

**Experiment Number:** 60311 - 04

**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:** 09:00:49

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

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

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

**Species/Strain:** MICE/B6C3F1

**Lab:** BNW

F2\_M3

**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

Test Type: 90-DAY

Cobalt

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CAS Number: 7440-48-4

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

Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE MALE	control	0.625 mg/m3	1.25 mg/m3	2.5 mg/m3	5 mg/m3	10 mg/m3
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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	10	10	10	10	10

## ALIMENTARY SYSTEM

Esophagus	(10)	(0)	(0)	(0)	(0)	(10)
Gallbladder	(9)	(0)	(0)	(0)	(0)	(9)
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)	(0)	(0)	(0)	(0)	(10)
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	(0)	(0)	(0)	(0)	(0)	(1)
Heart	(10)	(0)	(0)	(0)	(0)	(10)

## ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(0)	(0)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(0)	(0)	(9)
Islets, Pancreatic	(10)	(0)	(0)	(0)	(0)	(10)
Parathyroid Gland	(4)	(0)	(0)	(0)	(0)	(6)

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

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Lab: BNW

B6C3F1 MICE MALE	control	0.625 mg/m3	1.25 mg/m3	2.5 mg/m3	5 mg/m3	10 mg/m3
Pituitary Gland	(10)	(0)	(0)	(0)	(0)	(9)
Thyroid Gland	(10)	(0)	(0)	(0)	(0)	(10)

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

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

## HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(0)	(0)	(0)	(0)	(10)
Lymph Node, Bronchial	(5)	(0)	(0)	(0)	(0)	(6)
Lymph Node, Mandibular	(4)	(0)	(0)	(0)	(0)	(8)
Lymph Node, Mediastinal	(1)	(0)	(0)	(0)	(0)	(5)
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

Skin	(10)	(0)	(0)	(0)	(0)	(10)
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## MUSCULOSKELETAL SYSTEM

Bone	(10)	(0)	(0)	(0)	(0)	(10)
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a - Number of animals examined microscopically at site and number of animals with lesion

Experiment Number: 60311 - 04

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

Date Report Requested: 08/16/2012

Test Type: 90-DAY

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Time Report Requested: 09:00:49

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 7440-48-4

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

Species/Strain: MICE/B6C3F1

Lab: BNW

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B6C3F1 MICE MALE	control	0.625 mg/m3	1.25 mg/m3	2.5 mg/m3	5 mg/m3	10 mg/m3
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NERVOUS SYSTEM						
Brain	(10)	(0)	(0)	(0)	(0)	(10)
<hr/>						
RESPIRATORY SYSTEM						
Larynx	(10)	(10)	(10)	(10)	(10)	(10)
Lung	(10)	(10)	(10)	(10)	(10)	(10)
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Trachea	(10)	(0)	(0)	(0)	(0)	(10)
<hr/>						
SPECIAL SENSES SYSTEM						
Eye	(10)	(0)	(0)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(0)	(0)	(10)
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URINARY SYSTEM						
Kidney	(10)	(0)	(0)	(0)	(0)	(10)
Urinary Bladder	(10)	(0)	(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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**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS  
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Test Type: 90-DAY

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Time Report Requested: 09:00:49

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 7440-48-4

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

Species/Strain: MICE/B6C3F1

Lab: BNW

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B6C3F1 MICE MALE

control

0.625 mg/m3

1.25 mg/m3

2.5 mg/m3

5 mg/m3

10 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

Cobalt

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Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 7440-48-4

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

Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE FEMALE	control	0.625 mg/m3	1.25 mg/m3	2.5 mg/m3	5 mg/m3	10 mg/m3
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**Disposition Summary**

Animals Initially In Study	10	10	10	10	10	10
Early Deaths						
Accidentally Killed				1		
Survivors						
Terminal Sacrifice	10	10	10	9	10	10
Animals Examined Microscopically	10	10	10	10	10	10

## ALIMENTARY SYSTEM

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

## CARDIOVASCULAR SYSTEM

Blood Vessel	(1)	(0)	(0)	(0)	(0)	(1)
Heart	(10)	(0)	(0)	(1)	(0)	(10)

## ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(0)	(1)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(1)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(0)	(1)	(0)	(10)

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Lab: BNW

B6C3F1 MICE FEMALE	control	0.625 mg/m3	1.25 mg/m3	2.5 mg/m3	5 mg/m3	10 mg/m3
Parathyroid Gland	(8)	(0)	(0)	(1)	(0)	(6)
Pituitary Gland	(10)	(0)	(0)	(1)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(1)	(0)	(9)

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Clitoral Gland	(7)	(0)	(0)	(1)	(0)	(7)
Ovary	(10)	(0)	(0)	(1)	(0)	(10)
Uterus	(10)	(0)	(0)	(1)	(0)	(10)

## HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(0)	(0)	(1)	(0)	(10)
Lymph Node, Bronchial	(6)	(0)	(0)	(1)	(0)	(7)
Lymph Node, Mandibular	(8)	(0)	(0)	(1)	(0)	(7)
Lymph Node, Mediastinal	(1)	(0)	(0)	(0)	(0)	(4)
Lymph Node, Mesenteric	(10)	(0)	(0)	(1)	(0)	(10)
Spleen	(10)	(0)	(0)	(1)	(0)	(10)
Thymus	(10)	(0)	(0)	(1)	(0)	(10)

## INTEGUMENTARY SYSTEM

Mammary Gland	(10)	(0)	(0)	(1)	(0)	(10)
Skin	(10)	(0)	(0)	(1)	(0)	(10)

## MUSCULOSKELETAL SYSTEM

Bone	(10)	(0)	(0)	(1)	(0)	(10)
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B6C3F1 MICE FEMALE	control	0.625 mg/m3	1.25 mg/m3	2.5 mg/m3	5 mg/m3	10 mg/m3
<hr/>						
NERVOUS SYSTEM						
Brain	(10)	(0)	(0)	(1)	(0)	(10)
<hr/>						
RESPIRATORY SYSTEM						
Larynx	(10)	(10)	(10)	(10)	(10)	(10)
Lung	(10)	(10)	(10)	(10)	(10)	(10)
Nose	(10)	(10)	(10)	(10)	(10)	(10)
Pleura	(1)	(0)	(0)	(0)	(0)	(0)
Trachea	(10)	(0)	(0)	(1)	(0)	(9)
<hr/>						
SPECIAL SENSES SYSTEM						
Eye	(10)	(0)	(0)	(1)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(1)	(0)	(10)
<hr/>						
URINARY SYSTEM						
Kidney	(10)	(0)	(0)	(1)	(0)	(10)
Urinary Bladder	(10)	(0)	(0)	(1)	(0)	(10)

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B6C3F1 MICE FEMALE

control

0.625 mg/m3

1.25 mg/m3

2.5 mg/m3

5 mg/m3

10 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