

**Experiment Number:** 20407 - 01

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

**Date Report Requested:** 02/05/2013

**Test Type:** 90-DAY

Nanoscale material (Fullerene-C60 50 nanometers)

**Time Report Requested:** 07:56:27

**Route:** RESPIRATORY EXPOSURE NASAL

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

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

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

**Lab:** BNW

F2\_RE

**NTP Study Number:** C20407  
**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

Test Type: 90-DAY

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

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS MALE	0 mg/m3	0.5 mg/m3	2.0 mg/m3
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## Disposition Summary

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

## ALIMENTARY SYSTEM

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

## CARDIOVASCULAR SYSTEM

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

## ENDOCRINE SYSTEM

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

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

Experiment Number: 20407 - 01

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

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

Species/Strain: RATS/Wistar Han

Lab: BNW

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**Wistar Han RATS MALE**

**0 mg/m3**

**0.5 mg/m3**

**2.0 mg/m3**

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Thyroid Gland

(10)

(0)

(10)

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**GENERAL BODY SYSTEM**

None

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**GENITAL SYSTEM**

Epididymis

(10)

(10)

(10)

Preputial Gland

(10)

(0)

(10)

Prostate

(10)

(0)

(10)

Seminal Vesicle

(10)

(0)

(10)

Testes

(10)

(10)

(10)

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**HEMATOPOIETIC SYSTEM**

Bone Marrow

(10)

(0)

(10)

Lymph Node

(0)

(1)

(0)

Lymph Node, Bronchial

(10)

(9)

(10)

Lymph Node, Mandibular

(10)

(0)

(10)

Lymph Node, Mediastinal

(10)

(8)

(10)

Lymph Node, Mesenteric

(10)

(0)

(10)

Spleen

(10)

(0)

(10)

Thymus

(10)

(0)

(10)

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**INTEGUMENTARY SYSTEM**

Mammary Gland

(0)

(0)

(1)

Skin

(9)

(0)

(10)

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**MUSCULOSKELETAL SYSTEM**

Bone

(10)

(0)

(10)

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

Experiment Number: 20407 - 01

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

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Route: RESPIRATORY EXPOSURE NASAL

CAS Number: 99685-96-8

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

Species/Strain: RATS/Wistar Han

Lab: BNW

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Wistar Han RATS MALE	0 mg/m3	0.5 mg/m3	2.0 mg/m3
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NERVOUS SYSTEM			
Brain	(10)	(0)	(10)
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RESPIRATORY SYSTEM			
Larynx	(10)	(0)	(10)
Lung	(10)	(10)	(10)
Nose	(10)	(0)	(10)
Trachea	(10)	(0)	(10)
<hr/>			
SPECIAL SENSES SYSTEM			
Eye	(10)	(0)	(10)
Harderian Gland	(10)	(0)	(10)
<hr/>			
URINARY SYSTEM			
Kidney	(10)	(10)	(10)
Urinary Bladder	(10)	(0)	(10)
<hr/>			

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

Species/Strain: RATS/Wistar Han

Lab: BNW

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Wistar Han RATS MALE

0 mg/m3

0.5 mg/m3

2.0 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

Nanoscale material (Fullerene-C60 50 nanometers)

Time Report Requested: 07:56:27

Route: RESPIRATORY EXPOSURE NASAL

CAS Number: 99685-96-8

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

Species/Strain: RATS/Wistar Han

Lab: BNW

Wistar Han RATS FEMALE

0 mg/m3

0.5 mg/m3

2.0 mg/m3

**Disposition Summary**

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

## ALIMENTARY SYSTEM

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

## CARDIOVASCULAR SYSTEM

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

## ENDOCRINE SYSTEM

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

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Species/Strain: RATS/Wistar Han

Lab: BNW

---

**Wistar Han RATS FEMALE**

**0 mg/m3**

**0.5 mg/m3**

**2.0 mg/m3**

---

Thyroid Gland

(10)

(0)

(10)

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**GENERAL BODY SYSTEM**

None

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**GENITAL SYSTEM**

Clitoral Gland

(10)

(0)

(10)

Ovary

(10)

(0)

(10)

Uterus

(10)

(0)

(10)

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**HEMATOPOIETIC SYSTEM**

Bone Marrow

(10)

(0)

(10)

Lymph Node, Bronchial

(10)

(10)

(10)

Lymph Node, Mandibular

(10)

(0)

(10)

Lymph Node, Mediastinal

(8)

(8)

(10)

Lymph Node, Mesenteric

(10)

(0)

(10)

Spleen

(10)

(0)

(10)

Thymus

(10)

(0)

(10)

---

**INTEGUMENTARY SYSTEM**

Mammary Gland

(10)

(0)

(10)

Skin

(10)

(0)

(10)

---

**MUSCULOSKELETAL SYSTEM**

Bone

(10)

(0)

(10)

---

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Wistar Han RATS FEMALE	0 mg/m3	0.5 mg/m3	2.0 mg/m3
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NERVOUS SYSTEM			
Brain	(10)	(0)	(10)
<hr/>			
RESPIRATORY SYSTEM			
Larynx	(10)	(0)	(10)
Lung	(10)	(10)	(10)
Nose	(10)	(0)	(10)
Trachea	(10)	(0)	(10)
<hr/>			
SPECIAL SENSES SYSTEM			
Eye	(10)	(0)	(10)
Harderian Gland	(10)	(0)	(10)
<hr/>			
URINARY SYSTEM			
Kidney	(10)	(10)	(10)
Urinary Bladder	(10)	(0)	(10)
<hr/>			

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Species/Strain: RATS/Wistar Han

Lab: BNW

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Wistar Han RATS FEMALE

0 mg/m3

0.5 mg/m3

2.0 mg/m3

---

## 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