

Experiment Number: 20407 - 01

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH
AVERAGE SEVERITY GRADES[b]**

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

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Wistar Han RATS MALE

0 mg/m3

0.5 mg/m3

2.0 mg/m3

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)
Acinus, Atrophy	1 [1.0]		
Salivary Glands	(10)	(0)	(10)
Stomach, Forestomach	(10)	(0)	(10)
Hyperplasia, Squamous	1 [1.0]		
Stomach, Glandular	(10)	(0)	(10)

CARDIOVASCULAR SYSTEM

Blood Vessel	(10)	(0)	(10)
Heart	(10)	(0)	(10)
Cardiomyopathy	1 [1.0]		1 [1.0]

ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(10)
Accessory Adrenal Cortical Nodule	2 [1.0]		1 [1.0]

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

b-Average severity grade(1-minimal;2-mild;3-moderate;4-marked)

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Wistar Han RATS MALE	0 mg/m3	0.5 mg/m3	2.0 mg/m3
Adrenal Medulla	(10)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(10)
Parathyroid Gland	(10)	(0)	(9)
Pituitary Gland	(10)	(0)	(10)
Cyst	2 [1.0]		
Pars Distalis, Hyperplasia			1 [1.0]
Thyroid Gland	(10)	(0)	(10)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Epididymis	(10)	(10)	(10)
Hypospermia			2 [3.0]
Preputial Gland	(10)	(0)	(10)
Inflammation, Chronic Active	2 [1.0]		2 [1.0]
Prostate	(10)	(0)	(10)
Inflammation, Chronic Active			3 [2.0]
Seminal Vesicle	(10)	(0)	(10)
Testes	(10)	(10)	(10)
Germinal Epithelium, Degeneration			3 [2.0]

HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(0)	(10)
Lymph Node	(0)	(1)	(0)
Lymph Node, Bronchial	(10)	(9)	(10)
Pigmentation		3 [1.0]	4 [1.0]
Lymph Node, Mandibular	(10)	(0)	(10)
Lymph Node, Mediastinal	(10)	(8)	(10)
Pigmentation	1 [1.0]	6 [1.0]	2 [1.0]
Lymph Node, Mesenteric	(10)	(0)	(10)

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Wistar Han RATS MALE	0 mg/m3	0.5 mg/m3	2.0 mg/m3
Spleen	(10)	(0)	(10)
Thymus	(10)	(0)	(10)
Hemorrhage			1 [2.0]
INTEGUMENTARY SYSTEM			
Mammary Gland	(0)	(0)	(1)
Skin	(9)	(0)	(10)
MUSCULOSKELETAL SYSTEM			
Bone	(10)	(0)	(10)
NERVOUS SYSTEM			
Brain	(10)	(0)	(10)
RESPIRATORY SYSTEM			
Larynx	(10)	(0)	(10)
Lung	(10)	(10)	(10)
Infiltration Cellular, Histiocyte	1 [1.0]	1 [1.0]	3 [1.3]
Metaplasia, Osseous	1 [1.0]		
Pigmentation			3 [1.0]
Nose	(10)	(0)	(10)
Trachea	(10)	(0)	(10)
SPECIAL SENSES SYSTEM			
Eye	(10)	(0)	(10)
Harderian Gland	(10)	(0)	(10)
Inflammation, Chronic Active			3 [1.0]

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Wistar Han RATS MALE

0 mg/m3

0.5 mg/m3

2.0 mg/m3

URINARY SYSTEM

Kidney	(10)	(10)	(10)
Infarct			1 [1.0]
Nephropathy	1 [1.0]	1 [1.0]	6 [1.0]
Bilateral, Pelvis, Dilatation			1 [2.0]
Medulla, Inflammation, Chronic Active			1 [3.0]
Pelvis, Dilatation		2 [1.0]	
Urinary Bladder	(10)	(0)	(10)
Inflammation, Chronic Active			1 [2.0]

*** END OF MALE ***

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Wistar Han RATS FEMALE

0 mg/m3

0.5 mg/m3

2.0 mg/m3

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)
Cardiomyopathy	1 [1.0]		

ENDOCRINE SYSTEM

Adrenal Cortex	(10)	(0)	(10)
Accessory Adrenal Cortical Nodule	2 [1.0]		2 [1.0]
Adrenal Medulla	(10)	(0)	(10)
Islets, Pancreatic	(10)	(0)	(10)

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Wistar Han RATS FEMALE	0 mg/m3	0.5 mg/m3	2.0 mg/m3
Parathyroid Gland	(6)	(0)	(6)
Pituitary Gland	(10)	(0)	(10)
Pars Distalis, Hyperplasia			1 [1.0]
Thyroid Gland	(10)	(0)	(10)

GENERAL BODY SYSTEM

None

GENITAL SYSTEM

Clitoral Gland	(10)	(0)	(10)
Inflammation, Chronic Active	4 [1.0]		4 [1.0]
Ovary	(10)	(0)	(10)
Bilateral, Cyst			1 [1.0]
Uterus	(10)	(0)	(10)

HEMATOPOIETIC SYSTEM

Bone Marrow	(10)	(0)	(10)
Lymph Node, Bronchial	(10)	(10)	(10)
Pigmentation		1 [1.0]	5 [1.2]
Lymph Node, Mandibular	(10)	(0)	(10)
Lymph Node, Mediastinal	(8)	(8)	(10)
Pigmentation		7 [1.0]	9 [1.3]
Lymph Node, Mesenteric	(10)	(0)	(10)
Spleen	(10)	(0)	(10)
Thymus	(10)	(0)	(10)
Cyst			1 [1.0]

INTEGUMENTARY SYSTEM

Mammary Gland	(10)	(0)	(10)
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Wistar Han RATS FEMALE	0 mg/m3	0.5 mg/m3	2.0 mg/m3
Skin	(10)	(0)	(10)
MUSCULOSKELETAL SYSTEM			
Bone	(10)	(0)	(10)
NERVOUS SYSTEM			
Brain	(10)	(0)	(10)
RESPIRATORY SYSTEM			
Larynx	(10)	(0)	(10)
Lung	(10)	(10)	(10)
Infiltration Cellular, Histiocyte	2 [1.0]	1 [1.0]	8 [1.0]
Metaplasia, Osseous	2 [1.0]	1 [1.0]	
Pigmentation			8 [2.0]
Nose	(10)	(0)	(10)
Trachea	(10)	(0)	(10)
SPECIAL SENSES SYSTEM			
Eye	(10)	(0)	(10)
Harderian Gland	(10)	(0)	(10)
Inflammation, Chronic Active	2 [1.0]		
URINARY SYSTEM			
Kidney	(10)	(10)	(10)
Nephropathy	2 [1.0]	3 [1.0]	2 [1.0]
Pelvis, Dilatation			1 [1.0]
Urinary Bladder	(10)	(0)	(10)

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