

**Experiment Number:** 20701 - 02

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

**Date Report Requested:** 02/22/2013

**Test Type:** 90-DAY

Nanoscale material (Fullerene-C60 1 micron)

**Time Report Requested:** 07:59:02

**Route:** RESPIRATORY EXPOSURE NASAL

**CAS Number:** 99685-96-8

**First Dose M/F:** 11/05/07 / 11/05/07

**Species/Strain:** MICE/B6C3F1

**Lab:** BNW

F2\_Rev.1\_M3

**NTP Study Number:** C20701  
**Lock Date:** 02/24/2009  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 3.0.1.1\_001  
**PWG Approval Date:** NONE

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Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE MALE	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
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**Disposition Summary**

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

## ALIMENTARY SYSTEM

Esophagus	(10)	(1)	(0)	(10)
Gallbladder	(9)	(1)	(0)	(8)
Intestine Large, Cecum	(10)	(1)	(0)	(10)
Intestine Large, Colon	(10)	(1)	(0)	(10)
Intestine Large, Rectum	(10)	(1)	(0)	(10)
Intestine Small, Duodenum	(10)	(1)	(0)	(10)
Intestine Small, Ileum	(10)	(1)	(0)	(10)
Intestine Small, Jejunum	(10)	(1)	(0)	(10)
Liver	(10)	(1)	(0)	(10)
Pancreas	(10)	(1)	(0)	(10)
Salivary Glands	(10)	(1)	(0)	(10)
Stomach, Forestomach	(10)	(1)	(0)	(10)
Stomach, Glandular	(10)	(1)	(0)	(10)

## CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(0)	(0)	(9)
Heart	(10)	(1)	(0)	(10)

## ENDOCRINE SYSTEM

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

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

Test Type: 90-DAY

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Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE MALE	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
Parathyroid Gland	(5)	(1)	(0)	(6)
Pituitary Gland	(10)	(1)	(0)	(10)
Thyroid Gland	(10)	(1)	(0)	(10)

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

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

## HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(1)	(0)	(10)
Lymph Node, Bronchial	(6)	(4)	(5)	(9)
Lymph Node, Mandibular	(5)	(1)	(0)	(4)
Lymph Node, Mediastinal	(1)	(0)	(0)	(4)
Lymph Node, Mesenteric	(9)	(1)	(0)	(10)
Spleen	(10)	(1)	(0)	(10)
Thymus	(10)	(1)	(0)	(10)

## INTEGUMENTARY SYSTEM

Skin	(10)	(1)	(0)	(10)
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## MUSCULOSKELETAL SYSTEM

Bone	(10)	(1)	(0)	(10)
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a - Number of animals examined microscopically at site and number of animals with lesion

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Lab: BNW

B6C3F1 MICE MALE	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>NERVOUS SYSTEM</b>				
Brain	(10)	(1)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>				
Larynx	(10)	(9)	(10)	(10)
Lung	(10)	(10)	(10)	(10)
Alveolar/Bronchiolar Adenoma			1 (10%)	
Nose	(10)	(1)	(0)	(10)
Trachea	(10)	(1)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(10)	(1)	(0)	(10)
Harderian Gland	(10)	(1)	(0)	(10)
<b>URINARY SYSTEM</b>				
Kidney	(10)	(10)	(10)	(10)
Urinary Bladder	(10)	(1)	(0)	(10)
<b>SYSTEMIC LESIONS</b>				
Multiple Organ	*(10)	*(10)	*(10)	*(10)
Lymphoma Malignant		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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**P05: INCIDENCE RATES OF NEOPLASMS BY ANATOMIC SITE (SYSTEMIC LESIONS ABRIDGED) (a)**

Date Report Requested: 02/22/2013

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Nanoscale material (Fullerene-C60 1 micron)

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Route: RESPIRATORY EXPOSURE NASAL

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Species/Strain: MICE/B6C3F1

Lab: BNW

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B6C3F1 MICE MALE

0 mg/m3

2 mg/m3

15 mg/m3

30 mg/m3

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**Tumor Summary for Males**

Total Animals with Primary Neoplasms (b)

1

1

Total Primary Neoplasms

1

1

Total Animals with Benign Neoplasms

1

Total Benign Neoplasms

1

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 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

Nanoscale material (Fullerene-C60 1 micron)

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First Dose M/F: 11/05/07 / 11/05/07

Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE FEMALE	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
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**Disposition Summary**

<b>Animals Initially In Study</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>Animals Examined Microscopically</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>

## ALIMENTARY SYSTEM

Esophagus	(10)	(0)	(0)	(10)
Gallbladder	(10)	(0)	(0)	(7)
Intestine Large, Cecum	(10)	(0)	(0)	(10)
Intestine Large, Colon	(10)	(0)	(0)	(10)
Intestine Large, Rectum	(10)	(0)	(0)	(10)
Intestine Small, Duodenum	(10)	(0)	(0)	(10)
Intestine Small, Ileum	(10)	(0)	(0)	(10)
Intestine Small, Jejunum	(10)	(0)	(0)	(10)
Liver	(10)	(0)	(0)	(10)
Pancreas	(10)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(10)

## CARDIOVASCULAR SYSTEM

Blood Vessel	(7)	(0)	(0)	(10)
Heart	(10)	(0)	(0)	(10)

## ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(8)
Islets, Pancreatic	(10)	(0)	(0)	(10)
Parathyroid Gland	(6)	(0)	(0)	(4)

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Lab: BNW

B6C3F1 MICE FEMALE	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
Pituitary Gland	(10)	(0)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(10)

## GENERAL BODY SYSTEM

None

## GENITAL SYSTEM

Clitoral Gland	(9)	(0)	(0)	(8)
Ovary	(10)	(0)	(0)	(10)
Uterus	(10)	(0)	(0)	(10)

## HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(0)	(0)	(10)
Lymph Node, Bronchial	(5)	(6)	(5)	(6)
Lymph Node, Mandibular	(6)	(0)	(0)	(6)
Lymph Node, Mediastinal	(2)	(0)	(0)	(4)
Lymph Node, Mesenteric	(9)	(0)	(0)	(10)
Spleen	(10)	(0)	(0)	(10)
Thymus	(10)	(0)	(0)	(10)

## INTEGUMENTARY SYSTEM

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

## MUSCULOSKELETAL SYSTEM

Bone	(10)	(0)	(0)	(10)
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Lab: BNW

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B6C3F1 MICE FEMALE	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<hr/>				
NERVOUS SYSTEM				
Brain	(10)	(0)	(0)	(10)
<hr/>				
RESPIRATORY SYSTEM				
Larynx	(10)	(8)	(10)	(10)
Lung	(10)	(10)	(10)	(10)
Nose	(10)	(0)	(0)	(10)
Trachea	(10)	(0)	(0)	(10)
<hr/>				
SPECIAL SENSES SYSTEM				
Eye	(10)	(0)	(0)	(10)
Harderian Gland	(10)	(0)	(0)	(10)
<hr/>				
URINARY SYSTEM				
Kidney	(10)	(0)	(0)	(10)
Urinary Bladder	(10)	(0)	(0)	(10)

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B6C3F1 MICE FEMALE

0 mg/m3

2 mg/m3

15 mg/m3

30 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