

**Experiment Number:** 20701 - 01  
**Test Type:** 90-DAY  
**Route:** RESPIRATORY EXPOSURE NASAL  
**Species/Strain:** RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
Nanoscale material (Fullerene-C60 1 micron)  
**CAS Number:** 99685-96-8

**Date Report Requested:** 02/22/2013  
**Time Report Requested:** 07:58:31  
**First Dose M/F:** 11/05/07 / 11/05/07  
**Lab:** BNW

F2\_Rev.1\_RE

**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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## SUMMARY OF STATISTICALLY SIGNIFICANT ( $P \leq .05$ ) RESULTS IN THE ANALYSIS OF NANOSCALE MATERIAL (FULLERENE-C60 1 MICRON)

### MALE RATS

#### Organ

Liver  
Lung

Lymph Node, Bronchial  
Testes: Germinal Epithelium

### FEMALE RATS

#### Organ

Bone  
Lung

Lymph Node, Bronchial  
Lymph Node, Mediastinal  
Thymus

#### Morphology

Inflammation Chronic  
Hemorrhage  
Infiltration Cellular Histiocyte  
Inflammation Chronic  
Pigmentation  
Pigmentation  
Degeneration

#### Morphology

Inflammation Chronic  
Infiltration Cellular Histiocyte  
Inflammation Chronic  
Pigmentation  
Pigmentation  
Pigmentation  
Necrosis

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)**  
**TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Bone</b>				
<b>Inflammation Chronic</b>				
<b>LESION RATES</b>				
<b>OVERALL (a)</b>	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
<b>POLY-3 RATE (b)</b>	0/10.00	0/0.00	0/0.00	0/10.00
<b>POLY-3 PERCENT (g)</b>	0%	0%	0%	0%
<b>TERMINAL (d)</b>	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
<b>FIRST INCIDENCE</b>	---	---	---	---
<b>STATISTICAL TESTS</b>				
<b>POLY 3</b>	(n)	(n)	(n)	(n)
<b>POLY 1.5</b>	(n)	(n)	(n)	(n)
<b>POLY 6</b>	(n)	(n)	(n)	(n)
<b>COCH-ARM / FISHERS</b>	(n)	(n)	(n)	(n)
<b>MAX-ISO-POLY-3</b>	(n)	(n)	(n)	(n)

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 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Epididymis</b>				
<b>Hypospermia</b>				
<b>LESION RATES</b>				
<b>OVERALL (a)</b>	0/10 (0%)	0/10 (0%)	1/10 (10%)	0/10 (0%)
<b>POLY-3 RATE (b)</b>	0/10.00	0/10.00	1/10.00	0/10.00
<b>POLY-3 PERCENT (g)</b>	0%	0%	10%	0%
<b>TERMINAL (d)</b>	0/10 (0%)	0/10 (0%)	1/10 (10%)	0/10 (0%)
<b>FIRST INCIDENCE</b>	---	---	89 (T)	---
<b>STATISTICAL TESTS</b>				
<b>POLY 3</b>	P=0.639	(e)	P=0.500	(e)
<b>POLY 1.5</b>	P=0.639	(e)	P=0.500	(e)
<b>POLY 6</b>	P=0.639	(e)	P=0.500	(e)
<b>COCH-ARM / FISHERS</b>	P=0.641	(e)	P=0.500	(e)
<b>MAX-ISO-POLY-3</b>	P=0.391	(e)	P=0.159	(e)

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 13 WEEKS**

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DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3

---

Eye  
Inflammation Chronic

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**LESION RATES**

OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	10%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	89 (T)

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**STATISTICAL TESTS**

POLY 3	(e)	(e)	(e)	P=0.500
POLY 1.5	(e)	(e)	(e)	P=0.500
POLY 6	(e)	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.304	(e)	(e)	P=0.500
MAX-ISO-POLY-3	(e)	(e)	(e)	P=0.159

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 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Harderian Gland Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/10 (20%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	2/10.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	20%	0%	0%	0%
TERMINAL (d)	2/10 (20%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	89 (T)	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	(e)	(e)	P=0.227N
POLY 1.5	(e)	(e)	(e)	P=0.227N
POLY 6	(e)	(e)	(e)	P=0.227N
COCH-ARM / FISHERS	P=0.132N	(e)	(e)	P=0.237N
MAX-ISO-POLY-3	(e)	(e)	(e)	P=0.067N

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Heart</b>				
<b>Cardiomyopathy</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/10 (10%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	1/10.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	10%	0%	0%	10%
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	89 (T)	---	---	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	(e)	(e)	P=0.760
POLY 1.5	(e)	(e)	(e)	P=0.760
POLY 6	(e)	(e)	(e)	P=0.760
COCH-ARM / FISHERS	P=0.645	(e)	(e)	P=0.763N
MAX-ISO-POLY-3	(e)	(e)	(e)	P=1.000

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 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Kidney Infarct</b>				
<b>LESION RATES</b>				
<b>OVERALL (a)</b>	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
<b>POLY-3 RATE (b)</b>	1/10.00	0/0.00	0/0.00	0/10.00
<b>POLY-3 PERCENT (g)</b>	10%	0%	0%	0%
<b>TERMINAL (d)</b>	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
<b>FIRST INCIDENCE</b>	89 (T)	---	---	---
<b>STATISTICAL TESTS</b>				
<b>POLY 3</b>	(e)	(e)	(e)	P=0.500N
<b>POLY 1.5</b>	(e)	(e)	(e)	P=0.500N
<b>POLY 6</b>	(e)	(e)	(e)	P=0.500N
<b>COCH-ARM / FISHERS</b>	P=0.304N	(e)	(e)	P=0.500N
<b>MAX-ISO-POLY-3</b>	(e)	(e)	(e)	P=0.159N



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TERMINAL SACRIFICE AT 13 WEEKS**

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DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Kidney Mineralization</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)

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TERMINAL SACRIFICE AT 13 WEEKS**

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DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Kidney</b>				
<b>Nephropathy</b>				
<hr/>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	2/10 (20%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	2/10.00
POLY-3 PERCENT (g)	0%	0%	0%	20%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	2/10 (20%)
FIRST INCIDENCE	---	---	---	89 (T)
<hr/>				
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	(e)	(e)	P=0.227
POLY 1.5	(e)	(e)	(e)	P=0.227
POLY 6	(e)	(e)	(e)	P=0.227
COCH-ARM / FISHERS	P=0.132	(e)	(e)	P=0.237
MAX-ISO-POLY-3	(e)	(e)	(e)	P=0.067

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 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Kidney: Pelvis Dilatation</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	10%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	(e)	(e)	P=0.500
POLY 1.5	(e)	(e)	(e)	P=0.500
POLY 6	(e)	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.304	(e)	(e)	P=0.500
MAX-ISO-POLY-3	(e)	(e)	(e)	P=0.159

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 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Liver</b>				
<b>Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	1/1 (100%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	1/1.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	100%	0%	10%
TERMINAL (d)	0/10 (0%)	1/1 (100%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	89 (T)	---	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	P=0.091	(e)	P=0.500
POLY 1.5	(e)	P=0.091	(e)	P=0.500
POLY 6	(e)	P=0.091	(e)	P=0.500
COCH-ARM / FISHERS	P=0.582	P=0.091	(e)	P=0.500
MAX-ISO-POLY-3	(e)	P<0.001**	(e)	P=0.159

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TERMINAL SACRIFICE AT 13 WEEKS**

---

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3

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Liver: Hepatocyte  
Pigmentation

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**LESION RATES**

OVERALL (a)	0/10 (0%)	0/1 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/1.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/1 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---

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**STATISTICAL TESTS**

POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)

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TERMINAL SACRIFICE AT 13 WEEKS**

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DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<hr/>				
Lung Congestion				
<hr/>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	1/10 (10%)	0/9 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	1/10.00	0/9.00	0/10.00
POLY-3 PERCENT (g)	0%	10%	0%	0%
TERMINAL (d)	0/10 (0%)	1/10 (10%)	0/9 (0%)	0/10 (0%)
FIRST INCIDENCE	---	89 (T)	---	---
<hr/>				
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.432N	P=0.500	(e)	(e)
POLY 1.5	P=0.432N	P=0.500	(e)	(e)
POLY 6	P=0.432N	P=0.500	(e)	(e)
COCH-ARM / FISHERS	P=0.431N	P=0.500	(e)	(e)
MAX-ISO-POLY-3	P=0.396N	P=0.159	(e)	(e)

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 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
Lung Hemorrhage				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	1/10 (10%)	1/9 (11%)	3/10 (30%)
POLY-3 RATE (b)	0/10.00	1/10.00	1/9.00	3/10.00
POLY-3 PERCENT (g)	0%	10%	11.1%	30%
TERMINAL (d)	0/10 (0%)	1/10 (10%)	1/9 (11%)	3/10 (30%)
FIRST INCIDENCE	---	89 (T)	89 (T)	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.052	P=0.500	P=0.479	P=0.095
POLY 1.5	P=0.052	P=0.500	P=0.479	P=0.095
POLY 6	P=0.052	P=0.500	P=0.479	P=0.095
COCH-ARM / FISHERS	P=0.052	P=0.500	P=0.474	P=0.105
MAX-ISO-POLY-3	P=0.036*	P=0.159	P=0.151	P=0.025*

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 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
 CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
 Time Report Requested: 07:58:31  
 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Lung</b>				
<b>Infiltration Cellular Histiocyte</b>				
<b>LESION RATES</b>				
<b>OVERALL (a)</b>	1/10 (10%)	1/10 (10%)	8/9 (89%)	10/10 (100%)
<b>POLY-3 RATE (b)</b>	1/10.00	1/10.00	8/9.00	10/10.00
<b>POLY-3 PERCENT (g)</b>	10%	10%	88.9%	100%
<b>TERMINAL (d)</b>	1/10 (10%)	1/10 (10%)	8/9 (89%)	10/10 (100%)
<b>FIRST INCIDENCE</b>	89 (T)	89 (T)	89 (T)	89 (T)
<b>STATISTICAL TESTS</b>				
<b>POLY 3</b>	P<0.001**	P=0.760	P<0.001**	P<0.001**
<b>POLY 1.5</b>	P<0.001**	P=0.760	P<0.001**	P<0.001**
<b>POLY 6</b>	P<0.001**	P=0.760	P<0.001**	P<0.001**
<b>COCH-ARM / FISHERS</b>	P<0.001**	P=0.763N	P<0.001**	P<0.001**
<b>MAX-ISO-POLY-3</b>	P<0.001**	P=1.000	P<0.001**	P<0.001**



Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
 CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
 Time Report Requested: 07:58:31  
 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Lung</b>				
<b>Inflammation Chronic</b>				
<b>LESION RATES</b>				
<b>OVERALL (a)</b>	1/10 (10%)	4/10 (40%)	8/9 (89%)	10/10 (100%)
<b>POLY-3 RATE (b)</b>	1/10.00	4/10.00	8/9.00	10/10.00
<b>POLY-3 PERCENT (g)</b>	10%	40%	88.9%	100%
<b>TERMINAL (d)</b>	1/10 (10%)	4/10 (40%)	8/9 (89%)	10/10 (100%)
<b>FIRST INCIDENCE</b>	89 (T)	89 (T)	89 (T)	89 (T)
<b>STATISTICAL TESTS</b>				
<b>POLY 3</b>	P<0.001**	P=0.148	P<0.001**	P<0.001**
<b>POLY 1.5</b>	P<0.001**	P=0.148	P<0.001**	P<0.001**
<b>POLY 6</b>	P<0.001**	P=0.148	P<0.001**	P<0.001**
<b>COCH-ARM / FISHERS</b>	P<0.001**	P=0.152	P<0.001**	P<0.001**
<b>MAX-ISO-POLY-3</b>	P<0.001**	P=0.058	P<0.001**	P<0.001**

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
 CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
 Time Report Requested: 07:58:31  
 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Lung Pigmentation</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	1/10 (10%)	8/9 (89%)	10/10 (100%)
POLY-3 RATE (b)	0/10.00	1/10.00	8/9.00	10/10.00
POLY-3 PERCENT (g)	0%	10%	88.9%	100%
TERMINAL (d)	0/10 (0%)	1/10 (10%)	8/9 (89%)	10/10 (100%)
FIRST INCIDENCE	---	89 (T)	89 (T)	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	P=0.500	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P=0.500	P<0.001**	P<0.001**
POLY 6	P<0.001**	P=0.500	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.500	P<0.001**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P=0.159	P<0.001**	(e)

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
 CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
 Time Report Requested: 07:58:31  
 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Lymph Node, Bronchial Pigmentation</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/7 (0%)	1/5 (20%)	3/6 (50%)	7/8 (88%)
POLY-3 RATE (b)	0/7.00	1/5.00	3/6.00	7/8.00
POLY-3 PERCENT (g)	0%	20%	50%	87.5%
TERMINAL (d)	0/7 (0%)	1/5 (20%)	3/6 (50%)	7/8 (88%)
FIRST INCIDENCE	---	89 (T)	89 (T)	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	P=0.432	P=0.046*	P<0.001**
POLY 1.5	P<0.001**	P=0.432	P=0.046*	P<0.001**
POLY 6	P<0.001**	P=0.432	P=0.046*	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.417	P=0.070	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P=0.132	P=0.010**	P<0.001**

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
 CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
 Time Report Requested: 07:58:31  
 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Lymph Node, Mediastinal Pigmentation</b>				
<b>LESION RATES</b>				
OVERALL (a)	4/8 (50%)	4/9 (44%)	3/8 (38%)	5/9 (56%)
POLY-3 RATE (b)	4/8.00	4/9.00	3/8.00	5/9.00
POLY-3 PERCENT (g)	50%	44.4%	37.5%	55.6%
TERMINAL (d)	4/8 (50%)	4/9 (44%)	3/8 (38%)	5/9 (56%)
FIRST INCIDENCE	89 (T)	89 (T)	89 (T)	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.463	P=0.596N	P=0.500N	P=0.596
POLY 1.5	P=0.463	P=0.596N	P=0.500N	P=0.596
POLY 6	P=0.463	P=0.596N	P=0.500N	P=0.596
COCH-ARM / FISHERS	P=0.461	P=0.601N	P=0.500N	P=0.601
MAX-ISO-POLY-3	P=0.526	P=0.415N	P=0.317N	P=0.415

Experiment Number: 20701 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE NASAL  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Nanoscale material (Fullerene-C60 1 micron)  
CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
Time Report Requested: 07:58:31  
First Dose M/F: 11/05/07 / 11/05/07  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 13 WEEKS**

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DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3

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Lymph Node, Mesenteric  
Infiltration Cellular Histiocyte

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**LESION RATES**

OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---

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**STATISTICAL TESTS**

POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)

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Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
 CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
 Time Report Requested: 07:58:31  
 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Nose: Goblet Cell Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	10%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	(e)	(e)	P=0.500
POLY 1.5	(e)	(e)	(e)	P=0.500
POLY 6	(e)	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.304	(e)	(e)	P=0.500
MAX-ISO-POLY-3	(e)	(e)	(e)	P=0.159

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
 CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
 Time Report Requested: 07:58:31  
 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Preputial Gland Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	3/10 (30%)	0/0 (0%)	0/0 (0%)	5/10 (50%)
POLY-3 RATE (b)	3/10.00	0/0.00	0/0.00	5/10.00
POLY-3 PERCENT (g)	30%	0%	0%	50%
TERMINAL (d)	3/10 (30%)	0/0 (0%)	0/0 (0%)	5/10 (50%)
FIRST INCIDENCE	89 (T)	---	---	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	(e)	(e)	P=0.329
POLY 1.5	(e)	(e)	(e)	P=0.329
POLY 6	(e)	(e)	(e)	P=0.329
COCH-ARM / FISHERS	P=0.247	(e)	(e)	P=0.325
MAX-ISO-POLY-3	(e)	(e)	(e)	P=0.188

Experiment Number: 20701 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE NASAL  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Nanoscale material (Fullerene-C60 1 micron)  
CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
Time Report Requested: 07:58:31  
First Dose M/F: 11/05/07 / 11/05/07  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 13 WEEKS**

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DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Prostate Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	10%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	(e)	(e)	P=0.500
POLY 1.5	(e)	(e)	(e)	P=0.500
POLY 6	(e)	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.304	(e)	(e)	P=0.500
MAX-ISO-POLY-3	(e)	(e)	(e)	P=0.159

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Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
 CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
 Time Report Requested: 07:58:31  
 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Stomach, Forestomach Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)

Experiment Number: 20701 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE NASAL  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Nanoscale material (Fullerene-C60 1 micron)  
CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
Time Report Requested: 07:58:31  
First Dose M/F: 11/05/07 / 11/05/07  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 13 WEEKS**

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DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3

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Testes: Germinal Epithelium  
Degeneration

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**LESION RATES**

OVERALL (a)	0/10 (0%)	1/10 (10%)	3/10 (30%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	1/10.00	3/10.00	1/10.00
POLY-3 PERCENT (g)	0%	10%	30%	10%
TERMINAL (d)	0/10 (0%)	1/10 (10%)	3/10 (30%)	1/10 (10%)
FIRST INCIDENCE	---	89 (T)	89 (T)	89 (T)

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**STATISTICAL TESTS**

POLY 3	P=0.334	P=0.500	P=0.095	P=0.500
POLY 1.5	P=0.334	P=0.500	P=0.095	P=0.500
POLY 6	P=0.334	P=0.500	P=0.095	P=0.500
COCH-ARM / FISHERS	P=0.334	P=0.500	P=0.105	P=0.500
MAX-ISO-POLY-3	P=0.143	P=0.159	P=0.025*	P=0.159

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Experiment Number: 20701 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE NASAL  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Nanoscale material (Fullerene-C60 1 micron)  
CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
Time Report Requested: 07:58:31  
First Dose M/F: 11/05/07 / 11/05/07  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 13 WEEKS**

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DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3

---

Testes: Interstitial Cell  
Hyperplasia

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**LESION RATES**

OVERALL (a)	0/10 (0%)	0/10 (0%)	1/10 (10%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/10.00	1/10.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	10%	0%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	1/10 (10%)	0/10 (0%)
FIRST INCIDENCE	---	---	89 (T)	---

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**STATISTICAL TESTS**

POLY 3	P=0.639	(e)	P=0.500	(e)
POLY 1.5	P=0.639	(e)	P=0.500	(e)
POLY 6	P=0.639	(e)	P=0.500	(e)
COCH-ARM / FISHERS	P=0.641	(e)	P=0.500	(e)
MAX-ISO-POLY-3	P=0.391	(e)	P=0.159	(e)

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Experiment Number: 20701 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE NASAL  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Nanoscale material (Fullerene-C60 1 micron)  
CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
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First Dose M/F: 11/05/07 / 11/05/07  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 13 WEEKS**

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DOSE	Males			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
Thymus Necrosis				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)

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Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
 CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
 Time Report Requested: 07:58:31  
 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Bone Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	1/1 (100%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	1/1.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	100%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	88	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	P=0.091	(e)	(e)
POLY 1.5	(e)	P=0.091	(e)	(e)
POLY 6	(e)	P=0.091	(e)	(e)
COCH-ARM / FISHERS	P=0.371N	P=0.091	(e)	(e)
MAX-ISO-POLY-3	(e)	P<0.001**	(e)	(e)

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
 CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
 Time Report Requested: 07:58:31  
 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Clitoral Gland Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/10 (20%)	1/1 (100%)	0/0 (0%)	3/10 (30%)
POLY-3 RATE (b)	2/10.00	1/1.00	0/0.00	3/10.00
POLY-3 PERCENT (g)	20%	100%	0%	30%
TERMINAL (d)	2/10 (20%)	0/0 (0%)	0/0 (0%)	3/10 (30%)
FIRST INCIDENCE	89 (T)	88	---	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	P=0.286	(e)	P=0.500
POLY 1.5	(e)	P=0.286	(e)	P=0.500
POLY 6	(e)	P=0.286	(e)	P=0.500
COCH-ARM / FISHERS	P=0.522	P=0.273	(e)	P=0.500
MAX-ISO-POLY-3	(e)	P=0.090	(e)	P=0.311

Experiment Number: 20701 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE NASAL  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Nanoscale material (Fullerene-C60 1 micron)  
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Date Report Requested: 02/22/2013  
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Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 13 WEEKS**

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DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
Eye Inflammation Chronic				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/1 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.97	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)

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Experiment Number: 20701 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE NASAL  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 13 WEEKS**

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DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3

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Harderian Gland  
Inflammation Chronic

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**LESION RATES**

OVERALL (a)	0/10 (0%)	0/1 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.97	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---

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**STATISTICAL TESTS**

POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)

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Experiment Number: 20701 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE NASAL  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
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Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 13 WEEKS**

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DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<hr/>				
Heart Cardiomyopathy				
<hr/>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/1 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.97	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---
<hr/>				
<b>STATISTICAL TESTS</b>				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)

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Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
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 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
Kidney Infarct				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/1 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.97	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
 CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
 Time Report Requested: 07:58:31  
 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Kidney Mineralization</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/1 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	0/0.97	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	10%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	(e)	(e)	P=0.500
POLY 1.5	(e)	(e)	(e)	P=0.500
POLY 6	(e)	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.288	(e)	(e)	P=0.500
MAX-ISO-POLY-3	(e)	(e)	(e)	P=0.159

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
 CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
 Time Report Requested: 07:58:31  
 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Kidney Nephropathy</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/10 (10%)	0/1 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	1/10.00	0/0.97	0/0.00	1/10.00
POLY-3 PERCENT (g)	10%	0%	0%	10%
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	89 (T)	---	---	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	P=0.914N	(e)	P=0.760
POLY 1.5	(e)	P=0.913N	(e)	P=0.760
POLY 6	(e)	P=0.915N	(e)	P=0.760
COCH-ARM / FISHERS	P=0.623	P=0.909N	(e)	P=0.763N
MAX-ISO-POLY-3	(e)	P=0.412N	(e)	P=1.000

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Kidney: Pelvis Dilatation</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/1 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	0/0.97	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	10%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	(e)	(e)	P=0.500
POLY 1.5	(e)	(e)	(e)	P=0.500
POLY 6	(e)	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.288	(e)	(e)	P=0.500
MAX-ISO-POLY-3	(e)	(e)	(e)	P=0.159

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Liver</b>				
<b>Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/1 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.97	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Liver: Hepatocyte Pigmentation</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/1 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	0/0.97	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	10%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	(e)	(e)	P=0.500
POLY 1.5	(e)	(e)	(e)	P=0.500
POLY 6	(e)	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.288	(e)	(e)	P=0.500
MAX-ISO-POLY-3	(e)	(e)	(e)	P=0.159

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
Lung Congestion				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/9.97	0/10.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/9 (0%)	0/10 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)



Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
Lung Hemorrhage				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/9.97	0/10.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/9 (0%)	0/10 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Lung</b>				
<b>Infiltration Cellular Histiocyte</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/10 (10%)	1/10 (10%)	8/10 (80%)	10/10 (100%)
POLY-3 RATE (b)	1/10.00	1/10.00	8/10.00	10/10.00
POLY-3 PERCENT (g)	10%	10%	80%	100%
TERMINAL (d)	1/10 (10%)	0/9 (0%)	8/10 (80%)	10/10 (100%)
FIRST INCIDENCE	89 (T)	88	89 (T)	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	P=0.760	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P=0.760	P<0.001**	P<0.001**
POLY 6	P<0.001**	P=0.760	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.763N	P=0.003**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P=1.000	P<0.001**	P<0.001**

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Lung Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/10 (0%)	1/10 (10%)	10/10 (100%)
POLY-3 RATE (b)	0/10.00	0/9.97	1/10.00	10/10.00
POLY-3 PERCENT (g)	0%	0%	10%	100%
TERMINAL (d)	0/10 (0%)	0/9 (0%)	1/10 (10%)	10/10 (100%)
FIRST INCIDENCE	---	---	89 (T)	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	(e)	P=0.500	P<0.001**
POLY 1.5	P<0.001**	(e)	P=0.500	P<0.001**
POLY 6	P<0.001**	(e)	P=0.500	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	P=0.500	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	P=0.159	(e)

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
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 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Lung Pigmentation</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	0/10 (0%)	8/10 (80%)	10/10 (100%)
POLY-3 RATE (b)	0/10.00	0/9.97	8/10.00	10/10.00
POLY-3 PERCENT (g)	0%	0%	80%	100%
TERMINAL (d)	0/10 (0%)	0/9 (0%)	8/10 (80%)	10/10 (100%)
FIRST INCIDENCE	---	---	89 (T)	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	(e)	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	(e)	P<0.001**	P<0.001**
POLY 6	P<0.001**	(e)	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	P<0.001**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	P<0.001**	(e)

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Nanoscale material (Fullerene-C60 1 micron)  
 CAS Number: 99685-96-8

Date Report Requested: 02/22/2013  
 Time Report Requested: 07:58:31  
 First Dose M/F: 11/05/07 / 11/05/07  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Lymph Node, Bronchial Pigmentation</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/6 (17%)	1/5 (20%)	3/7 (43%)	4/5 (80%)
POLY-3 RATE (b)	1/6.00	1/4.97	3/7.00	4/5.00
POLY-3 PERCENT (g)	16.7%	20.1%	42.9%	80%
TERMINAL (d)	1/6 (17%)	1/4 (25%)	3/7 (43%)	4/5 (80%)
FIRST INCIDENCE	89 (T)	89 (T)	89 (T)	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.015*	P=0.718	P=0.345	P=0.041*
POLY 1.5	P=0.015*	P=0.719	P=0.345	P=0.041*
POLY 6	P=0.015*	P=0.717	P=0.345	P=0.041*
COCH-ARM / FISHERS	P=0.019*	P=0.727	P=0.343	P=0.067
MAX-ISO-POLY-3	P=0.025*	P=0.448	P=0.173	P=0.009**

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Lymph Node, Mediastinal Pigmentation</b>				
<b>LESION RATES</b>				
OVERALL (a)	3/8 (38%)	9/10 (90%)	7/8 (88%)	7/9 (78%)
POLY-3 RATE (b)	3/8.00	9/10.00	7/8.00	7/9.00
POLY-3 PERCENT (g)	37.5%	90%	87.5%	77.8%
TERMINAL (d)	3/8 (38%)	8/9 (89%)	7/8 (88%)	7/9 (78%)
FIRST INCIDENCE	89 (T)	88	89 (T)	89 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.236	P=0.018*	P=0.045*	P=0.110
POLY 1.5	P=0.236	P=0.018*	P=0.045*	P=0.110
POLY 6	P=0.236	P=0.018*	P=0.045*	P=0.110
COCH-ARM / FISHERS	P=0.250	P=0.032*	P=0.059	P=0.117
MAX-ISO-POLY-3	P=0.016*	P=0.006**	P=0.012*	P=0.046*

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Lymph Node, Mesenteric Infiltration Cellular Histiocyte</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/10 (10%)	0/1 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	1/10.00	0/0.97	0/0.00	0/10.00
POLY-3 PERCENT (g)	10%	0%	0%	0%
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	89 (T)	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	P=0.914N	(e)	P=0.500N
POLY 1.5	(e)	P=0.913N	(e)	P=0.500N
POLY 6	(e)	P=0.915N	(e)	P=0.500N
COCH-ARM / FISHERS	P=0.318N	P=0.909N	(e)	P=0.500N
MAX-ISO-POLY-3	(e)	P=0.412N	(e)	P=0.159N

Experiment Number: 20701 - 01  
Test Type: 90-DAY  
Route: RESPIRATORY EXPOSURE NASAL  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
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Date Report Requested: 02/22/2013  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 13 WEEKS**

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DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3

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Nose: Goblet Cell  
Hyperplasia

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**LESION RATES**

OVERALL (a)	0/10 (0%)	0/1 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.97	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---

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**STATISTICAL TESTS**

POLY 3	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)

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Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Stomach, Forestomach Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/10 (10%)	0/1 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	1/10.00	0/0.97	0/0.00	0/10.00
POLY-3 PERCENT (g)	10%	0%	0%	0%
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	89 (T)	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	P=0.914N	(e)	P=0.500N
POLY 1.5	(e)	P=0.913N	(e)	P=0.500N
POLY 6	(e)	P=0.915N	(e)	P=0.500N
COCH-ARM / FISHERS	P=0.318N	P=0.909N	(e)	P=0.500N
MAX-ISO-POLY-3	(e)	P=0.412N	(e)	P=0.159N

Experiment Number: 20701 - 01  
 Test Type: 90-DAY  
 Route: RESPIRATORY EXPOSURE NASAL  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 13 WEEKS**

DOSE	Females			
	0 mg/m3	2 mg/m3	15 mg/m3	30 mg/m3
<b>Thymus Necrosis</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/10 (0%)	1/1 (100%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	1/1.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	100%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	88	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	(e)	P=0.091	(e)	(e)
POLY 1.5	(e)	P=0.091	(e)	(e)
POLY 6	(e)	P=0.091	(e)	(e)
COCH-ARM / FISHERS	P=0.371N	P=0.091	(e)	(e)
MAX-ISO-POLY-3	(e)	P<0.001**	(e)	(e)

**Experiment Number:** 20701 - 01  
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**Route:** RESPIRATORY EXPOSURE NASAL  
**Species/Strain:** RATS/Wistar Han

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## **LEGEND**

- (a) Number of tumor-bearing animals/number of animals examined at site.
  - (b) Number of tumor-bearing animals/Poly-3 number
  - (d) Observed incidence at terminal kill.
  - (e) Value of statistic cannot be computed.
  - (f) Beneath the control incidence are the P-values associated with the trend test. Beneath the dosed group incidence are the P-values corresponding to pairwise comparisons between the controls and that dosed group.
  - (g) Poly-3 adjusted lifetime tumor incidence.
  - (n) No statistics are calculated if all dose groups have fewer than two tumors.
  - (I) Interim sacrifice
  - (T) Terminal sacrifice
  - # Tumor rates based on numbers of animals necropsied.
  - \* To the right of any statistical result, indicates significance at ( $P \leq 0.05$ ).
  - \*\* To the right of any statistical result, indicates significance at ( $P \leq 0.01$ ).
  - N Indicates a negative trend for all tests
- The Cochran-Armitage and Fishers exact tests compare directly the overall incidence rates.

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