

**TDMS No.** 20724 - 03

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

**Date Report Requested:** 07/28/2011

**Test Type:** 90-DAY

Acetoin

**Time Report Requested:** 10:24:16

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**CAS Number:** 513-86-0

**First Dose M/F:** 06/29/09 / 06/30/09

**Species/Strain:** RATS/Wistar Han

**Lab:** BNW

F1\_RE

**C Number:** C20724  
**Lock Date:** 03/04/2010  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 2.4.2.1\_003  
**PWG Approval Date:** NONE

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Species/Strain: RATS/Wistar Han

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Wistar Han RATS MALE	CONTROL	50 ppm	100 ppm	200 ppm	400 ppm	800 ppm
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**Disposition Summary**

Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	2	1	4		10

ALIMENTARY SYSTEM

Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(0)	(10)
Liver	(10)	(1)	(0)	(0)	(0)	(10)
Atrophy		1 [1.0]				
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Atrophy	1 [1.0]					1 [1.0]
Acinus, Atrophy	1 [2.0]					
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)

CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(0)	(0)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(0)	(0)	(10)
Cardiomyopathy						3 [1.3]
Necrosis, Acute	1 [1.0]					

ENDOCRINE SYSTEM

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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Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS MALE	CONTROL	50 ppm	100 ppm	200 ppm	400 ppm	800 ppm
Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(10)	(0)	(0)	(0)	(0)	(5)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Cyst						1
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(10)

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Epididymis	(10)	(0)	(0)	(0)	(0)	(10)
Preputial Gland	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active	1 [2.0]					
Prostate	(10)	(0)	(0)	(0)	(0)	(10)
Seminal Vesicle	(10)	(0)	(0)	(0)	(0)	(10)
Testes	(10)	(0)	(0)	(0)	(0)	(10)

## HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Lymph Node	(0)	(1)	(0)	(0)	(0)	(0)
Lymph Node, Bronchial	(7)	(0)	(0)	(0)	(0)	(7)
Lymph Node, Mandibular	(9)	(0)	(0)	(0)	(0)	(10)
Lymph Node, Mediastinal	(8)	(0)	(0)	(0)	(0)	(8)
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(0)	(0)	(10)
Accessory Spleen						1
Thymus	(10)	(0)	(0)	(0)	(0)	(10)

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Wistar Han RATS MALE	CONTROL	50 ppm	100 ppm	200 ppm	400 ppm	800 ppm
<b>INTEGUMENTARY SYSTEM</b>						
Mammary Gland	(3)	(0)	(0)	(0)	(0)	(3)
Skin	(10)	(0)	(0)	(0)	(0)	(10)
<b>MUSCULOSKELETAL SYSTEM</b>						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
<b>NERVOUS SYSTEM</b>						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>						
Larynx	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Acute	1 [1.0]					2 [1.0]
Inflammation, Chronic Active						1 [2.0]
Squamous Epithelium, Erosion						1 [1.0]
Squamous Epithelium, Hyperplasia	1 [2.0]					
Lung	(10)	(0)	(0)	(1)	(0)	(10)
Infiltration Cellular, Histiocyte						2 [1.0]
Metaplasia, Osseous						1 [1.0]
Nose	(10)	(0)	(0)	(0)	(0)	(10)
Trachea	(10)	(0)	(0)	(0)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>						
Eye	(10)	(0)	(0)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
<b>URINARY SYSTEM</b>						

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

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Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS MALE	CONTROL	50 ppm	100 ppm	200 ppm	400 ppm	800 ppm
Kidney	(10)	(0)	(0)	(2)	(0)	(10)
Nephropathy	2 [1.0]					3 [1.0]
Cortex, Cyst	1 [1.0]					
Pelvis, Dilatation	1 [4.0]			2 [3.0]		1 [2.0]
Urinary Bladder	(10)	(0)	(1)	(1)	(0)	(10)
Calculus Gross Observation			1	1		

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

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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Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS FEMALE	CONTROL	50 ppm	100 ppm	200 ppm	400 ppm	800 ppm
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**Disposition Summary**

Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Survivors						
Terminal Sacrifice	10	10	10	10	10	10
Animals Examined Microscopically	10	1	2			10

ALIMENTARY SYSTEM

Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(0)	(10)
Liver	(10)	(1)	(1)	(0)	(0)	(10)
Hepatodiaphragmatic Nodule			1			
Necrosis		1 [3.0]				
Pancreas	(10)	(0)	(0)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(0)	(0)	(10)

CARDIOVASCULAR SYSTEM

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

ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)

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Wistar Han RATS FEMALE	CONTROL	50 ppm	100 ppm	200 ppm	400 ppm	800 ppm
Parathyroid Gland	(9)	(0)	(0)	(0)	(0)	(7)
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(9)

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Clitoral Gland	(10)	(0)	(0)	(0)	(0)	(10)
Ovary	(10)	(0)	(0)	(0)	(0)	(10)
Uterus	(10)	(0)	(0)	(0)	(0)	(10)

## HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Lymph Node	(0)	(0)	(1)	(0)	(0)	(0)
Iliac, Infiltration Cellular, Mixed Cell			1 [3.0]			
Lymph Node, Bronchial	(7)	(0)	(0)	(0)	(0)	(5)
Lymph Node, Mandibular	(9)	(0)	(0)	(0)	(0)	(9)
Lymph Node, Mediastinal	(8)	(0)	(0)	(0)	(0)	(8)
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(0)	(0)	(10)
Thymus	(10)	(0)	(0)	(0)	(0)	(10)

## INTEGUMENTARY SYSTEM

Mammary Gland	(10)	(0)	(0)	(0)	(0)	(10)
Skin	(10)	(0)	(0)	(0)	(0)	(10)
Ulcer	1 [2.0]					

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Wistar Han RATS FEMALE	CONTROL	50 ppm	100 ppm	200 ppm	400 ppm	800 ppm
<b>MUSCULOSKELETAL SYSTEM</b>						
Bone	(10)	(0)	(0)	(0)	(0)	(10)
<b>NERVOUS SYSTEM</b>						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>						
Larynx	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Acute						1 [1.0]
Lung	(10)	(0)	(0)	(0)	(0)	(10)
Inflammation, Chronic Active						1 [1.0]
Nose	(10)	(0)	(0)	(0)	(0)	(10)
Trachea	(10)	(0)	(0)	(0)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>						
Eye	(10)	(0)	(0)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
<b>URINARY SYSTEM</b>						
Kidney	(10)	(0)	(0)	(0)	(0)	(10)
Nephropathy	3 [1.0]					2 [1.0]
Medulla, Inflammation, Chronic Active	2 [2.5]					1 [3.0]
Pelvis, Dilatation						1 [2.0]
Pelvis, Inflammation, Chronic Active						1 [2.0]
Transitional Epithelium, Hyperplasia						1 [3.0]
Urinary Bladder	(10)	(0)	(1)	(0)	(0)	(10)
Calculus Gross Observation			1			
Transitional Epithelium, Hyperplasia			1 [4.0]			

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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Wistar Han RATS FEMALE

CONTROL

50 ppm

100 ppm

200 ppm

400 ppm

800 ppm

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\*\*\* 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)