

**Experiment Number:** 20701 - 02  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE NASAL  
**Species/Strain:** MICE/B6C3F1

**P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)**  
Nanoscale material (Fullerene-C60 1 micron)  
**CAS Number:** 99685-96-8

**Date Report Requested:** 02/22/2013  
**Time Report Requested:** 07:58:59  
**First Dose M/F:** 11/05/07 / 11/05/07  
**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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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)
Inflammation, Granulomatous				1 (10%)
Necrosis	1 (10%)			
Pancreas	(10)	(1)	(0)	(10)
Salivary Glands	(10)	(1)	(0)	(10)
Stomach, Forestomach	(10)	(1)	(0)	(10)
Hyperplasia, Squamous		1 (100%)		
Ulcer		1 (100%)		
Stomach, Glandular	(10)	(1)	(0)	(10)

**CARDIOVASCULAR SYSTEM**

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

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

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B6C3F1 MICE MALE	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>ENDOCRINE SYSTEM</b>				
Adrenal Cortex	(10)	(1)	(0)	(10)
Adrenal Medulla	(10)	(1)	(0)	(10)
Islets, Pancreatic	(10)	(1)	(0)	(10)
Parathyroid Gland	(5)	(1)	(0)	(6)
Pituitary Gland	(10)	(1)	(0)	(10)
Thyroid Gland	(10)	(1)	(0)	(10)
<b>GENERAL BODY SYSTEM</b>				
None				
<b>GENITAL SYSTEM</b>				
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)
Germinal Epithelium, Degeneration			1 (10%)	
<b>HEMATOPOIETIC SYSTEM</b>				
Bone Marrow	(10)	(1)	(0)	(10)
Lymph Node, Bronchial	(6)	(4)	(5)	(9)
Pigmentation	2 (33%)	1 (25%)	2 (40%)	9 (100%)
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)

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B6C3F1 MICE MALE	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>INTEGUMENTARY SYSTEM</b>				
Skin	(10)	(1)	(0)	(10)
<b>MUSCULOSKELETAL SYSTEM</b>				
Bone	(10)	(1)	(0)	(10)
<b>NERVOUS SYSTEM</b>				
Brain	(10)	(1)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>				
Larynx	(10)	(9)	(10)	(10)
Metaplasia, Squamous	1 (10%)		5 (50%)	9 (90%)
Squamous Epithelium, Hyperplasia		1 (11%)		
Lung	(10)	(10)	(10)	(10)
Hemorrhage		1 (10%)		
Infiltration Cellular, Histiocyte			10 (100%)	10 (100%)
Inflammation, Chronic Active			10 (100%)	10 (100%)
Pigmentation			10 (100%)	10 (100%)
Nose	(10)	(1)	(0)	(10)
Olfactory Epithelium, Accumulation, Hyaline Droplet				1 (10%)
Respiratory Epithelium, Accumulation, Hyaline Droplet				1 (10%)
Trachea	(10)	(1)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(10)	(1)	(0)	(10)
Harderian Gland	(10)	(1)	(0)	(10)
Inflammation, Acute	7 (70%)			7 (70%)

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

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B6C3F1 MICE MALE	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
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URINARY SYSTEM				
Kidney	(10)	(10)	(10)	(10)
Nephropathy	1 (10%)	2 (20%)		2 (20%)
Papilla, Infiltration Cellular, Polymorphonuclear	1 (10%)			
Renal Tubule, Necrosis	1 (10%)		1 (10%)	3 (30%)
Urinary Bladder	(10)	(1)	(0)	(10)

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

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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>

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### 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)
Necrosis				1 (10%)
Pancreas	(10)	(0)	(0)	(10)
Salivary Glands	(10)	(0)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(0)	(10)
Stomach, Glandular	(10)	(0)	(0)	(10)

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### CARDIOVASCULAR SYSTEM

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

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### ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(0)	(10)
Adrenal Medulla	(10)	(0)	(0)	(8)
Islets, Pancreatic	(10)	(0)	(0)	(10)

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Parathyroid Gland	(6)	(0)	(0)	(4)
Pituitary Gland	(10)	(0)	(0)	(10)
Thyroid Gland	(10)	(0)	(0)	(10)
<b>GENERAL BODY SYSTEM</b>				
None				
<b>GENITAL SYSTEM</b>				
Clitoral Gland	(9)	(0)	(0)	(8)
Ovary	(10)	(0)	(0)	(10)
Uterus	(10)	(0)	(0)	(10)
<b>HEMATOPOIETIC SYSTEM</b>				
Bone Marrow	(10)	(0)	(0)	(10)
Lymph Node, Bronchial	(5)	(6)	(5)	(6)
Pigmentation	2 (40%)	3 (50%)	1 (20%)	6 (100%)
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)
<b>INTEGUMENTARY SYSTEM</b>				
Mammary Gland	(10)	(0)	(0)	(10)
Inflammation, Acute				1 (10%)
Skin	(10)	(0)	(0)	(10)
<b>MUSCULOSKELETAL SYSTEM</b>				

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Bone	(10)	(0)	(0)	(10)
<b>NERVOUS SYSTEM</b>				
Brain	(10)	(0)	(0)	(10)
<b>RESPIRATORY SYSTEM</b>				
Larynx	(10)	(8)	(10)	(10)
Metaplasia, Squamous		1 (13%)	6 (60%)	9 (90%)
Lung	(10)	(10)	(10)	(10)
Hemorrhage	1 (10%)			
Infiltration Cellular, Histiocyte			10 (100%)	10 (100%)
Inflammation, Chronic Active			3 (30%)	10 (100%)
Pigmentation			10 (100%)	10 (100%)
Nose	(10)	(0)	(0)	(10)
Olfactory Epithelium, Accumulation, Hyaline Droplet				2 (20%)
Respiratory Epithelium, Accumulation, Hyaline Droplet	5 (50%)			4 (40%)
Trachea	(10)	(0)	(0)	(10)
<b>SPECIAL SENSES SYSTEM</b>				
Eye	(10)	(0)	(0)	(10)
Cornea, Necrosis	1 (10%)			
Harderian Gland	(10)	(0)	(0)	(10)
Inflammation, Acute	3 (30%)			7 (70%)
<b>URINARY SYSTEM</b>				
Kidney	(10)	(0)	(0)	(10)
Nephropathy	1 (10%)			1 (10%)
Urinary Bladder	(10)	(0)	(0)	(10)

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

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B6C3F1 MICE FEMALE

0 mg/m3

2 mg/m3

15 mg/m3

30 mg/m3

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\*\*\* END OF REPORT \*\*\*

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