

**Experiment Number:** 60311 - 03

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

**Date Report Requested:** 08/16/2012

**Test Type:** 90-DAY

Cobalt

**Time Report Requested:** 08:59:19

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**CAS Number:** 7440-48-4

**First Dose M/F:** 03/08/05 / 03/07/05

**Species/Strain:** RATS/F 344/N

**Lab:** BNW

F2\_R2

**NTP Study Number:** C60311  
**Lock Date:** 11/29/2005  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 2.6.0.0\_007  
**PWG Approval Date:** NONE

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Species/Strain: RATS/F 344/N

Lab: BNW

## FISCHER 344 RATS MALE

control

0.625 MG/M3

1.25 MG/M3

2.5 MG/M3

5.0 MG/M3

**Disposition Summary**

<b>Animals Initially In Study</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>Early Deaths</b>					
<b>Survivors</b>					
<b>Terminal Sacrifice</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>Animals Examined Microscopically</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>

## ALIMENTARY SYSTEM

Esophagus	(10)	(0)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(10)
Liver	(10)	(0)	(0)	(1)	(10)
Pancreas	(10)	(0)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(0)	(10)

## CARDIOVASCULAR SYSTEM

Heart	(10)	(0)	(0)	(0)	(10)
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## ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(0)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(10)
Parathyroid Gland	(10)	(0)	(0)	(0)	(7)
Pituitary Gland	(10)	(0)	(0)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(0)	(10)

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

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## FISCHER 344 RATS MALE

control

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1.25 MG/M3

2.5 MG/M3

5.0 MG/M3

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Epididymis	(10)	(10)	(10)	(10)	(10)
Preputial Gland	(10)	(0)	(0)	(0)	(10)
Prostate	(10)	(0)	(1)	(0)	(9)
Seminal Vesicle	(10)	(0)	(0)	(0)	(10)
Testes	(10)	(10)	(10)	(10)	(10)

## HEMATOPOIETIC SYSTEM

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

## INTEGUMENTARY SYSTEM

Mammary Gland	(7)	(0)	(0)	(0)	(7)
Skin	(10)	(0)	(0)	(0)	(10)

## MUSCULOSKELETAL SYSTEM

Bone	(10)	(0)	(0)	(0)	(10)
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FISCHER 344 RATS MALE	control	0.625 MG/M3	1.25 MG/M3	2.5 MG/M3	5.0 MG/M3
<hr/>					
NERVOUS SYSTEM					
Brain	(10)	(0)	(0)	(0)	(10)
<hr/>					
RESPIRATORY SYSTEM					
Larynx	(10)	(0)	(0)	(0)	(10)
Lung	(10)	(10)	(10)	(10)	(10)
Nose	(10)	(10)	(10)	(10)	(10)
Trachea	(10)	(0)	(0)	(0)	(10)
<hr/>					
SPECIAL SENSES SYSTEM					
Eye	(10)	(0)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(0)	(10)
<hr/>					
URINARY SYSTEM					
Kidney	(9)	(0)	(0)	(0)	(10)
Urinary Bladder	(10)	(0)	(0)	(0)	(10)

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

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FISCHER 344 RATS MALE

control

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1.25 MG/M3

2.5 MG/M3

5.0 MG/M3

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## Tumor Summary for Males

Total Animals with Primary Neoplasms (b)

Total Primary Neoplasms

Total Animals with Benign Neoplasms

Total Benign Neoplasms

Total Animals with Malignant Neoplasms

Total Malignant Neoplasms

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 MALE \*\*\*

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

b - Primary tumors: all tumors except metastatic tumors

Test Type: 90-DAY

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First Dose M/F: 03/08/05 / 03/07/05

Species/Strain: RATS/F 344/N

Lab: BNW

## FISCHER 344 RATS FEMALE

control

0.625 MG/M3

1.25 MG/M3

2.5 MG/M3

5.0 MG/M3

**Disposition Summary**

<b>Animals Initially In Study</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>Early Deaths</b>					
<b>Survivors</b>					
<b>Terminal Sacrifice</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>Animals Examined Microscopically</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>

## ALIMENTARY SYSTEM

Esophagus	(10)	(0)	(0)	(0)	(10)
Intestine Large, Cecum	(10)	(0)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(0)	(10)
Liver	(10)	(1)	(0)	(0)	(10)
Pancreas	(10)	(0)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(0)	(10)

## CARDIOVASCULAR SYSTEM

Heart	(10)	(0)	(0)	(0)	(10)
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## ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(0)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(10)
Parathyroid Gland	(7)	(0)	(0)	(0)	(8)
Pituitary Gland	(10)	(0)	(0)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(0)	(10)

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## FISCHER 344 RATS FEMALE

control

0.625 MG/M3

1.25 MG/M3

2.5 MG/M3

5.0 MG/M3

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Clitoral Gland	(10)	(0)	(0)	(0)	(10)
Ovary	(10)	(0)	(0)	(1)	(10)
Uterus	(10)	(0)	(0)	(0)	(10)

## HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(0)	(0)	(0)	(10)
Lymph Node, Mediastinal	(8)	(0)	(0)	(0)	(8)
Lymph Node, Mesenteric	(10)	(0)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(0)	(10)
Thymus	(10)	(0)	(0)	(0)	(10)

## INTEGUMENTARY SYSTEM

Mammary Gland	(10)	(0)	(0)	(0)	(10)
Skin	(10)	(0)	(0)	(0)	(10)

## MUSCULOSKELETAL SYSTEM

Bone	(10)	(0)	(0)	(0)	(10)
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## NERVOUS SYSTEM

Brain	(10)	(0)	(0)	(0)	(10)
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FISCHER 344 RATS FEMALE	control	0.625 MG/M3	1.25 MG/M3	2.5 MG/M3	5.0 MG/M3
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RESPIRATORY SYSTEM					
Larynx	(10)	(0)	(0)	(0)	(10)
Lung	(10)	(10)	(10)	(10)	(10)
Nose	(10)	(10)	(10)	(10)	(10)
Trachea	(10)	(0)	(0)	(0)	(10)
<hr/>					
SPECIAL SENSES SYSTEM					
Eye	(10)	(0)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(0)	(10)
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URINARY SYSTEM					
Kidney	(10)	(0)	(0)	(0)	(10)
Urinary Bladder	(10)	(0)	(0)	(0)	(10)

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1.25 MG/M3

2.5 MG/M3

5.0 MG/M3

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## Tumor Summary for Females

Total Animals with Primary Neoplasms (b)

Total Primary Neoplasms

Total Animals with Benign Neoplasms

Total Benign Neoplasms

Total Animals with Malignant Neoplasms

Total Malignant Neoplasms

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