

Experiment Number: 20536 - 02
Test Type: 39-WEEK
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Abrasive blasting agents (specular hematite)
CAS Number: HEMATITESPEC

Date Report Requested: 09/13/2012
Time Report Requested: 10:26:12
First Dose M/F: 07/27/09 / NA
Lab: BNW

F1_Rev.1_16 Wk. SSAC

NTP Study Number: C20536
Lock Date: 07/19/2010
Cage Range: ALL
Date Range: ALL
Reasons For Removal: 25017 SSAC
Removal Date Range: 13-Nov-2009 - 13-Nov-2009
Treatment Groups: Include ALL
Study Gender: Male
TDMSE Version: 2.6.0.0_007
PWG Approval Date: 02/08/2012

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SUMMARY OF STATISTICALLY SIGNIFICANT (P<=.05) RESULTS IN THE ANALYSIS OF ABRASIVE BLASTING AGENTS (SPECULAR HEMATITE)

MALE RATS

Organ

Larynx
Larynx: Epiglottis
Lung

Lung: Alveolar Epithelium
Lymph Node, Bronchial

Lymph Node, Mediastinal

Nose: Respiratory Epithelium

Morphology

Foreign Body
Metaplasia
Foreign Body
Infiltration Cellular Histiocyte
Inflammation Chronic
Hyperplasia
Foreign Body
Hyperplasia
Infiltration Cellular Histiocyte
Foreign Body
Hyperplasia
Infiltration Cellular Histiocyte
Accumulation, Hyaline Droplet

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Larynx				
Foreign Body				
LESION RATES				
OVERALL (a)	0/8 (0%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
POLY-3 RATE (b)	0/8.00	8/8.00	8/8.00	8/8.00
POLY-3 PERCENT (g)	0%	100%	100%	100%
INT SACRIFICE 1	0/8 (0%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	110 (I)	110 (I)	110 (I)
STATISTICAL TESTS				
POLY 3	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P<0.001**	P<0.001**	P<0.001**
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)

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 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Larynx: Epiglottis Metaplasia				
LESION RATES				
OVERALL (a)	0/8 (0%)	3/8 (38%)	3/8 (38%)	4/8 (50%)
POLY-3 RATE (b)	0/8.00	3/8.00	3/8.00	4/8.00
POLY-3 PERCENT (g)	0%	37.5%	37.5%	50%
INT SACRIFICE 1	0/8 (0%)	3/8 (38%)	3/8 (38%)	4/8 (50%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	110 (I)	110 (I)	110 (I)
STATISTICAL TESTS				
POLY 3	P=0.043*	P=0.086	P=0.086	P=0.024*
POLY 1.5	P=0.043*	P=0.086	P=0.086	P=0.024*
POLY 6	P=0.043*	P=0.086	P=0.086	P=0.024*
COCH-ARM / FISHERS	P=0.047*	P=0.100	P=0.100	P=0.038*
MAX-ISO-POLY-3	P=0.020*	P=0.020*	P=0.020*	P=0.004**

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 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Larynx: Glands				
Concretion				
LESION RATES				
OVERALL (a)	0/8 (0%)	1/8 (13%)	0/8 (0%)	0/8 (0%)
POLY-3 RATE (b)	0/8.00	1/8.00	0/8.00	0/8.00
POLY-3 PERCENT (g)	0%	12.5%	0%	0%
INT SACRIFICE 1	0/8 (0%)	1/8 (13%)	0/8 (0%)	0/8 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	1/10 (l)	---	---
STATISTICAL TESTS				
POLY 3	P=0.555N	P=0.500	(e)	(e)
POLY 1.5	P=0.555N	P=0.500	(e)	(e)
POLY 6	P=0.555N	P=0.500	(e)	(e)
COCH-ARM / FISHERS	P=0.556N	P=0.500	(e)	(e)
MAX-ISO-POLY-3	P=0.388N	P=0.159	(e)	(e)

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Larynx: Glands Inflammation				
LESION RATES				
OVERALL (a)	0/8 (0%)	0/8 (0%)	1/8 (13%)	0/8 (0%)
POLY-3 RATE (b)	0/8.00	0/8.00	1/8.00	0/8.00
POLY-3 PERCENT (g)	0%	0%	12.5%	0%
INT SACRIFICE 1	0/8 (0%)	0/8 (0%)	1/8 (13%)	0/8 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	---	1/0 (l)	---
STATISTICAL TESTS				
POLY 3	P=0.680	(e)	P=0.500	(e)
POLY 1.5	P=0.680	(e)	P=0.500	(e)
POLY 6	P=0.680	(e)	P=0.500	(e)
COCH-ARM / FISHERS	P=0.683	(e)	P=0.500	(e)
MAX-ISO-POLY-3	P=0.388	(e)	P=0.159	(e)

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 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Lung				
Foreign Body				
LESION RATES				
OVERALL (a)	0/8 (0%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
POLY-3 RATE (b)	0/8.00	8/8.00	8/8.00	8/8.00
POLY-3 PERCENT (g)	0%	100%	100%	100%
INT SACRIFICE 1	0/8 (0%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	110 (I)	110 (I)	110 (I)
STATISTICAL TESTS				
POLY 3	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P<0.001**	P<0.001**	P<0.001**
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)

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 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Lung				
Infiltration Cellular Histiocyte				
LESION RATES				
OVERALL (a)	2/8 (25%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
POLY-3 RATE (b)	2/8.00	8/8.00	8/8.00	8/8.00
POLY-3 PERCENT (g)	25%	100%	100%	100%
INT SACRIFICE 1	2/8 (25%)	8/8 (100%)	8/8 (100%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	110 (I)	110 (I)	110 (I)	110 (I)
STATISTICAL TESTS				
POLY 3	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P=0.002**	P=0.003**	P=0.003**	P=0.003**
MAX-ISO-POLY-3	P<0.001**	P<0.001**	P<0.001**	P<0.001**

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 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Lung				
Inflammation Chronic				
LESION RATES				
OVERALL (a)	1/8 (13%)	0/8 (0%)	0/8 (0%)	3/8 (38%)
POLY-3 RATE (b)	1/8.00	0/8.00	0/8.00	3/8.00
POLY-3 PERCENT (g)	12.5%	0%	0%	37.5%
INT SACRIFICE 1	1/8 (13%)	0/8 (0%)	0/8 (0%)	3/8 (38%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	110 (I)	---	---	110 (I)
STATISTICAL TESTS				
POLY 3	P=0.064	P=0.500N	P=0.500N	P=0.286
POLY 1.5	P=0.064	P=0.500N	P=0.500N	P=0.286
POLY 6	P=0.064	P=0.500N	P=0.500N	P=0.286
COCH-ARM / FISHERS	P=0.075	P=0.500N	P=0.500N	P=0.285
MAX-ISO-POLY-3	P=0.025*	P=0.159N	P=0.159N	P=0.130

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DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Lung: Alveolar Epithelium Hyperplasia				
LESION RATES				
OVERALL (a)	0/8 (0%)	3/8 (38%)	8/8 (100%)	8/8 (100%)
POLY-3 RATE (b)	0/8.00	3/8.00	8/8.00	8/8.00
POLY-3 PERCENT (g)	0%	37.5%	100%	100%
INT SACRIFICE 1	0/8 (0%)	3/8 (38%)	8/8 (100%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	110 (l)	110 (l)	110 (l)
STATISTICAL TESTS				
POLY 3	P<0.001**	P=0.086	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P=0.086	P<0.001**	P<0.001**
POLY 6	P<0.001**	P=0.086	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.100	P<0.001**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P=0.020*	(e)	(e)

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 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Lymph Node, Bronchial Foreign Body				
LESION RATES				
OVERALL (a)	0/8 (0%)	7/7 (100%)	6/8 (75%)	7/8 (88%)
POLY-3 RATE (b)	0/8.00	7/7.00	6/8.00	7/8.00
POLY-3 PERCENT (g)	0%	100%	75%	87.5%
INT SACRIFICE 1	0/8 (0%)	7/7 (100%)	6/8 (75%)	7/8 (88%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	110 (I)	110 (I)	110 (I)
STATISTICAL TESTS				
POLY 3	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P=0.004**	P<0.001**	P=0.003**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P<0.001**	P<0.001**	P<0.001**

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 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Lymph Node, Bronchial Hyperplasia				
LESION RATES				
OVERALL (a)	0/8 (0%)	1/7 (14%)	2/8 (25%)	3/8 (38%)
POLY-3 RATE (b)	0/8.00	1/7.00	2/8.00	3/8.00
POLY-3 PERCENT (g)	0%	14.3%	25%	37.5%
INT SACRIFICE 1	0/8 (0%)	1/7 (14%)	2/8 (25%)	3/8 (38%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	110 (I)	110 (I)	110 (I)
STATISTICAL TESTS				
POLY 3	P=0.051	P=0.473	P=0.223	P=0.086
POLY 1.5	P=0.051	P=0.473	P=0.223	P=0.086
POLY 6	P=0.051	P=0.473	P=0.223	P=0.086
COCH-ARM / FISHERS	P=0.051	P=0.467	P=0.233	P=0.100
MAX-ISO-POLY-3	P=0.045*	P=0.148	P=0.063	P=0.020*

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 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Lymph Node, Bronchial Infiltration Cellular Histiocyte				
LESION RATES				
OVERALL (a)	0/8 (0%)	2/7 (29%)	6/8 (75%)	7/8 (88%)
POLY-3 RATE (b)	0/8.00	2/7.00	6/8.00	7/8.00
POLY-3 PERCENT (g)	0%	28.6%	75%	87.5%
INT SACRIFICE 1	0/8 (0%)	2/7 (29%)	6/8 (75%)	7/8 (88%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	110 (I)	110 (I)	110 (I)
STATISTICAL TESTS				
POLY 3	P<0.001**	P=0.188	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P=0.188	P<0.001**	P<0.001**
POLY 6	P<0.001**	P=0.188	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.200	P=0.003**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P=0.053	P<0.001**	P<0.001**

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 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Lymph Node, Bronchial Pigmentation Hemosiderin				
LESION RATES				
OVERALL (a)	0/8 (0%)	1/7 (14%)	1/8 (13%)	0/8 (0%)
POLY-3 RATE (b)	0/8.00	1/7.00	1/8.00	0/8.00
POLY-3 PERCENT (g)	0%	14.3%	12.5%	0%
INT SACRIFICE 1	0/8 (0%)	1/7 (14%)	1/8 (13%)	0/8 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	110 (I)	110 (I)	---
STATISTICAL TESTS				
POLY 3	P=0.582N	P=0.473	P=0.500	(e)
POLY 1.5	P=0.582N	P=0.473	P=0.500	(e)
POLY 6	P=0.582N	P=0.473	P=0.500	(e)
COCH-ARM / FISHERS	P=0.585N	P=0.467	P=0.500	(e)
MAX-ISO-POLY-3	P=0.398N	P=0.148	P=0.159	(e)

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 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Lymph Node, Mediastinal Foreign Body				
LESION RATES				
OVERALL (a)	0/6 (0%)	4/8 (50%)	6/8 (75%)	8/8 (100%)
POLY-3 RATE (b)	0/6.00	4/8.00	6/8.00	8/8.00
POLY-3 PERCENT (g)	0%	50%	75%	100%
INT SACRIFICE 1	0/6 (0%)	4/8 (50%)	6/8 (75%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	110 (I)	110 (I)	110 (I)
STATISTICAL TESTS				
POLY 3	P<0.001**	P=0.054	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P=0.054	P<0.001**	P<0.001**
POLY 6	P<0.001**	P=0.054	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.070	P=0.009**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P=0.017*	P<0.001**	P<0.001**

Experiment Number: 20536 - 02
 Test Type: 39-WEEK
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Abrasive blasting agents (specular hematite)
 CAS Number: HEMATITESPEC

Date Report Requested: 09/13/2012
 Time Report Requested: 10:26:12
 First Dose M/F: 07/27/09 / NA
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Lymph Node, Mediastinal Hyperplasia				
LESION RATES				
OVERALL (a)	0/6 (0%)	3/8 (38%)	6/8 (75%)	8/8 (100%)
POLY-3 RATE (b)	0/6.00	3/8.00	6/8.00	8/8.00
POLY-3 PERCENT (g)	0%	37.5%	75%	100%
INT SACRIFICE 1	0/6 (0%)	3/8 (38%)	6/8 (75%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	110 (I)	110 (I)	110 (I)
STATISTICAL TESTS				
POLY 3	P<0.001**	P=0.142	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P=0.142	P<0.001**	P<0.001**
POLY 6	P<0.001**	P=0.142	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.154	P=0.009**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P=0.050*	P<0.001**	P<0.001**

Experiment Number: 20536 - 02
 Test Type: 39-WEEK
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Abrasive blasting agents (specular hematite)
 CAS Number: HEMATITESPEC

Date Report Requested: 09/13/2012
 Time Report Requested: 10:26:12
 First Dose M/F: 07/27/09 / NA
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Lymph Node, Mediastinal Infiltration Cellular Histiocyte				
LESION RATES				
OVERALL (a)	0/6 (0%)	3/8 (38%)	5/8 (63%)	8/8 (100%)
POLY-3 RATE (b)	0/6.00	3/8.00	5/8.00	8/8.00
POLY-3 PERCENT (g)	0%	37.5%	62.5%	100%
INT SACRIFICE 1	0/6 (0%)	3/8 (38%)	5/8 (63%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	110 (I)	110 (I)	110 (I)
STATISTICAL TESTS				
POLY 3	P<0.001**	P=0.142	P=0.012*	P<0.001**
POLY 1.5	P<0.001**	P=0.142	P=0.012*	P<0.001**
POLY 6	P<0.001**	P=0.142	P=0.012*	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.154	P=0.028*	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P=0.050*	P=0.003**	P<0.001**

Experiment Number: 20536 - 02
 Test Type: 39-WEEK
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Abrasive blasting agents (specular hematite)
 CAS Number: HEMATITESPEC

Date Report Requested: 09/13/2012
 Time Report Requested: 10:26:12
 First Dose M/F: 07/27/09 / NA
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Lymph Node, Mediastinal Pigmentation Hemosiderin				
LESION RATES				
OVERALL (a)	1/6 (17%)	2/8 (25%)	0/8 (0%)	0/8 (0%)
POLY-3 RATE (b)	1/6.00	2/8.00	0/8.00	0/8.00
POLY-3 PERCENT (g)	16.7%	25%	0%	0%
INT SACRIFICE 1	1/6 (17%)	2/8 (25%)	0/8 (0%)	0/8 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	110 (I)	110 (I)	---	---
STATISTICAL TESTS				
POLY 3	P=0.132N	P=0.604	P=0.442N	P=0.442N
POLY 1.5	P=0.132N	P=0.604	P=0.442N	P=0.442N
POLY 6	P=0.132N	P=0.604	P=0.442N	P=0.442N
COCH-ARM / FISHERS	P=0.132N	P=0.615	P=0.429N	P=0.429N
MAX-ISO-POLY-3	P=0.171N	P=0.370	P=0.136N	P=0.136N

Experiment Number: 20536 - 02
 Test Type: 39-WEEK
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Abrasive blasting agents (specular hematite)
 CAS Number: HEMATITESPEC

Date Report Requested: 09/13/2012
 Time Report Requested: 10:26:12
 First Dose M/F: 07/27/09 / NA
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Lymph Node: Renal Hemorrhage				
LESION RATES				
OVERALL (a)	0/0 (0%)	1/1 (100%)	0/0 (0%)	0/0 (0%)
POLY-3 RATE (b)	0/0.00	1/1.00	0/0.00	0/0.00
POLY-3 PERCENT (g)	0%	100%	0%	0%
INT SACRIFICE 1	0/0 (0%)	1/1 (100%)	0/0 (0%)	0/0 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	1/10 (1)	---	---
STATISTICAL TESTS				
POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)

Experiment Number: 20536 - 02
 Test Type: 39-WEEK
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Abrasive blasting agents (specular hematite)
 CAS Number: HEMATITESPEC

Date Report Requested: 09/13/2012
 Time Report Requested: 10:26:12
 First Dose M/F: 07/27/09 / NA
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Nose				
Inflammation Focal				
LESION RATES				
OVERALL (a)	0/8 (0%)	0/8 (0%)	1/8 (13%)	0/8 (0%)
POLY-3 RATE (b)	0/8.00	0/8.00	1/8.00	0/8.00
POLY-3 PERCENT (g)	0%	0%	12.5%	0%
INT SACRIFICE 1	0/8 (0%)	0/8 (0%)	1/8 (13%)	0/8 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	---	1/0 (l)	---
STATISTICAL TESTS				
POLY 3	P=0.680	(e)	P=0.500	(e)
POLY 1.5	P=0.680	(e)	P=0.500	(e)
POLY 6	P=0.680	(e)	P=0.500	(e)
COCH-ARM / FISHERS	P=0.683	(e)	P=0.500	(e)
MAX-ISO-POLY-3	P=0.388	(e)	P=0.159	(e)

Experiment Number: 20536 - 02
 Test Type: 39-WEEK
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Abrasive blasting agents (specular hematite)
 CAS Number: HEMATITESPEC

Date Report Requested: 09/13/2012
 Time Report Requested: 10:26:12
 First Dose M/F: 07/27/09 / NA
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Nose: Glands				
Accumulation, Hyaline Droplet				
LESION RATES				
OVERALL (a)	0/8 (0%)	0/8 (0%)	1/8 (13%)	0/8 (0%)
POLY-3 RATE (b)	0/8.00	0/8.00	1/8.00	0/8.00
POLY-3 PERCENT (g)	0%	0%	12.5%	0%
INT SACRIFICE 1	0/8 (0%)	0/8 (0%)	1/8 (13%)	0/8 (0%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	---	1/10 (1)	---
STATISTICAL TESTS				
POLY 3	P=0.680	(e)	P=0.500	(e)
POLY 1.5	P=0.680	(e)	P=0.500	(e)
POLY 6	P=0.680	(e)	P=0.500	(e)
COCH-ARM / FISHERS	P=0.683	(e)	P=0.500	(e)
MAX-ISO-POLY-3	P=0.388	(e)	P=0.159	(e)

Experiment Number: 20536 - 02
 Test Type: 39-WEEK
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Abrasive blasting agents (specular hematite)
 CAS Number: HEMATITESPEC

Date Report Requested: 09/13/2012
 Time Report Requested: 10:26:12
 First Dose M/F: 07/27/09 / NA
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Nose: Olfactory Epithelium Accumulation, Hyaline Droplet				
LESION RATES				
OVERALL (a)	7/8 (88%)	8/8 (100%)	7/8 (88%)	8/8 (100%)
POLY-3 RATE (b)	7/8.00	8/8.00	7/8.00	8/8.00
POLY-3 PERCENT (g)	87.5%	100%	87.5%	100%
INT SACRIFICE 1	7/8 (88%)	8/8 (100%)	7/8 (88%)	8/8 (100%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	110 (I)	110 (I)	110 (I)	110 (I)
STATISTICAL TESTS				
POLY 3	P=0.408	P=0.500	P=0.760	P=0.500
POLY 1.5	P=0.408	P=0.500	P=0.760	P=0.500
POLY 6	P=0.408	P=0.500	P=0.760	P=0.500
COCH-ARM / FISHERS	P=0.405	P=0.500	P=0.767N	P=0.500
MAX-ISO-POLY-3	P=0.256	P=0.159	P=1.000	P=0.159

Experiment Number: 20536 - 02
 Test Type: 39-WEEK
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
 Abrasive blasting agents (specular hematite)
 CAS Number: HEMATITESPEC

Date Report Requested: 09/13/2012
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 First Dose M/F: 07/27/09 / NA
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)
 LAST REMOVAL AT 16 WEEKS**

DOSE	Males			
	Control	15 mg/m3	30 mg/m3	60 mg/m3
Nose: Respiratory Epithelium Accumulation, Hyaline Droplet				
LESION RATES				
OVERALL (a)	1/8 (13%)	4/8 (50%)	5/8 (63%)	2/8 (25%)
POLY-3 RATE (b)	1/8.00	4/8.00	5/8.00	2/8.00
POLY-3 PERCENT (g)	12.5%	50%	62.5%	25%
INT SACRIFICE 1	1/8 (13%)	4/8 (50%)	5/8 (63%)	2/8 (25%)
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	110 (I)	110 (I)	110 (I)	110 (I)
STATISTICAL TESTS				
POLY 3	P=0.492	P=0.135	P=0.045*	P=0.500
POLY 1.5	P=0.492	P=0.135	P=0.045*	P=0.500
POLY 6	P=0.492	P=0.135	P=0.045*	P=0.500
COCH-ARM / FISHERS	P=0.492	P=0.141	P=0.059	P=0.500
MAX-ISO-POLY-3	P=0.125	P=0.049*	P=0.012*	P=0.272

Experiment Number: 20536 - 02
Test Type: 39-WEEK
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS
Abrasive blasting agents (specular hematite)
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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 ***