial Cell, Adenoma						
Interstitial Cell, Adenoma	6 (30%)	2 (20%)	1 (10%)	3 (30%)	2 (20%)	1 (10%)

## HEMATOPOIETIC SYSTEM

Bone Marrow	(20)	(10)	(10)	(10)	(10)	(10)
Lymph Node	(1)	(0)	(0)	(0)	(0)	(0)
Lymph Node, Mandibular	(20)	(10)	(10)	(10)	(10)	(10)
Lymph Node, Mesenteric	(20)	(10)	(10)	(10)	(10)	(10)
Spleen	(20)	(10)	(10)	(10)	(10)	(10)

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Route: GAVAGE

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First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE	0 Vehicle 60 wk	0.02 Furan 60 wk	0.044 Furan 60wk	0.092 Furan 60wk	0.2 Furan 60 wk	0.44 Furan 60 wk
Thymus	(20)	(10)	(10)	(10)	(10)	(10)
<b>INTEGUMENTARY SYSTEM</b>						
Mammary Gland	(19)	(10)	(9)	(10)	(9)	(10)
Fibroadenoma				1 (10%)		
Skin	(20)	(10)	(10)	(10)	(10)	(10)
Subcutaneous Tissue, Fibroma	1 (5%)					
<b>MUSCULOSKELETAL SYSTEM</b>						
Bone	(1)	(0)	(0)	(0)	(0)	(0)
Bone, Femur	(20)	(10)	(10)	(10)	(10)	(10)
Skeletal Muscle	(1)	(0)	(0)	(0)	(1)	(0)
<b>NERVOUS SYSTEM</b>						
Brain, Brain Stem	(20)	(10)	(10)	(10)	(10)	(10)
Brain, Cerebellum	(20)	(10)	(10)	(10)	(10)	(10)
Brain, Cerebrum	(20)	(10)	(10)	(10)	(10)	(10)
Brain, NOS	(0)	(0)	(0)	(0)	(0)	(1)
<b>RESPIRATORY SYSTEM</b>						
Lung	(20)	(10)	(10)	(10)	(10)	(10)
Nose	(20)	(10)	(10)	(10)	(10)	(10)
Trachea	(20)	(10)	(10)	(10)	(10)	(10)
<b>SPECIAL SENSES SYSTEM</b>						
Eye	(19)	(10)	(10)	(10)	(10)	(10)
Harderian Gland	(20)	(10)	(10)	(10)	(10)	(10)

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

Experiment Number: 10119 - 01

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

Date Report Requested: 06/03/2014

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Furan

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Route: GAVAGE

CAS Number: 110-00-9

First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

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FISCHER 344 RATS-NCTR RATS MALE	0 Vehicle 60 wk	0.02 Furan 60 wk	0.044 Furan 60wk	0.092 Furan 60wk	0.2 Furan 60 wk	0.44 Furan 60 wk
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URINARY SYSTEM

Kidney	(20)	(10)	(10)	(10)	(10)	(10)
Urinary Bladder	(20)	(10)	(10)	(10)	(10)	(10)

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SYSTEMIC LESIONS

Multiple Organ Leukemia Mononuclear	*(20)	*(10)	*(10)	*(10)	*(10)	*(10)
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a - Number of animals examined microscopically at site and number of animals with lesion

\* Number of animals with any tissue examined microscopically

Test Type: CHRONIC

Furan

Time Report Requested: 08:43:51

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First Dose M/F: 09/07/09 / NA

Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE

0.92 Furan 60 wk

2 Furan 60 wk

**Disposition Summary**

<b>Animals Initially In Study</b>	<b>10</b>	<b>10</b>
<b>Scheduled Sacrifice</b>	<b>10</b>	<b>8</b>
<b>Early Deaths</b>		
<b>Moribund Sacrifice</b>		<b>1</b>
<b>Natural Death</b>		<b>1</b>
<b>Survivors</b>		
<b>Animals Examined Microscopically</b>	<b>10</b>	<b>10</b>

## ALIMENTARY SYSTEM

Esophagus	(10)	(10)
Intestine Large, Cecum	(10)	(9)
Intestine Large, Colon	(10)	(10)
Intestine Large, Rectum	(10)	(9)
Intestine Small, Duodenum	(10)	(9)
Intestine Small, Ileum	(10)	(9)
Intestine Small, Jejunum	(10)	(9)
Liver	(10)	(10)
Mesentery	(0)	(0)
Pancreas	(10)	(10)
Acinar Cell, Adenoma		
Salivary Glands	(10)	(10)
Stomach, Forestomach	(10)	(10)
Stomach, Glandular	(10)	(10)

## CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(10)
Heart	(10)	(10)
Schwannoma Malignant		

## ENDOCRINE SYSTEM

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

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Species/Strain: RATS/F 344/NCTR

Lab: NCTR

FISCHER 344 RATS-NCTR RATS MALE	0.92 Furan 60 wk	2 Furan 60 wk
Adrenal Cortex	(10)	(10)
Adrenal Medulla	(10)	(10)
Pheochromocytoma Benign		
Islets, Pancreatic	(10)	(10)
Adenoma		
Parathyroid Gland	(10)	(10)
Pituitary Gland	(10)	(10)
Pars Distalis, Adenoma		2 (20%)
Thyroid Gland	(10)	(10)
C-cell, Adenoma		

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Epididymis	(10)	(10)
Preputial Gland	(10)	(10)
Adenoma	1 (10%)	
Carcinoma		
Prostate	(10)	(10)
Seminal Vesicle	(10)	(10)
Testes	(10)	(10)
Bilateral, Interstitial Cell, Adenoma	1 (10%)	
Interstitial Cell, Adenoma	3 (30%)	1 (10%)

## HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(10)
Lymph Node	(0)	(0)
Lymph Node, Mandibular	(10)	(10)
Lymph Node, Mesenteric	(10)	(10)
Spleen	(10)	(10)

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Species/Strain: RATS/F 344/NCTR

Lab: NCTR

## FISCHER 344 RATS-NCTR RATS MALE

0.92 Furan 60 wk

2 Furan 60 wk

	0.92 Furan 60 wk	2 Furan 60 wk
Thymus	(10)	(10)

## INTEGUMENTARY SYSTEM

Mammary Gland	(10)	(10)
Fibroadenoma		
Skin	(10)	(10)
Subcutaneous Tissue, Fibroma		

## MUSCULOSKELETAL SYSTEM

Bone	(0)	(0)
Bone, Femur	(10)	(10)
Skeletal Muscle	(0)	(0)

## NERVOUS SYSTEM

Brain, Brain Stem	(10)	(10)
Brain, Cerebellum	(10)	(10)
Brain, Cerebrum	(10)	(10)
Brain, NOS	(0)	(0)

## RESPIRATORY SYSTEM

Lung	(10)	(10)
Nose	(10)	(10)
Trachea	(10)	(10)

## SPECIAL SENSES SYSTEM

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

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



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Lab: NCTR

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**FISCHER 344 RATS-NCTR RATS MALE**

**0.92 Furan 60 wk**

**2 Furan 60 wk**

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**URINARY SYSTEM**

Kidney	(10)	(10)
Urinary Bladder	(10)	(10)

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**SYSTEMIC LESIONS**

Multiple Organ	*(10)	*(10)
Leukemia Mononuclear	1 (10%)	

---

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

\* Number of animals with any tissue examined microscopically

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FISCHER 344 RATS-NCTR RATS MALE	0 Vehicle 60 wk	0.02 Furan 60 wk	0.044 Furan 60wk	0.092 Furan 60wk	0.2 Furan 60 wk	0.44 Furan 60 wk
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**Tumor Summary for Males**

Total Animals with Primary Neoplasms (b)	11	5	3	6	2	8
Total Primary Neoplasms	12	9	3	7	3	10
Total Animals with Benign Neoplasms	10	4	3	6	2	8
Total Benign Neoplasms	10	8	3	7	3	10
Total Animals with Malignant Neoplasms	2	1				
Total Malignant Neoplasms	2	1				
Total Animals with Metastatic Neoplasms						
Total Metastatic Neoplasms						
Total Animals with Malignant Neoplasms Uncertain Primary Site						
Total Animals with Neoplasms Uncertain- Benign or Malignant						
Total Uncertain Neoplasms						

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

b - Primary tumors: all tumors except metastatic tumors

Experiment Number: 10119 - 01

**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

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Species/Strain: RATS/F 344/NCTR

Lab: NCTR

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FISCHER 344 RATS-NCTR RATS MALE

0.92 Furan 60 wk

2 Furan 60 wk

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**Tumor Summary for Males**

Total Animals with Primary Neoplasms (b)	5	3
Total Primary Neoplasms	6	3
Total Animals with Benign Neoplasms	4	3
Total Benign Neoplasms	5	3
Total Animals with Malignant Neoplasms	1	
Total Malignant Neoplasms	1	
Total Animals with Metastatic Neoplasms		
Total Metastatic Neoplasms		
Total Animals with Malignant Neoplasms Uncertain Primary Site		
Total Animals with Neoplasms Uncertain- Benign or Malignant		
Total Uncertain Neoplasms		

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

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

b - Primary tumors: all tumors except metastatic tumors