

**Experiment Number:** 20515 - 03  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
Metal working fluids (CIMSTAR 3800)  
**CAS Number:** CIMSTAR3800

**Date Report Requested:** 05/08/2013  
**Time Report Requested:** 08:51:01  
**First Dose M/F:** 04/14/08 / 04/14/08  
**Lab:** BNW

F1\_Rev.1\_RE

**NTP Study Number:** C20515  
**Lock Date:** 01/12/2011  
**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:** 02/21/2013

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## SUMMARY OF STATISTICALLY SIGNIFICANT (P<=.05) RESULTS IN THE ANALYSIS OF METAL WORKING FLUIDS (CIMSTAR 3800)

### MALE RATS

#### Organ

Epididymis  
Harderian Gland  
Heart  
Kidney  
  
Kidney: Renal Tubule  
Larynx  
Liver

Lung  
Lung: Alveolar Epithelium  
Lung: Bronchus-Associated Lymphoid Tissue  
Lymph Node, Bronchial  
Lymph Node, Mediastinal  
Lymph Node, Mesenteric  
Lymph Node: Renal  
Mesentery: Fat  
Nose  
Nose: Goblet Cell  
Nose: Olfactory Epithelium  
Nose: Olfactory Epithelium, Glands  
Nose: Respiratory Epithelium  
Pancreas  
Skin  
Testes  
Thyroid Gland: Follicular Cell

### FEMALE RATS

#### Organ

Adrenal Cortex

#### Morphology

Granuloma Sperm  
Hyperplasia  
Cardiomyopathy  
Cyst  
Inflammation  
Hyperplasia  
Metaplasia  
Basophilic Focus  
Clear Cell Focus  
Mixed Cell Focus  
Inflammation Lymphohistiocytic  
Hyperplasia  
Hyperplasia Lymphohistiocytic  
Hyperplasia Lymphohistiocytic  
Hyperplasia Lymphohistiocytic  
Ectasia  
Ectasia  
Necrosis  
Inflammation Chronic  
Hyperplasia  
Accumulation, Hyaline Droplet  
Hyperplasia  
Accumulation, Hyaline Droplet  
Atrophy  
Inflammation Chronic  
Atrophy  
Hyperplasia

#### Morphology

Degeneration Cystic  
Hyperplasia

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### SUMMARY OF STATISTICALLY SIGNIFICANT (P<=.05) RESULTS IN THE ANALYSIS OF METAL WORKING FLUIDS (CIMSTAR 3800)

Clitoral Gland	Hypertrophy
Larynx	Inflammation Chronic
	Inflammation Acute
	Metaplasia
Liver	Clear Cell Focus
	Mixed Cell Focus
Liver: Bile Duct	Cyst
Lung	Inflammation Lymphohistiocytic
Lung: Bronchus-Associated Lymphoid Tissue	Hyperplasia Lymphohistiocytic
Lymph Node, Bronchial	Hyperplasia Lymphohistiocytic
Lymph Node, Mediastinal	Hyperplasia Lymphohistiocytic
Mammary Gland	Inflammation Chronic
Nose: Goblet Cell	Hyperplasia
Nose: Olfactory Epithelium	Accumulation, Hyaline Droplet
Nose: Olfactory Epithelium, Glands	Hyperplasia
Nose: Respiratory Epithelium	Accumulation, Hyaline Droplet
Ovary	Cyst
Stomach, Glandular	Necrosis
Thyroid Gland: C-Cell	Hyperplasia
Uterus: Endometrium	Hyperplasia Cystic

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Adrenal Cortex</b>				
<b>Angiectasis</b>				
<hr/>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/49 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/43.59	0/42.93	0/45.09	0/43.48
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/33 (0%)	0/34 (0%)	0/34 (0%)	0/33 (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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 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Adrenal Cortex Degeneration Cystic</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	1/50 (2%)	3/49 (6%)	2/50 (4%)
POLY-3 RATE (b)	2/43.97	1/42.93	3/45.73	2/43.48
POLY-3 PERCENT (g)	4.6%	2.3%	6.6%	4.6%
TERMINAL (d)	0/33 (0%)	1/34 (3%)	1/34 (3%)	2/33 (6%)
FIRST INCIDENCE	653	729 (T)	564	729 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.552	P=0.508N	P=0.518	P=0.690
POLY 1.5	P=0.549	P=0.506N	P=0.507	P=0.689
POLY 6	P=0.555	P=0.510N	P=0.530	P=0.692
COCH-ARM / FISHERS	P=0.552	P=0.500N	P=0.490	P=0.691N
MAX-ISO-POLY-3	P=0.507	P=0.290N	P=0.343	P=0.495

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 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Adrenal Cortex Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	26/50 (52%)	25/50 (50%)	28/49 (57%)	26/50 (52%)
POLY-3 RATE (b)	26/45.41	25/44.10	28/46.22	26/44.65
POLY-3 PERCENT (g)	57.3%	56.7%	60.6%	58.2%
TERMINAL (d)	22/33 (67%)	20/34 (59%)	24/34 (71%)	19/33 (58%)
FIRST INCIDENCE	494	564	564	611
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.511	P=0.565N	P=0.455	P=0.548
POLY 1.5	P=0.505	P=0.546N	P=0.420	P=0.546
POLY 6	P=0.536	P=0.571N	P=0.498	P=0.572
COCH-ARM / FISHERS	P=0.530	P=0.500N	P=0.378	P=0.579N
MAX-ISO-POLY-3	P=0.631	P=0.477N	P=0.371	P=0.461

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 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Adrenal Cortex Hypertrophy</b>				
<b>LESION RATES</b>				
OVERALL (a)	20/50 (40%)	21/50 (42%)	14/49 (29%)	16/50 (32%)
POLY-3 RATE (b)	20/44.00	21/43.75	14/45.66	16/44.25
POLY-3 PERCENT (g)	45.5%	48%	30.7%	36.2%
TERMINAL (d)	18/33 (55%)	18/34 (53%)	9/34 (27%)	13/33 (39%)
FIRST INCIDENCE	627	620	639	627
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.184N	P=0.490	P=0.107N	P=0.248N
POLY 1.5	P=0.195N	P=0.487	P=0.129N	P=0.264N
POLY 6	P=0.167N	P=0.508	P=0.083N	P=0.220N
COCH-ARM / FISHERS	P=0.198N	P=0.500	P=0.162N	P=0.266N
MAX-ISO-POLY-3	P=0.160N	P=0.402	P=0.076N	P=0.185N

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 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Adrenal Medulla Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	1/48 (2%)	4/49 (8%)	1/50 (2%)
POLY-3 RATE (b)	2/43.59	1/40.93	4/45.12	1/43.48
POLY-3 PERCENT (g)	4.6%	2.4%	8.9%	2.3%
TERMINAL (d)	2/33 (6%)	1/32 (3%)	3/34 (9%)	1/33 (3%)
FIRST INCIDENCE	729 (T)	729 (T)	722	729 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.437N	P=0.522N	P=0.353	P=0.501N
POLY 1.5	P=0.441N	P=0.520N	P=0.342	P=0.503N
POLY 6	P=0.430N	P=0.522N	P=0.366	P=0.497N
COCH-ARM / FISHERS	P=0.441N	P=0.515N	P=0.329	P=0.500N
MAX-ISO-POLY-3	P=0.400N	P=0.302N	P=0.218	P=0.281N



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DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Epididymis Granuloma Sperm</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/43.98	0/42.93	0/45.98	0/43.48
POLY-3 PERCENT (g)	4.6%	0%	0%	0%
TERMINAL (d)	1/33 (3%)	0/34 (0%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	619	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.257N	P=0.242N	P=0.227N	P=0.240N
POLY 1.5	P=0.258N	P=0.241N	P=0.231N	P=0.240N
POLY 6	P=0.257N	P=0.243N	P=0.223N	P=0.238N
COCH-ARM / FISHERS	P=0.260N	P=0.247N	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.037N*	P=0.081N	P=0.076N	P=0.078N

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 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
Eye Cataract				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	3/50 (6%)	1/48 (2%)	0/50 (0%)
POLY-3 RATE (b)	2/43.59	3/43.73	1/45.02	0/43.48
POLY-3 PERCENT (g)	4.6%	6.9%	2.2%	0%
TERMINAL (d)	2/33 (6%)	2/34 (6%)	1/34 (3%)	0/33 (0%)
FIRST INCIDENCE	729 (T)	429	729 (T)	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.112N	P=0.501	P=0.489N	P=0.238N
POLY 1.5	P=0.112N	P=0.500	P=0.498N	P=0.239N
POLY 6	P=0.111N	P=0.505	P=0.479N	P=0.235N
COCH-ARM / FISHERS	P=0.110N	P=0.500	P=0.515N	P=0.247N
MAX-ISO-POLY-3	P=0.117N	P=0.325	P=0.276N	P=0.076N

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 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Eye: Retina Atrophy</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	3/50 (6%)	2/48 (4%)	1/50 (2%)
POLY-3 RATE (b)	2/43.59	3/42.93	2/45.02	1/43.48
POLY-3 PERCENT (g)	4.6%	7%	4.4%	2.3%
TERMINAL (d)	2/33 (6%)	3/34 (9%)	2/34 (6%)	1/33 (3%)
FIRST INCIDENCE	729 (T)	729 (T)	729 (T)	729 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.307N	P=0.493	P=0.682N	P=0.501N
POLY 1.5	P=0.308N	P=0.494	P=0.692N	P=0.503N
POLY 6	P=0.303N	P=0.494	P=0.672N	P=0.497N
COCH-ARM / FISHERS	P=0.304N	P=0.500	P=0.676	P=0.500N
MAX-ISO-POLY-3	P=0.361N	P=0.319	P=0.487N	P=0.281N

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 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Harderian Gland Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	17/50 (34%)	7/50 (14%)	12/50 (24%)	6/50 (12%)
POLY-3 RATE (b)	17/43.69	7/42.93	12/46.30	6/43.48
POLY-3 PERCENT (g)	38.9%	16.3%	25.9%	13.8%
TERMINAL (d)	16/33 (49%)	7/34 (21%)	9/34 (27%)	6/33 (18%)
FIRST INCIDENCE	704	729 (T)	653	729 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.031N*	P=0.015N*	P=0.135N	P=0.006N**
POLY 1.5	P=0.033N*	P=0.015N*	P=0.157N	P=0.007N**
POLY 6	P=0.028N*	P=0.013N*	P=0.111N	P=0.005N**
COCH-ARM / FISHERS	P=0.036N*	P=0.017N*	P=0.189N	P=0.008N**
MAX-ISO-POLY-3	P=0.005N**	P=0.008N**	P=0.098N	P=0.003N**

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DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Harderian Gland Hypertrophy</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	3/50 (6%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/43.59	3/42.93	0/45.98	0/43.48
POLY-3 PERCENT (g)	4.6%	7%	0%	0%
TERMINAL (d)	2/33 (6%)	3/34 (9%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	729 (T)	729 (T)	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.099N	P=0.493	P=0.225N	P=0.238N
POLY 1.5	P=0.099N	P=0.494	P=0.230N	P=0.239N
POLY 6	P=0.098N	P=0.494	P=0.220N	P=0.235N
COCH-ARM / FISHERS	P=0.099N	P=0.500	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.084N	P=0.319	P=0.076N	P=0.076N

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 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Heart</b>				
<b>Cardiomyopathy</b>				
<b>LESION RATES</b>				
<b>OVERALL (a)</b>	28/50 (56%)	40/50 (80%)	32/50 (64%)	33/50 (66%)
<b>POLY-3 RATE (b)</b>	28/46.04	40/46.97	32/48.05	33/45.36
<b>POLY-3 PERCENT (g)</b>	60.8%	85.2%	66.6%	72.8%
<b>TERMINAL (d)</b>	20/33 (61%)	29/34 (85%)	22/34 (65%)	25/33 (76%)
<b>FIRST INCIDENCE</b>	535	429	564	504
<b>STATISTICAL TESTS</b>				
<b>POLY 3</b>	P=0.466	P=0.005**	P=0.354	P=0.154
<b>POLY 1.5</b>	P=0.484	P=0.005**	P=0.315	P=0.163
<b>POLY 6</b>	P=0.456	P=0.005**	P=0.404	P=0.151
<b>COCH-ARM / FISHERS</b>	P=0.549	P=0.009**	P=0.270	P=0.206
<b>MAX-ISO-POLY-3</b>	P=0.104	P=0.002**	P=0.282	P=0.107

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 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Kidney Cyst</b>				
<b>LESION RATES</b>				
OVERALL (a)	4/50 (8%)	1/50 (2%)	3/49 (6%)	0/50 (0%)
POLY-3 RATE (b)	4/43.59	1/43.37	3/46.31	0/43.48
POLY-3 PERCENT (g)	9.2%	2.3%	6.5%	0%
TERMINAL (d)	4/33 (12%)	0/34 (0%)	1/34 (3%)	0/33 (0%)
FIRST INCIDENCE	729 (T)	603	620	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.091N	P=0.180N	P=0.467N	P=0.060N
POLY 1.5	P=0.091N	P=0.181N	P=0.484N	P=0.061N
POLY 6	P=0.090N	P=0.176N	P=0.449N	P=0.058N
COCH-ARM / FISHERS	P=0.091N	P=0.181N	P=0.511N	P=0.059N
MAX-ISO-POLY-3	P=0.033N*	P=0.085N	P=0.323N	P=0.019N*

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Kidney</b>				
<b>Hydronephrosis</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	1/50 (2%)	2/49 (4%)	0/50 (0%)
POLY-3 RATE (b)	0/43.59	1/43.37	2/46.61	0/43.48
POLY-3 PERCENT (g)	0%	2.3%	4.3%	0%
TERMINAL (d)	0/33 (0%)	0/34 (0%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	---	603	564	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.502N	P=0.499	P=0.253	(e)
POLY 1.5	P=0.504N	P=0.499	P=0.245	(e)
POLY 6	P=0.498N	P=0.501	P=0.261	(e)
COCH-ARM / FISHERS	P=0.501N	P=0.500	P=0.242	(e)
MAX-ISO-POLY-3	P=0.344	P=0.158	P=0.092	(e)



Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Kidney Inflammation</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	3/50 (6%)	2/49 (4%)	4/50 (8%)
POLY-3 RATE (b)	0/43.59	3/43.95	2/46.44	4/45.42
POLY-3 PERCENT (g)	0%	6.8%	4.3%	8.8%
TERMINAL (d)	0/33 (0%)	1/34 (3%)	1/34 (3%)	1/33 (3%)
FIRST INCIDENCE	---	505	564	202
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.121	P=0.120	P=0.252	P=0.065
POLY 1.5	P=0.117	P=0.119	P=0.244	P=0.063
POLY 6	P=0.126	P=0.122	P=0.259	P=0.069
COCH-ARM / FISHERS	P=0.112	P=0.121	P=0.242	P=0.059
MAX-ISO-POLY-3	P=0.051	P=0.039*	P=0.091	P=0.024*

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Kidney Nephropathy</b>				
<b>LESION RATES</b>				
OVERALL (a)	43/50 (86%)	38/50 (76%)	38/49 (78%)	38/50 (76%)
POLY-3 RATE (b)	43/47.63	38/44.81	38/48.14	38/45.38
POLY-3 PERCENT (g)	90.3%	84.8%	78.9%	83.7%
TERMINAL (d)	30/33 (91%)	30/34 (88%)	25/34 (74%)	28/33 (85%)
FIRST INCIDENCE	494	603	564	611
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.334N	P=0.297N	P=0.096N	P=0.249N
POLY 1.5	P=0.317N	P=0.227N	P=0.126N	P=0.214N
POLY 6	P=0.340N	P=0.385N	P=0.074N	P=0.278N
COCH-ARM / FISHERS	P=0.261N	P=0.154N	P=0.204N	P=0.154N
MAX-ISO-POLY-3	P=0.175N	P=0.197N	P=0.056N	P=0.162N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Kidney: Renal Tubule Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/49 (0%)	3/50 (6%)
POLY-3 RATE (b)	0/43.59	0/42.93	0/45.90	3/43.51
POLY-3 PERCENT (g)	0%	0%	0%	6.9%
TERMINAL (d)	0/33 (0%)	0/34 (0%)	0/34 (0%)	2/33 (6%)
FIRST INCIDENCE	---	---	---	722
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.008**	(e)	(e)	P=0.118
POLY 1.5	P=0.008**	(e)	(e)	P=0.117
POLY 6	P=0.008**	(e)	(e)	P=0.120
COCH-ARM / FISHERS	P=0.009**	(e)	(e)	P=0.121
MAX-ISO-POLY-3	P=0.010**	(e)	(e)	P=0.038*

Experiment Number: 20515 - 03  
Test Type: CHRONIC  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Metal working fluids (CIMSTAR 3800)  
CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
Time Report Requested: 08:51:01  
First Dose M/F: 04/14/08 / 04/14/08  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Kidney: Transitional Epithelium Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	1/50 (2%)	1/49 (2%)	0/50 (0%)
POLY-3 RATE (b)	1/43.59	1/42.93	1/45.90	0/43.48
POLY-3 PERCENT (g)	2.3%	2.3%	2.2%	0%
TERMINAL (d)	1/33 (3%)	1/34 (3%)	1/34 (3%)	0/33 (0%)
FIRST INCIDENCE	729 (T)	729 (T)	729 (T)	---
<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: 20515 - 03  
Test Type: CHRONIC  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Metal working fluids (CIMSTAR 3800)  
CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
Time Report Requested: 08:51:01  
First Dose M/F: 04/14/08 / 04/14/08  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<hr/>				
Larynx Inflammation Acute				
<hr/>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/43.59	1/43.60	0/45.98	0/43.48
POLY-3 PERCENT (g)	0%	2.3%	0%	0%
TERMINAL (d)	0/33 (0%)	0/34 (0%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	---	505	---	---
<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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Larynx</b>				
<b>Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	2/50 (4%)	2/50 (4%)	1/50 (2%)
POLY-3 RATE (b)	0/43.59	2/43.13	2/45.98	1/43.48
POLY-3 PERCENT (g)	0%	4.6%	4.4%	2.3%
TERMINAL (d)	0/33 (0%)	1/34 (3%)	2/34 (6%)	1/33 (3%)
FIRST INCIDENCE	---	677	729 (T)	729 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.633	P=0.235	P=0.249	P=0.500
POLY 1.5	P=0.631	P=0.235	P=0.244	P=0.498
POLY 6	P=0.639	P=0.236	P=0.255	P=0.502
COCH-ARM / FISHERS	P=0.634	P=0.247	P=0.247	P=0.500
MAX-ISO-POLY-3	P=0.239	P=0.076	P=0.088	P=0.158

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Larynx Metaplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	47/50 (94%)	50/50 (100%)	50/50 (100%)
POLY-3 RATE (b)	1/43.59	47/50.00	50/50.00	50/50.00
POLY-3 PERCENT (g)	2.3%	94%	100%	100%
TERMINAL (d)	1/33 (3%)	31/34 (91%)	34/34 (100%)	33/33 (100%)
FIRST INCIDENCE	729 (T)	286	309	202
<b>STATISTICAL TESTS</b>				
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	P<0.001**	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver</b>				
<b>Angiectasis</b>				
<b>LESION RATES</b>				
<b>OVERALL (a)</b>	3/50 (6%)	7/50 (14%)	8/50 (16%)	7/50 (14%)
<b>POLY-3 RATE (b)</b>	3/43.69	7/43.32	8/45.98	7/43.48
<b>POLY-3 PERCENT (g)</b>	6.9%	16.2%	17.4%	16.1%
<b>TERMINAL (d)</b>	2/33 (6%)	6/34 (18%)	8/34 (24%)	7/33 (21%)
<b>FIRST INCIDENCE</b>	704	620	729 (T)	729 (T)
<b>STATISTICAL TESTS</b>				
<b>POLY 3</b>	P=0.284	P=0.152	P=0.114	P=0.154
<b>POLY 1.5</b>	P=0.283	P=0.153	P=0.108	P=0.153
<b>POLY 6</b>	P=0.289	P=0.154	P=0.122	P=0.157
<b>COCH-ARM / FISHERS</b>	P=0.290	P=0.159	P=0.100	P=0.159
<b>MAX-ISO-POLY-3</b>	P=0.153	P=0.087	P=0.068	P=0.088



Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver</b>				
<b>Basophilic Focus</b>				
<b>LESION RATES</b>				
OVERALL (a)	11/50 (22%)	20/50 (40%)	18/50 (36%)	18/50 (36%)
POLY-3 RATE (b)	11/44.54	20/43.13	18/46.99	18/45.22
POLY-3 PERCENT (g)	24.7%	46.4%	38.3%	39.8%
TERMINAL (d)	7/33 (21%)	18/34 (53%)	12/34 (35%)	13/33 (39%)
FIRST INCIDENCE	597	704	564	395
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.291	P=0.025*	P=0.118	P=0.093
POLY 1.5	P=0.276	P=0.030*	P=0.106	P=0.090
POLY 6	P=0.316	P=0.022*	P=0.133	P=0.100
COCH-ARM / FISHERS	P=0.270	P=0.041*	P=0.093	P=0.093
MAX-ISO-POLY-3	P=0.080	P=0.016*	P=0.085	P=0.062

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver</b>				
<b>Clear Cell Focus</b>				
<b>LESION RATES</b>				
OVERALL (a)	29/50 (58%)	26/50 (52%)	17/50 (34%)	26/50 (52%)
POLY-3 RATE (b)	29/44.77	26/42.98	17/46.12	26/44.60
POLY-3 PERCENT (g)	64.8%	60.5%	36.9%	58.3%
TERMINAL (d)	22/33 (67%)	25/34 (74%)	14/34 (41%)	21/33 (64%)
FIRST INCIDENCE	599	717	704	611
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.433N	P=0.420N	P=0.005N**	P=0.336N
POLY 1.5	P=0.455N	P=0.390N	P=0.007N**	P=0.352N
POLY 6	P=0.393N	P=0.462N	P=0.003N**	P=0.305N
COCH-ARM / FISHERS	P=0.458N	P=0.344N	P=0.013N*	P=0.344N
MAX-ISO-POLY-3	P=0.069N	P=0.335N	P=0.003N**	P=0.259N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
Liver Fatty Change				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/43.59	0/42.93	0/45.98	1/43.48
POLY-3 PERCENT (g)	0%	0%	0%	2.3%
TERMINAL (d)	0/33 (0%)	0/34 (0%)	0/34 (0%)	1/33 (3%)
FIRST INCIDENCE	---	---	---	729 (T)
<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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver</b>				
<b>Mixed Cell Focus</b>				
<b>LESION RATES</b>				
OVERALL (a)	3/50 (6%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	3/43.59	0/42.93	0/45.98	1/43.48
POLY-3 PERCENT (g)	6.9%	0%	0%	2.3%
TERMINAL (d)	3/33 (9%)	0/34 (0%)	0/34 (0%)	1/33 (3%)
FIRST INCIDENCE	729 (T)	---	---	729 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.471N	P=0.121N	P=0.109N	P=0.306N
POLY 1.5	P=0.471N	P=0.121N	P=0.113N	P=0.308N
POLY 6	P=0.472N	P=0.120N	P=0.105N	P=0.301N
COCH-ARM / FISHERS	P=0.472N	P=0.121N	P=0.121N	P=0.309N
MAX-ISO-POLY-3	P=0.044N*	P=0.040N*	P=0.038N*	P=0.155N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver</b>				
<b>Necrosis</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	3/50 (6%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	2/44.89	3/43.84	1/46.90	1/43.62
POLY-3 PERCENT (g)	4.5%	6.8%	2.1%	2.3%
TERMINAL (d)	0/33 (0%)	1/34 (3%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	345	547	309	695
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.318N	P=0.489	P=0.485N	P=0.510N
POLY 1.5	P=0.317N	P=0.491	P=0.491N	P=0.509N
POLY 6	P=0.318N	P=0.492	P=0.479N	P=0.508N
COCH-ARM / FISHERS	P=0.308N	P=0.500	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.340N	P=0.316	P=0.272N	P=0.292N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver: Bile Duct Cyst</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	1/43.59	1/42.93	0/45.98	0/43.48
POLY-3 PERCENT (g)	2.3%	2.3%	0%	0%
TERMINAL (d)	1/33 (3%)	1/34 (3%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	729 (T)	729 (T)	---	---
<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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver: Bile Duct Dilatation</b>				
<b>LESION RATES</b>				
OVERALL (a)	3/50 (6%)	2/50 (4%)	2/50 (4%)	4/50 (8%)
POLY-3 RATE (b)	3/43.67	2/42.93	2/45.98	4/43.48
POLY-3 PERCENT (g)	6.9%	4.7%	4.4%	9.2%
TERMINAL (d)	2/33 (6%)	2/34 (6%)	2/34 (6%)	4/33 (12%)
FIRST INCIDENCE	710	729 (T)	729 (T)	729 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.317	P=0.508N	P=0.477N	P=0.498
POLY 1.5	P=0.315	P=0.506N	P=0.486N	P=0.495
POLY 6	P=0.320	P=0.507N	P=0.466N	P=0.503
COCH-ARM / FISHERS	P=0.317	P=0.500N	P=0.500N	P=0.500
MAX-ISO-POLY-3	P=0.370	P=0.331N	P=0.307N	P=0.345

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver: Bile Duct Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	2/50 (4%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	1/44.00	2/43.03	0/45.98	0/43.48
POLY-3 PERCENT (g)	2.3%	4.7%	0%	0%
TERMINAL (d)	0/33 (0%)	1/34 (3%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	612	704	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.228N	P=0.492	P=0.491N	P=0.502N
POLY 1.5	P=0.227N	P=0.494	P=0.495N	P=0.503N
POLY 6	P=0.228N	P=0.492	P=0.487N	P=0.501N
COCH-ARM / FISHERS	P=0.224N	P=0.500	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.176N	P=0.276	P=0.158N	P=0.161N



Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lung Inflammation Acute</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/43.59	2/43.60	0/45.98	0/43.48
POLY-3 PERCENT (g)	0%	4.6%	0%	0%
TERMINAL (d)	0/33 (0%)	1/34 (3%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	---	505	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.389N	P=0.237	(e)	(e)
POLY 1.5	P=0.389N	P=0.236	(e)	(e)
POLY 6	P=0.387N	P=0.239	(e)	(e)
COCH-ARM / FISHERS	P=0.387N	P=0.247	(e)	(e)
MAX-ISO-POLY-3	P=0.255N	P=0.076	(e)	(e)

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lung</b>				
<b>Inflammation Lymphohistiocytic</b>				
<b>LESION RATES</b>				
OVERALL (a)	6/50 (12%)	14/50 (28%)	41/50 (82%)	47/50 (94%)
POLY-3 RATE (b)	6/45.24	14/43.47	41/49.72	47/47.60
POLY-3 PERCENT (g)	13.3%	32.2%	82.5%	98.7%
TERMINAL (d)	2/33 (6%)	11/34 (32%)	26/34 (77%)	33/33 (100%)
FIRST INCIDENCE	597	620	309	395
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	P=0.027*	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P=0.031*	P<0.001**	P<0.001**
POLY 6	P<0.001**	P=0.024*	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.039*	P<0.001**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P=0.016*	P<0.001**	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lung: Alveolar Epithelium Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	4/50 (8%)	6/50 (12%)	11/50 (22%)	13/50 (26%)
POLY-3 RATE (b)	4/44.03	6/43.75	11/46.59	13/44.76
POLY-3 PERCENT (g)	9.1%	13.7%	23.6%	29%
TERMINAL (d)	3/33 (9%)	4/34 (12%)	9/34 (27%)	8/33 (24%)
FIRST INCIDENCE	599	564	564	611
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.012*	P=0.365	P=0.055	P=0.015*
POLY 1.5	P=0.011*	P=0.365	P=0.051	P=0.014*
POLY 6	P=0.014*	P=0.370	P=0.061	P=0.017*
COCH-ARM / FISHERS	P=0.012*	P=0.370	P=0.045*	P=0.016*
MAX-ISO-POLY-3	P=0.013*	P=0.249	P=0.033*	P=0.008**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lung: Bronchus-Associated Lymphoid Tissue Hyperplasia Lymphohistiocytic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	1/50 (2%)	5/50 (10%)	19/50 (38%)
POLY-3 RATE (b)	0/43.59	1/43.03	5/45.98	19/44.84
POLY-3 PERCENT (g)	0%	2.3%	10.9%	42.4%
TERMINAL (d)	0/33 (0%)	0/34 (0%)	5/34 (15%)	14/33 (42%)
FIRST INCIDENCE	---	704	729 (T)	611
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	P=0.497	P=0.035*	P<0.001**
POLY 1.5	P<0.001**	P=0.498	P=0.033*	P<0.001**
POLY 6	P<0.001**	P=0.498	P=0.037*	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P=0.500	P=0.028*	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P=0.158	P=0.013*	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node, Bronchial Hyperplasia Lymphohistiocytic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/42 (0%)	0/40 (0%)	10/37 (27%)	28/35 (80%)
POLY-3 RATE (b)	0/35.69	0/33.03	10/35.55	28/32.43
POLY-3 PERCENT (g)	0%	0%	28.1%	86.4%
TERMINAL (d)	0/26 (0%)	0/25 (0%)	7/26 (27%)	19/23 (83%)
FIRST INCIDENCE	---	---	564	504
<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**	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node, Mandibular Ectasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/46 (2%)	2/46 (4%)	0/44 (0%)	0/45 (0%)
POLY-3 RATE (b)	1/40.23	2/39.47	0/39.98	0/39.20
POLY-3 PERCENT (g)	2.5%	5.1%	0%	0%
TERMINAL (d)	1/32 (3%)	2/31 (7%)	0/28 (0%)	0/30 (0%)
FIRST INCIDENCE	729 (T)	729 (T)	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.231N	P=0.493	P=0.501N	P=0.505N
POLY 1.5	P=0.231N	P=0.495	P=0.504N	P=0.506N
POLY 6	P=0.230N	P=0.493	P=0.499N	P=0.503N
COCH-ARM / FISHERS	P=0.228N	P=0.500	P=0.511N	P=0.505N
MAX-ISO-POLY-3	P=0.181N	P=0.276	P=0.161N	P=0.164N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node, Mediastinal Hyperplasia Lymphohistiocytic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/46 (0%)	0/45 (0%)	4/50 (8%)	29/49 (59%)
POLY-3 RATE (b)	0/40.72	0/39.38	4/46.11	29/43.97
POLY-3 PERCENT (g)	0%	0%	8.7%	66%
TERMINAL (d)	0/32 (0%)	0/31 (0%)	2/34 (6%)	22/32 (69%)
FIRST INCIDENCE	---	---	704	611
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	(e)	P=0.077	P<0.001**
POLY 1.5	P<0.001**	(e)	P=0.075	P<0.001**
POLY 6	P<0.001**	(e)	P=0.080	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	P=0.069	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	P=0.031*	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node, Mesenteric Ectasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/49 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/43.59	0/42.93	0/45.90	0/43.48
POLY-3 PERCENT (g)	4.6%	0%	0%	0%
TERMINAL (d)	2/33 (6%)	0/34 (0%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	729 (T)	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.260N	P=0.240N	P=0.226N	P=0.238N
POLY 1.5	P=0.259N	P=0.240N	P=0.232N	P=0.239N
POLY 6	P=0.261N	P=0.240N	P=0.220N	P=0.235N
COCH-ARM / FISHERS	P=0.260N	P=0.247N	P=0.253N	P=0.247N
MAX-ISO-POLY-3	P=0.036N*	P=0.079N	P=0.077N	P=0.076N



Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node: Iliac Ectasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/12 (17%)	0/5 (0%)	1/7 (14%)	1/5 (20%)
POLY-3 RATE (b)	2/11.07	0/4.08	1/6.86	1/3.92
POLY-3 PERCENT (g)	18.1%	0%	14.6%	25.5%
TERMINAL (d)	1/7 (14%)	0/3 (0%)	0/3 (0%)	0/2 (0%)
FIRST INCIDENCE	704	---	704	675
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.518	P=0.475N	P=0.670N	P=0.649
POLY 1.5	P=0.514	P=0.462N	P=0.677N	P=0.650
POLY 6	P=0.534	P=0.492N	P=0.659N	P=0.657
COCH-ARM / FISHERS	P=0.556	P=0.485N	P=0.773	P=0.676
MAX-ISO-POLY-3	P=0.533	P=0.241N	P=0.431N	P=0.406

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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Date Report Requested: 05/08/2013  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node: Lumbar Ectasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/12 (17%)	2/5 (40%)	2/7 (29%)	0/5 (0%)
POLY-3 RATE (b)	2/11.35	2/4.08	2/6.77	0/3.72
POLY-3 PERCENT (g)	17.6%	49.1%	29.5%	0%
TERMINAL (d)	1/7 (14%)	2/3 (67%)	1/3 (33%)	0/2 (0%)
FIRST INCIDENCE	619	729 (T)	726	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.379N	P=0.288	P=0.498	P=0.504N
POLY 1.5	P=0.365N	P=0.313	P=0.494	P=0.494N
POLY 6	P=0.390N	P=0.257	P=0.501	P=0.513N
COCH-ARM / FISHERS	P=0.293N	P=0.330	P=0.475	P=0.485N
MAX-ISO-POLY-3	P=0.353N	P=0.168	P=0.305	P=0.267N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node: Lumbar Infiltration Cellular Plasma Cell</b>				
<b>LESION RATES</b>				
OVERALL (a)	5/12 (42%)	1/5 (20%)	2/7 (29%)	0/5 (0%)
POLY-3 RATE (b)	5/11.51	1/4.42	2/6.79	0/3.72
POLY-3 PERCENT (g)	43.4%	22.6%	29.5%	0%
TERMINAL (d)	2/7 (29%)	0/3 (0%)	1/3 (33%)	0/2 (0%)
FIRST INCIDENCE	599	633	722	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.156N	P=0.428N	P=0.463N	P=0.192N
POLY 1.5	P=0.150N	P=0.413N	P=0.466N	P=0.177N
POLY 6	P=0.161N	P=0.442N	P=0.462N	P=0.205N
COCH-ARM / FISHERS	P=0.111N	P=0.395N	P=0.474N	P=0.128N
MAX-ISO-POLY-3	P=0.207N	P=0.275N	P=0.304N	P=0.122N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node: Renal Ectasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/12 (0%)	2/5 (40%)	0/7 (0%)	2/5 (40%)
POLY-3 RATE (b)	0/10.97	2/4.42	0/6.76	2/4.69
POLY-3 PERCENT (g)	0%	45.2%	0%	42.6%
TERMINAL (d)	0/7 (0%)	1/3 (33%)	0/3 (0%)	1/2 (50%)
FIRST INCIDENCE	---	633	---	202
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.090	P=0.038*	(e)	P=0.043*
POLY 1.5	P=0.090	P=0.039*	(e)	P=0.043*
POLY 6	P=0.089	P=0.037*	(e)	P=0.043*
COCH-ARM / FISHERS	P=0.115	P=0.074	(e)	P=0.074
MAX-ISO-POLY-3	P=0.030*	P=0.011*	(e)	P=0.012*

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Mammary Gland</b>				
<b>Galactocele</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/6 (17%)	0/6 (0%)	0/3 (0%)	0/4 (0%)
POLY-3 RATE (b)	1/4.85	0/5.62	0/2.60	0/3.12
POLY-3 PERCENT (g)	20.6%	0%	0%	0%
TERMINAL (d)	0/2 (0%)	0/5 (0%)	0/1 (0%)	0/1 (0%)
FIRST INCIDENCE	627	---	---	---
<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: 20515 - 03  
Test Type: CHRONIC  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Metal working fluids (CIMSTAR 3800)  
CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
Time Report Requested: 08:51:01  
First Dose M/F: 04/14/08 / 04/14/08  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Mammary Gland Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/6 (0%)	0/6 (0%)	0/3 (0%)	0/4 (0%)
POLY-3 RATE (b)	0/4.48	0/5.62	0/2.60	0/3.12
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/2 (0%)	0/5 (0%)	0/1 (0%)	0/1 (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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Mesentery: Fat Necrosis</b>				
<b>LESION RATES</b>				
OVERALL (a)	6/7 (86%)	7/7 (100%)	1/1 (100%)	0/2 (0%)
POLY-3 RATE (b)	6/7.00	7/7.00	1/1.00	0/1.49
POLY-3 PERCENT (g)	85.7%	100%	100%	0%
TERMINAL (d)	3/4 (75%)	5/5 (100%)	1/1 (100%)	0/0 (0%)
FIRST INCIDENCE	704	562	729 (T)	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.011N*	P=0.500	P=0.856	P=0.107N
POLY 1.5	P=0.002N**	P=0.500	P=0.856	P=0.060N
POLY 6	P=0.062N	P=0.500	P=0.856	P=0.222N
COCH-ARM / FISHERS	P=0.010N**	P=0.500	P=0.875	P=0.083N
MAX-ISO-POLY-3	P=0.007N**	P=0.159	P=0.393	P=0.036N*

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Nose</b>				
<b>Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	4/50 (8%)	1/50 (2%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	4/43.65	1/43.13	1/46.30	0/43.48
POLY-3 PERCENT (g)	9.2%	2.3%	2.2%	0%
TERMINAL (d)	3/33 (9%)	0/34 (0%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	715	677	639	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.074N	P=0.182N	P=0.161N	P=0.060N
POLY 1.5	P=0.074N	P=0.182N	P=0.169N	P=0.061N
POLY 6	P=0.074N	P=0.179N	P=0.153N	P=0.059N
COCH-ARM / FISHERS	P=0.076N	P=0.181N	P=0.181N	P=0.059N
MAX-ISO-POLY-3	P=0.015N*	P=0.087N	P=0.079N	P=0.020N*



Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Nose: Goblet Cell Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	20/50 (40%)	25/50 (50%)	34/50 (68%)
POLY-3 RATE (b)	0/43.59	20/44.82	25/47.24	34/47.69
POLY-3 PERCENT (g)	0%	44.6%	52.9%	71.3%
TERMINAL (d)	0/33 (0%)	15/34 (44%)	19/34 (56%)	22/33 (67%)
FIRST INCIDENCE	---	505	564	202
<b>STATISTICAL TESTS</b>				
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	P<0.001**	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Nose: Olfactory Epithelium Accumulation, Hyaline Droplet</b>				
<b>LESION RATES</b>				
OVERALL (a)	19/50 (38%)	50/50 (100%)	50/50 (100%)	50/50 (100%)
POLY-3 RATE (b)	19/45.32	50/50.00	50/50.00	50/50.00
POLY-3 PERCENT (g)	41.9%	100%	100%	100%
TERMINAL (d)	15/33 (46%)	34/34 (100%)	34/34 (100%)	33/33 (100%)
FIRST INCIDENCE	520	286	309	202
<b>STATISTICAL TESTS</b>				
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	P<0.001**	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Nose: Olfactory Epithelium, Glands Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	39/50 (78%)	47/50 (94%)	50/50 (100%)
POLY-3 RATE (b)	1/43.59	39/48.10	47/48.54	50/50.00
POLY-3 PERCENT (g)	2.3%	81.1%	96.8%	100%
TERMINAL (d)	1/33 (3%)	28/34 (82%)	33/34 (97%)	33/33 (100%)
FIRST INCIDENCE	729 (T)	429	564	202
<b>STATISTICAL TESTS</b>				
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	P<0.001**	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Nose: Respiratory Epithelium Accumulation, Hyaline Droplet</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	17/50 (34%)	25/50 (50%)	29/50 (58%)
POLY-3 RATE (b)	0/43.59	17/44.94	25/47.10	29/47.62
POLY-3 PERCENT (g)	0%	37.8%	53.1%	60.9%
TERMINAL (d)	0/33 (0%)	12/34 (35%)	21/34 (62%)	18/33 (55%)
FIRST INCIDENCE	---	439	564	202
<b>STATISTICAL TESTS</b>				
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	P<0.001**	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Pancreas Atrophy</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	4/50 (8%)	4/49 (8%)	5/50 (10%)
POLY-3 RATE (b)	1/43.59	4/43.56	4/46.21	5/44.50
POLY-3 PERCENT (g)	2.3%	9.2%	8.7%	11.2%
TERMINAL (d)	1/33 (3%)	2/34 (6%)	3/34 (9%)	1/33 (3%)
FIRST INCIDENCE	729 (T)	547	646	611
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.177	P=0.178	P=0.197	P=0.106
POLY 1.5	P=0.171	P=0.177	P=0.188	P=0.102
POLY 6	P=0.189	P=0.181	P=0.207	P=0.113
COCH-ARM / FISHERS	P=0.170	P=0.181	P=0.175	P=0.102
MAX-ISO-POLY-3	P=0.101	P=0.083	P=0.102	P=0.048*

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Pancreas</b>				
<b>Basophilic Focus</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	4/50 (8%)	2/49 (4%)	1/50 (2%)
POLY-3 RATE (b)	2/44.04	4/43.28	2/45.90	1/43.48
POLY-3 PERCENT (g)	4.5%	9.2%	4.4%	2.3%
TERMINAL (d)	1/33 (3%)	3/34 (9%)	2/34 (6%)	1/33 (3%)
FIRST INCIDENCE	597	633	729 (T)	729 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.246N	P=0.329	P=0.679N	P=0.504N
POLY 1.5	P=0.246N	P=0.331	P=0.687N	P=0.505N
POLY 6	P=0.245N	P=0.329	P=0.672N	P=0.503N
COCH-ARM / FISHERS	P=0.240N	P=0.339	P=0.684	P=0.500N
MAX-ISO-POLY-3	P=0.275N	P=0.196	P=0.483N	P=0.285N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Pituitary Gland: Pars Distalis Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	14/49 (29%)	21/50 (42%)	13/50 (26%)	16/50 (32%)
POLY-3 RATE (b)	14/43.49	21/43.95	13/46.02	16/43.58
POLY-3 PERCENT (g)	32.2%	47.8%	28.3%	36.7%
TERMINAL (d)	12/32 (38%)	17/34 (50%)	11/34 (32%)	15/33 (46%)
FIRST INCIDENCE	597	564	722	704
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.499N	P=0.098	P=0.430N	P=0.413
POLY 1.5	P=0.494N	P=0.102	P=0.449N	P=0.417
POLY 6	P=0.500N	P=0.099	P=0.411N	P=0.415
COCH-ARM / FISHERS	P=0.470N	P=0.117	P=0.475N	P=0.440
MAX-ISO-POLY-3	P=0.369N	P=0.064	P=0.345N	P=0.328

Experiment Number: 20515 - 03  
Test Type: CHRONIC  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Metal working fluids (CIMSTAR 3800)  
CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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First Dose M/F: 04/14/08 / 04/14/08  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Pituitary Gland: Pars Intermedia Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	3/49 (6%)	1/50 (2%)	1/50 (2%)	4/50 (8%)
POLY-3 RATE (b)	3/42.59	1/42.93	1/45.98	4/43.48
POLY-3 PERCENT (g)	7%	2.3%	2.2%	9.2%
TERMINAL (d)	3/32 (9%)	1/34 (3%)	1/34 (3%)	4/33 (12%)
FIRST INCIDENCE	729 (T)	729 (T)	729 (T)	729 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.220	P=0.302N	P=0.278N	P=0.511
POLY 1.5	P=0.219	P=0.302N	P=0.287N	P=0.508
POLY 6	P=0.222	P=0.300N	P=0.269N	P=0.519
COCH-ARM / FISHERS	P=0.220	P=0.301N	P=0.301N	P=0.511
MAX-ISO-POLY-3	P=0.213	P=0.151N	P=0.143N	P=0.358



Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Preputial Gland Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	3/50 (6%)	5/50 (10%)	3/50 (6%)	3/50 (6%)
POLY-3 RATE (b)	3/44.47	5/44.23	3/46.51	3/44.20
POLY-3 PERCENT (g)	6.8%	11.3%	6.5%	6.8%
TERMINAL (d)	0/33 (0%)	2/34 (6%)	2/34 (6%)	2/33 (6%)
FIRST INCIDENCE	607	547	564	478
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.461N	P=0.353	P=0.641N	P=0.660
POLY 1.5	P=0.461N	P=0.353	P=0.650N	P=0.658
POLY 6	P=0.461N	P=0.356	P=0.634N	P=0.661
COCH-ARM / FISHERS	P=0.455N	P=0.357	P=0.661N	P=0.661N
MAX-ISO-POLY-3	P=0.537N	P=0.229	P=0.477N	P=0.496

Experiment Number: 20515 - 03  
Test Type: CHRONIC  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Metal working fluids (CIMSTAR 3800)  
CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
Time Report Requested: 08:51:01  
First Dose M/F: 04/14/08 / 04/14/08  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Prostate Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	12/50 (24%)	17/50 (34%)	12/50 (24%)	11/50 (22%)
POLY-3 RATE (b)	12/44.11	17/43.79	12/45.98	11/43.85
POLY-3 PERCENT (g)	27.2%	38.8%	26.1%	25.1%
TERMINAL (d)	10/33 (30%)	15/34 (44%)	12/34 (35%)	10/33 (30%)
FIRST INCIDENCE	607	547	729 (T)	627
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.261N	P=0.173	P=0.548N	P=0.507N
POLY 1.5	P=0.266N	P=0.176	P=0.566N	P=0.511N
POLY 6	P=0.251N	P=0.175	P=0.529N	P=0.496N
COCH-ARM / FISHERS	P=0.259N	P=0.189	P=0.592N	P=0.500N
MAX-ISO-POLY-3	P=0.338N	P=0.122	P=0.452N	P=0.409N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Prostate Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	2/50 (4%)	4/50 (8%)	2/50 (4%)
POLY-3 RATE (b)	1/44.04	2/43.86	4/46.15	2/44.03
POLY-3 PERCENT (g)	2.3%	4.6%	8.7%	4.5%
TERMINAL (d)	0/33 (0%)	0/34 (0%)	2/34 (6%)	0/33 (0%)
FIRST INCIDENCE	597	564	704	635
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.531	P=0.499	P=0.193	P=0.500
POLY 1.5	P=0.527	P=0.498	P=0.187	P=0.498
POLY 6	P=0.540	P=0.502	P=0.200	P=0.505
COCH-ARM / FISHERS	P=0.531	P=0.500	P=0.181	P=0.500
MAX-ISO-POLY-3	P=0.287	P=0.280	P=0.097	P=0.280

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Seminal Vesicle Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/48 (4%)	1/50 (2%)
POLY-3 RATE (b)	0/43.59	0/42.93	2/45.02	1/43.50
POLY-3 PERCENT (g)	0%	0%	4.4%	2.3%
TERMINAL (d)	0/33 (0%)	0/34 (0%)	2/34 (6%)	0/33 (0%)
FIRST INCIDENCE	---	---	729 (T)	725
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.382	(e)	P=0.244	P=0.500
POLY 1.5	P=0.379	(e)	P=0.238	P=0.498
POLY 6	P=0.389	(e)	P=0.251	P=0.502
COCH-ARM / FISHERS	P=0.378	(e)	P=0.237	P=0.500
MAX-ISO-POLY-3	P=0.184	(e)	P=0.085	P=0.158

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Skin</b>				
<b>Inflammation Chronic</b>				
<b>LESION RATES</b>				
<b>OVERALL (a)</b>	31/50 (62%)	23/50 (46%)	30/50 (60%)	22/50 (44%)
<b>POLY-3 RATE (b)</b>	31/46.14	23/44.47	30/47.79	22/45.14
<b>POLY-3 PERCENT (g)</b>	67.2%	51.7%	62.8%	48.7%
<b>TERMINAL (d)</b>	22/33 (67%)	18/34 (53%)	19/34 (56%)	16/33 (49%)
<b>FIRST INCIDENCE</b>	494	429	564	478
<b>STATISTICAL TESTS</b>				
<b>POLY 3</b>	P=0.099N	P=0.092N	P=0.407N	P=0.052N
<b>POLY 1.5</b>	P=0.105N	P=0.086N	P=0.448N	P=0.055N
<b>POLY 6</b>	P=0.089N	P=0.100N	P=0.359N	P=0.048N*
<b>COCH-ARM / FISHERS</b>	P=0.107N	P=0.080N	P=0.500N	P=0.054N
<b>MAX-ISO-POLY-3</b>	P=0.057N	P=0.064N	P=0.327N	P=0.034N*

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Spleen</b>				
<b>Hematopoietic Cell Proliferation</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	0/50 (0%)	4/50 (8%)	2/50 (4%)
POLY-3 RATE (b)	2/44.10	0/42.93	4/47.11	2/44.03
POLY-3 PERCENT (g)	4.5%	0%	8.5%	4.5%
TERMINAL (d)	0/33 (0%)	0/34 (0%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	597	---	564	611
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.484	P=0.243N	P=0.368	P=0.693
POLY 1.5	P=0.478	P=0.241N	P=0.355	P=0.691
POLY 6	P=0.495	P=0.244N	P=0.383	P=0.690N
COCH-ARM / FISHERS	P=0.475	P=0.247N	P=0.339	P=0.691N
MAX-ISO-POLY-3	P=0.272	P=0.081N	P=0.232	P=0.499

Experiment Number: 20515 - 03  
Test Type: CHRONIC  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Metal working fluids (CIMSTAR 3800)  
CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
Time Report Requested: 08:51:01  
First Dose M/F: 04/14/08 / 04/14/08  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Stomach, Forestomach Inflammation Acute</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/43.59	0/42.93	0/45.98	0/43.48
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/33 (0%)	0/34 (0%)	0/34 (0%)	0/33 (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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Stomach, Forestomach Ulcer</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	2/50 (4%)
POLY-3 RATE (b)	0/43.59	1/43.32	0/45.98	2/44.33
POLY-3 PERCENT (g)	0%	2.3%	0%	4.5%
TERMINAL (d)	0/33 (0%)	0/34 (0%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	---	620	---	478
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.151	P=0.499	(e)	P=0.241
POLY 1.5	P=0.149	P=0.498	(e)	P=0.238
POLY 6	P=0.154	P=0.501	(e)	P=0.245
COCH-ARM / FISHERS	P=0.149	P=0.500	(e)	P=0.247
MAX-ISO-POLY-3	P=0.085	P=0.158	(e)	P=0.080



Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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Date Report Requested: 05/08/2013  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Stomach, Glandular Necrosis</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	0/50 (0%)	1/49 (2%)	0/50 (0%)
POLY-3 RATE (b)	0/43.59	0/42.93	1/46.08	0/43.48
POLY-3 PERCENT (g)	0%	0%	2.2%	0%
TERMINAL (d)	0/33 (0%)	0/34 (0%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	---	---	684	---
<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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Testes</b>				
<b>Atrophy</b>				
<b>LESION RATES</b>				
OVERALL (a)	15/50 (30%)	8/50 (16%)	5/50 (10%)	5/50 (10%)
POLY-3 RATE (b)	15/45.55	8/43.47	5/46.36	5/44.37
POLY-3 PERCENT (g)	32.9%	18.4%	10.8%	11.3%
TERMINAL (d)	10/33 (30%)	7/34 (21%)	2/34 (6%)	3/33 (9%)
FIRST INCIDENCE	535	564	639	457
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.025N*	P=0.091N	P=0.008N**	P=0.011N*
POLY 1.5	P=0.026N*	P=0.085N	P=0.009N**	P=0.011N*
POLY 6	P=0.024N*	P=0.097N	P=0.008N**	P=0.011N*
COCH-ARM / FISHERS	P=0.028N*	P=0.077N	P=0.011N*	P=0.011N*
MAX-ISO-POLY-3	P=0.006N**	P=0.061N	P=0.004N**	P=0.006N**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Testes</b>				
<b>Edema</b>				
<b>LESION RATES</b>				
OVERALL (a)	16/50 (32%)	11/50 (22%)	18/50 (36%)	11/50 (22%)
POLY-3 RATE (b)	16/43.81	11/43.13	18/46.76	11/43.79
POLY-3 PERCENT (g)	36.5%	25.5%	38.5%	25.1%
TERMINAL (d)	13/33 (39%)	10/34 (29%)	12/34 (35%)	9/33 (27%)
FIRST INCIDENCE	704	677	564	675
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.232N	P=0.187N	P=0.509	P=0.175N
POLY 1.5	P=0.242N	P=0.189N	P=0.469	P=0.184N
POLY 6	P=0.216N	P=0.182N	P=0.556	P=0.161N
COCH-ARM / FISHERS	P=0.243N	P=0.184N	P=0.417	P=0.184N
MAX-ISO-POLY-3	P=0.202N	P=0.132N	P=0.423	P=0.122N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Testes: Artery</b>				
<b>Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/43.59	2/42.93	0/45.98	0/43.48
POLY-3 PERCENT (g)	0%	4.7%	0%	0%
TERMINAL (d)	0/33 (0%)	2/34 (6%)	0/34 (0%)	0/33 (0%)
FIRST INCIDENCE	---	729 (T)	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.391N	P=0.234	(e)	(e)
POLY 1.5	P=0.391N	P=0.234	(e)	(e)
POLY 6	P=0.391N	P=0.234	(e)	(e)
COCH-ARM / FISHERS	P=0.387N	P=0.247	(e)	(e)
MAX-ISO-POLY-3	P=0.252N	P=0.076	(e)	(e)

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Thyroid Gland: C-Cell Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	34/50 (68%)	30/50 (60%)	30/49 (61%)	28/50 (56%)
POLY-3 RATE (b)	34/47.21	30/45.50	30/46.50	28/44.46
POLY-3 PERCENT (g)	72%	65.9%	64.5%	63%
TERMINAL (d)	24/33 (73%)	23/34 (68%)	24/34 (71%)	23/33 (70%)
FIRST INCIDENCE	494	505	620	635
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.270N	P=0.337N	P=0.284N	P=0.235N
POLY 1.5	P=0.242N	P=0.314N	P=0.297N	P=0.205N
POLY 6	P=0.297N	P=0.353N	P=0.270N	P=0.263N
COCH-ARM / FISHERS	P=0.188N	P=0.266N	P=0.310N	P=0.151N
MAX-ISO-POLY-3	P=0.296N	P=0.262N	P=0.214N	P=0.178N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Thyroid Gland: Follicular Cell Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	5/50 (10%)	1/50 (2%)	5/49 (10%)	0/50 (0%)
POLY-3 RATE (b)	5/43.67	1/42.93	5/45.19	0/43.48
POLY-3 PERCENT (g)	11.5%	2.3%	11.1%	0%
TERMINAL (d)	4/33 (12%)	1/34 (3%)	4/34 (12%)	0/33 (0%)
FIRST INCIDENCE	710	729 (T)	704	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.063N	P=0.104N	P=0.609N	P=0.031N*
POLY 1.5	P=0.065N	P=0.104N	P=0.623N	P=0.031N*
POLY 6	P=0.061N	P=0.104N	P=0.592N	P=0.029N*
COCH-ARM / FISHERS	P=0.067N	P=0.102N	P=0.617	P=0.028N*
MAX-ISO-POLY-3	P=0.022N*	P=0.047N*	P=0.476N	P=0.010N**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Adrenal Cortex</b>				
<b>Angiectasis</b>				
<b>LESION RATES</b>				
<b>OVERALL (a)</b>	1/50 (2%)	1/50 (2%)	1/50 (2%)	2/50 (4%)
<b>POLY-3 RATE (b)</b>	1/44.94	1/43.71	1/46.49	2/45.65
<b>POLY-3 PERCENT (g)</b>	2.2%	2.3%	2.2%	4.4%
<b>TERMINAL (d)</b>	1/35 (3%)	1/32 (3%)	1/36 (3%)	2/29 (7%)
<b>FIRST INCIDENCE</b>	731 (T)	731 (T)	731 (T)	731 (T)
<b>STATISTICAL TESTS</b>				
<b>POLY 3</b>	P=0.373	P=0.755	P=0.753N	P=0.505
<b>POLY 1.5</b>	P=0.370	P=0.757	P=0.755N	P=0.504
<b>POLY 6</b>	P=0.374	P=0.750	P=0.751N	P=0.504
<b>COCH-ARM / FISHERS</b>	P=0.363	P=0.753N	P=0.753N	P=0.500
<b>MAX-ISO-POLY-3</b>	P=0.432	P=0.491	P=0.490N	P=0.287

Experiment Number: 20515 - 03  
Test Type: CHRONIC  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Metal working fluids (CIMSTAR 3800)  
CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
Time Report Requested: 08:51:01  
First Dose M/F: 04/14/08 / 04/14/08  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Adrenal Cortex Degeneration Cystic</b>				
<b>LESION RATES</b>				
OVERALL (a)	26/50 (52%)	23/50 (46%)	29/50 (58%)	35/50 (70%)
POLY-3 RATE (b)	26/46.91	23/45.80	29/48.03	35/49.31
POLY-3 PERCENT (g)	55.4%	50.2%	60.4%	71%
TERMINAL (d)	19/35 (54%)	15/32 (47%)	23/36 (64%)	17/29 (59%)
FIRST INCIDENCE	402	544	598	586
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.026*	P=0.383N	P=0.388	P=0.081
POLY 1.5	P=0.018*	P=0.367N	P=0.371	P=0.064
POLY 6	P=0.041*	P=0.401N	P=0.404	P=0.111
COCH-ARM / FISHERS	P=0.013*	P=0.345N	P=0.344	P=0.050*
MAX-ISO-POLY-3	P=0.041*	P=0.307N	P=0.312	P=0.057

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Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Adrenal Cortex Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	17/50 (34%)	20/50 (40%)	27/50 (54%)	22/50 (44%)
POLY-3 RATE (b)	17/45.07	20/45.17	27/47.08	22/46.92
POLY-3 PERCENT (g)	37.7%	44.3%	57.4%	46.9%
TERMINAL (d)	16/35 (46%)	15/32 (47%)	24/36 (67%)	17/29 (59%)
FIRST INCIDENCE	698	619	673	523
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.333	P=0.336	P=0.042*	P=0.246
POLY 1.5	P=0.310	P=0.338	P=0.039*	P=0.232
POLY 6	P=0.346	P=0.336	P=0.045*	P=0.254
COCH-ARM / FISHERS	P=0.269	P=0.339	P=0.035*	P=0.206
MAX-ISO-POLY-3	P=0.134	P=0.261	P=0.028*	P=0.189

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Adrenal Cortex Hypertrophy</b>				
<b>LESION RATES</b>				
OVERALL (a)	14/50 (28%)	20/50 (40%)	24/50 (48%)	21/50 (42%)
POLY-3 RATE (b)	14/45.10	20/46.16	24/47.58	21/46.49
POLY-3 PERCENT (g)	31%	43.3%	50.4%	45.2%
TERMINAL (d)	12/35 (34%)	12/32 (38%)	19/36 (53%)	16/29 (55%)
FIRST INCIDENCE	709	530	603	630
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.225	P=0.156	P=0.042*	P=0.116
POLY 1.5	P=0.220	P=0.152	P=0.037*	P=0.112
POLY 6	P=0.220	P=0.165	P=0.048*	P=0.116
COCH-ARM / FISHERS	P=0.205	P=0.146	P=0.032*	P=0.104
MAX-ISO-POLY-3	P=0.085	P=0.112	P=0.029*	P=0.082

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Adrenal Medulla Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/49 (4%)	2/50 (4%)	1/49 (2%)	0/49 (0%)
POLY-3 RATE (b)	2/44.33	2/43.71	1/45.49	0/44.65
POLY-3 PERCENT (g)	4.5%	4.6%	2.2%	0%
TERMINAL (d)	1/34 (3%)	2/32 (6%)	1/35 (3%)	0/28 (0%)
FIRST INCIDENCE	619	731 (T)	731 (T)	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.146N	P=0.689	P=0.491N	P=0.235N
POLY 1.5	P=0.147N	P=0.693N	P=0.494N	P=0.235N
POLY 6	P=0.147N	P=0.680	P=0.490N	P=0.238N
COCH-ARM / FISHERS	P=0.148N	P=0.684N	P=0.500N	P=0.247N
MAX-ISO-POLY-3	P=0.159N	P=0.493	P=0.275N	P=0.076N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Clitoral Gland Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	6/50 (12%)	4/46 (9%)	2/50 (4%)	1/49 (2%)
POLY-3 RATE (b)	6/45.55	4/40.18	2/46.49	1/44.76
POLY-3 PERCENT (g)	13.2%	10%	4.3%	2.2%
TERMINAL (d)	4/35 (11%)	2/29 (7%)	2/36 (6%)	1/29 (3%)
FIRST INCIDENCE	586	683	731 (T)	731 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.047N*	P=0.450N	P=0.126N	P=0.058N
POLY 1.5	P=0.048N*	P=0.438N	P=0.128N	P=0.058N
POLY 6	P=0.047N*	P=0.468N	P=0.126N	P=0.060N
COCH-ARM / FISHERS	P=0.051N	P=0.425N	P=0.134N	P=0.059N
MAX-ISO-POLY-3	P=0.037N*	P=0.329N	P=0.066N	P=0.025N*

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
Eye Cataract				
<b>LESION RATES</b>				
OVERALL (a)	0/49 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	0/44.10	0/43.71	1/46.49	0/45.65
POLY-3 PERCENT (g)	0%	0%	2.2%	0%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	1/36 (3%)	0/29 (0%)
FIRST INCIDENCE	---	---	731 (T)	---
<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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Eye: Retina Atrophy</b>				
<b>LESION RATES</b>				
OVERALL (a)	3/49 (6%)	4/50 (8%)	4/50 (8%)	2/50 (4%)
POLY-3 RATE (b)	3/44.89	4/43.89	4/46.49	2/45.65
POLY-3 PERCENT (g)	6.7%	9.1%	8.6%	4.4%
TERMINAL (d)	1/35 (3%)	3/32 (9%)	4/36 (11%)	2/29 (7%)
FIRST INCIDENCE	619	684	731 (T)	731 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.319N	P=0.488	P=0.519	P=0.492N
POLY 1.5	P=0.319N	P=0.499	P=0.518	P=0.490N
POLY 6	P=0.324N	P=0.471	P=0.516	P=0.501N
COCH-ARM / FISHERS	P=0.324N	P=0.511	P=0.511	P=0.490N
MAX-ISO-POLY-3	P=0.399N	P=0.338	P=0.366	P=0.318N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Harderian Gland Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	3/49 (6%)	3/50 (6%)	5/50 (10%)	4/50 (8%)
POLY-3 RATE (b)	3/44.10	3/43.71	5/46.65	4/45.90
POLY-3 PERCENT (g)	6.8%	6.9%	10.7%	8.7%
TERMINAL (d)	3/35 (9%)	3/32 (9%)	4/36 (11%)	2/29 (7%)
FIRST INCIDENCE	731 (T)	731 (T)	690	673
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.472	P=0.659	P=0.388	P=0.522
POLY 1.5	P=0.465	P=0.660N	P=0.381	P=0.519
POLY 6	P=0.477	P=0.648	P=0.393	P=0.521
COCH-ARM / FISHERS	P=0.450	P=0.651N	P=0.369	P=0.511
MAX-ISO-POLY-3	P=0.497	P=0.495	P=0.262	P=0.369

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Harderian Gland Hypertrophy</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/49 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/44.10	0/43.71	0/46.49	0/45.65
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	0/29 (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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Heart</b>				
<b>Cardiomyopathy</b>				
<b>LESION RATES</b>				
<b>OVERALL (a)</b>	16/50 (32%)	17/50 (34%)	16/50 (32%)	14/50 (28%)
<b>POLY-3 RATE (b)</b>	16/45.75	17/45.77	16/46.49	14/46.86
<b>POLY-3 PERCENT (g)</b>	35%	37.1%	34.4%	29.9%
<b>TERMINAL (d)</b>	12/35 (34%)	10/32 (31%)	16/36 (44%)	7/29 (24%)
<b>FIRST INCIDENCE</b>	586	530	731 (T)	630
<b>STATISTICAL TESTS</b>				
<b>POLY 3</b>	P=0.284N	P=0.501	P=0.565N	P=0.381N
<b>POLY 1.5</b>	P=0.296N	P=0.502	P=0.568N	P=0.392N
<b>POLY 6</b>	P=0.274N	P=0.498	P=0.573N	P=0.375N
<b>COCH-ARM / FISHERS</b>	P=0.319N	P=0.500	P=0.585N	P=0.414N
<b>MAX-ISO-POLY-3</b>	P=0.430N	P=0.412	P=0.476N	P=0.302N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Kidney Cyst</b>				
<b>LESION RATES</b>				
<b>OVERALL (a)</b>	0/50 (0%)	1/50 (2%)	2/50 (4%)	0/50 (0%)
<b>POLY-3 RATE (b)</b>	0/44.94	1/43.71	2/46.80	0/45.65
<b>POLY-3 PERCENT (g)</b>	0%	2.3%	4.3%	0%
<b>TERMINAL (d)</b>	0/35 (0%)	1/32 (3%)	1/36 (3%)	0/29 (0%)
<b>FIRST INCIDENCE</b>	---	731 (T)	646	---
<b>STATISTICAL TESTS</b>				
<b>POLY 3</b>	P=0.494N	P=0.494	P=0.246	(e)
<b>POLY 1.5</b>	P=0.496N	P=0.497	P=0.243	(e)
<b>POLY 6</b>	P=0.494N	P=0.490	P=0.249	(e)
<b>COCH-ARM / FISHERS</b>	P=0.502N	P=0.500	P=0.247	(e)
<b>MAX-ISO-POLY-3</b>	P=0.336N	P=0.158	P=0.085	(e)

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 Species/Strain: RATS/Wistar Han

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Kidney</b>				
<b>Hydronephrosis</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/44.94	1/44.06	0/46.49	1/45.65
POLY-3 PERCENT (g)	0%	2.3%	0%	2.2%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	1/29 (3%)
FIRST INCIDENCE	---	633	---	731 (T)
<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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Kidney Inflammation</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	2/50 (4%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	1/44.94	2/43.89	0/46.49	0/45.65
POLY-3 PERCENT (g)	2.2%	4.6%	0%	0%
TERMINAL (d)	1/35 (3%)	1/32 (3%)	0/36 (0%)	0/29 (0%)
FIRST INCIDENCE	731 (T)	683	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.224N	P=0.492	P=0.493N	P=0.497N
POLY 1.5	P=0.224N	P=0.496	P=0.496N	P=0.498N
POLY 6	P=0.226N	P=0.486	P=0.492N	P=0.498N
COCH-ARM / FISHERS	P=0.224N	P=0.500	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.171N	P=0.276	P=0.158N	P=0.158N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Kidney Nephropathy</b>				
<b>LESION RATES</b>				
OVERALL (a)	17/50 (34%)	16/50 (32%)	19/50 (38%)	18/50 (36%)
POLY-3 RATE (b)	17/46.26	16/44.43	19/47.34	18/47.15
POLY-3 PERCENT (g)	36.8%	36%	40.1%	38.2%
TERMINAL (d)	12/35 (34%)	14/32 (44%)	14/36 (39%)	8/29 (28%)
FIRST INCIDENCE	599	627	646	586
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.489	P=0.558N	P=0.450	P=0.529
POLY 1.5	P=0.467	P=0.530N	P=0.441	P=0.521
POLY 6	P=0.507	P=0.575	P=0.454	P=0.528
COCH-ARM / FISHERS	P=0.430	P=0.500N	P=0.418	P=0.500
MAX-ISO-POLY-3	P=0.612	P=0.470N	P=0.368	P=0.442

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Kidney: Renal Tubule Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/44.94	0/43.71	0/46.49	1/45.84
POLY-3 PERCENT (g)	0%	0%	0%	2.2%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	0/29 (0%)
FIRST INCIDENCE	---	---	---	681
<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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Kidney: Transitional Epithelium Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	3/50 (6%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	1/44.94	3/43.88	1/46.93	0/45.65
POLY-3 PERCENT (g)	2.2%	6.8%	2.1%	0%
TERMINAL (d)	1/35 (3%)	2/32 (6%)	0/36 (0%)	0/29 (0%)
FIRST INCIDENCE	731 (T)	687	603	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.172N	P=0.297	P=0.751N	P=0.497N
POLY 1.5	P=0.173N	P=0.301	P=0.754N	P=0.498N
POLY 6	P=0.174N	P=0.290	P=0.748N	P=0.498N
COCH-ARM / FISHERS	P=0.175N	P=0.309	P=0.753N	P=0.500N
MAX-ISO-POLY-3	P=0.157N	P=0.150	P=0.487N	P=0.158N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Larynx</b>				
<b>Inflammation Acute</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	4/50 (8%)
POLY-3 RATE (b)	0/44.94	0/43.71	0/46.49	4/46.39
POLY-3 PERCENT (g)	0%	0%	0%	8.6%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	1/29 (3%)
FIRST INCIDENCE	---	---	---	586
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.002**	(e)	(e)	P=0.064
POLY 1.5	P=0.002**	(e)	(e)	P=0.063
POLY 6	P=0.002**	(e)	(e)	P=0.065
COCH-ARM / FISHERS	P=0.002**	(e)	(e)	P=0.059
MAX-ISO-POLY-3	P=0.003**	(e)	(e)	P=0.023*



Experiment Number: 20515 - 03  
Test Type: CHRONIC  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Metal working fluids (CIMSTAR 3800)  
CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
Time Report Requested: 08:51:01  
First Dose M/F: 04/14/08 / 04/14/08  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Larynx</b>				
<b>Inflammation Chronic</b>				
<hr/>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/44.94	0/43.71	0/46.49	0/45.65
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	0/29 (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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Larynx Metaplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	50/50 (100%)	50/50 (100%)	50/50 (100%)
POLY-3 RATE (b)	1/44.94	50/50.00	50/50.00	50/50.00
POLY-3 PERCENT (g)	2.2%	100%	100%	100%
TERMINAL (d)	1/35 (3%)	32/32 (100%)	36/36 (100%)	29/29 (100%)
FIRST INCIDENCE	731 (T)	481	563	523
<b>STATISTICAL TESTS</b>				
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	P<0.001**	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver</b>				
<b>Angiectasis</b>				
<b>LESION RATES</b>				
OVERALL (a)	4/50 (8%)	5/50 (10%)	5/50 (10%)	1/50 (2%)
POLY-3 RATE (b)	4/45.07	5/44.43	5/46.49	1/45.65
POLY-3 PERCENT (g)	8.9%	11.3%	10.8%	2.2%
TERMINAL (d)	3/35 (9%)	3/32 (9%)	5/36 (14%)	1/29 (3%)
FIRST INCIDENCE	698	568	731 (T)	731 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.090N	P=0.491	P=0.519	P=0.175N
POLY 1.5	P=0.092N	P=0.496	P=0.513	P=0.176N
POLY 6	P=0.091N	P=0.483	P=0.523	P=0.176N
COCH-ARM / FISHERS	P=0.096N	P=0.500	P=0.500	P=0.181N
MAX-ISO-POLY-3	P=0.132N	P=0.355	P=0.382	P=0.082N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver</b>				
<b>Basophilic Focus</b>				
<b>LESION RATES</b>				
<b>OVERALL (a)</b>	34/50 (68%)	33/50 (66%)	35/50 (70%)	32/50 (64%)
<b>POLY-3 RATE (b)</b>	34/47.64	33/47.02	35/49.04	32/48.80
<b>POLY-3 PERCENT (g)</b>	71.4%	70.2%	71.4%	65.6%
<b>TERMINAL (d)</b>	25/35 (71%)	21/32 (66%)	25/36 (69%)	18/29 (62%)
<b>FIRST INCIDENCE</b>	402	481	598	586
<b>STATISTICAL TESTS</b>				
<b>POLY 3</b>	P=0.293N	P=0.540N	P=0.590N	P=0.345N
<b>POLY 1.5</b>	P=0.332N	P=0.526N	P=0.552	P=0.376N
<b>POLY 6</b>	P=0.252N	P=0.548N	P=0.544N	P=0.307N
<b>COCH-ARM / FISHERS</b>	P=0.387N	P=0.500N	P=0.500	P=0.417N
<b>MAX-ISO-POLY-3</b>	P=0.431N	P=0.447N	P=0.499N	P=0.270N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver</b>				
<b>Clear Cell Focus</b>				
<b>LESION RATES</b>				
<b>OVERALL (a)</b>	14/50 (28%)	6/50 (12%)	17/50 (34%)	14/50 (28%)
<b>POLY-3 RATE (b)</b>	14/45.39	6/43.71	17/46.65	14/46.27
<b>POLY-3 PERCENT (g)</b>	30.8%	13.7%	36.4%	30.3%
<b>TERMINAL (d)</b>	13/35 (37%)	6/32 (19%)	16/36 (44%)	9/29 (31%)
<b>FIRST INCIDENCE</b>	599	731 (T)	690	630
<b>STATISTICAL TESTS</b>				
<b>POLY 3</b>	P=0.302	P=0.043N*	P=0.364	P=0.566N
<b>POLY 1.5</b>	P=0.286	P=0.041N*	P=0.354	P=0.572N
<b>POLY 6</b>	P=0.319	P=0.048N*	P=0.368	P=0.566N
<b>COCH-ARM / FISHERS</b>	P=0.261	P=0.039N*	P=0.333	P=0.588N
<b>MAX-ISO-POLY-3</b>	P=0.194	P=0.026N*	P=0.287	P=0.475N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver</b>				
<b>Fatty Change</b>				
<b>LESION RATES</b>				
OVERALL (a)	3/50 (6%)	1/50 (2%)	2/50 (4%)	1/50 (2%)
POLY-3 RATE (b)	3/46.04	1/44.06	2/47.21	1/45.87
POLY-3 PERCENT (g)	6.5%	2.3%	4.2%	2.2%
TERMINAL (d)	1/35 (3%)	0/32 (0%)	0/36 (0%)	0/29 (0%)
FIRST INCIDENCE	499	633	598	673
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.339N	P=0.321N	P=0.489N	P=0.307N
POLY 1.5	P=0.342N	P=0.314N	P=0.493N	P=0.305N
POLY 6	P=0.338N	P=0.331N	P=0.485N	P=0.311N
COCH-ARM / FISHERS	P=0.347N	P=0.309N	P=0.500N	P=0.309N
MAX-ISO-POLY-3	P=0.228N	P=0.171N	P=0.316N	P=0.155N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver</b>				
<b>Mixed Cell Focus</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/45.05	0/43.71	0/46.49	0/45.65
POLY-3 PERCENT (g)	4.4%	0%	0%	0%
TERMINAL (d)	1/35 (3%)	0/32 (0%)	0/36 (0%)	0/29 (0%)
FIRST INCIDENCE	703	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.255N	P=0.244N	P=0.230N	P=0.234N
POLY 1.5	P=0.257N	P=0.241N	P=0.233N	P=0.235N
POLY 6	P=0.251N	P=0.249N	P=0.229N	P=0.236N
COCH-ARM / FISHERS	P=0.260N	P=0.247N	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.035N*	P=0.082N	P=0.076N	P=0.076N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
Liver Necrosis				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	1/50 (2%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	1/45.03	1/44.43	1/46.71	0/45.65
POLY-3 PERCENT (g)	2.2%	2.3%	2.1%	0%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	0/29 (0%)
FIRST INCIDENCE	709	481	673	---
<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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver: Bile Duct Cyst</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	5/50 (10%)	1/50 (2%)	4/50 (8%)
POLY-3 RATE (b)	1/44.94	5/44.26	1/46.49	4/46.19
POLY-3 PERCENT (g)	2.2%	11.3%	2.2%	8.7%
TERMINAL (d)	1/35 (3%)	2/32 (6%)	1/36 (3%)	2/29 (7%)
FIRST INCIDENCE	731 (T)	633	731 (T)	586
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.331	P=0.097	P=0.753N	P=0.187
POLY 1.5	P=0.327	P=0.100	P=0.755N	P=0.185
POLY 6	P=0.331	P=0.095	P=0.751N	P=0.187
COCH-ARM / FISHERS	P=0.320	P=0.102	P=0.753N	P=0.181
MAX-ISO-POLY-3	P=0.163	P=0.043*	P=0.490N	P=0.092

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver: Bile Duct Dilatation</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	0/50 (0%)	2/50 (4%)	3/50 (6%)
POLY-3 RATE (b)	1/44.94	0/43.71	2/46.49	3/45.96
POLY-3 PERCENT (g)	2.2%	0%	4.3%	6.5%
TERMINAL (d)	1/35 (3%)	0/32 (0%)	2/36 (6%)	2/29 (7%)
FIRST INCIDENCE	731 (T)	---	731 (T)	645
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.118	P=0.506N	P=0.512	P=0.313
POLY 1.5	P=0.115	P=0.503N	P=0.508	P=0.311
POLY 6	P=0.121	P=0.510N	P=0.515	P=0.313
COCH-ARM / FISHERS	P=0.110	P=0.500N	P=0.500	P=0.309
MAX-ISO-POLY-3	P=0.125	P=0.165N	P=0.294	P=0.163

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Liver: Bile Duct Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	5/50 (10%)	2/50 (4%)	3/50 (6%)	6/50 (12%)
POLY-3 RATE (b)	5/44.94	2/44.06	3/47.11	6/45.92
POLY-3 PERCENT (g)	11.1%	4.5%	6.4%	13.1%
TERMINAL (d)	5/35 (14%)	1/32 (3%)	1/36 (3%)	4/29 (14%)
FIRST INCIDENCE	731 (T)	633	603	691
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.234	P=0.224N	P=0.331N	P=0.515
POLY 1.5	P=0.230	P=0.220N	P=0.341N	P=0.511
POLY 6	P=0.237	P=0.229N	P=0.321N	P=0.516
COCH-ARM / FISHERS	P=0.221	P=0.218N	P=0.357N	P=0.500
MAX-ISO-POLY-3	P=0.278	P=0.127N	P=0.216N	P=0.388

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lung Inflammation Acute</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/44.94	0/43.71	0/46.49	0/45.65
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	0/29 (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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lung</b>				
<b>Inflammation Lymphohistiocytic</b>				
<b>LESION RATES</b>				
OVERALL (a)	3/50 (6%)	20/50 (40%)	42/50 (84%)	50/50 (100%)
POLY-3 RATE (b)	3/45.03	20/45.98	42/49.41	50/50.00
POLY-3 PERCENT (g)	6.7%	43.5%	85%	100%
TERMINAL (d)	2/35 (6%)	13/32 (41%)	30/36 (83%)	29/29 (100%)
FIRST INCIDENCE	709	530	598	523
<b>STATISTICAL TESTS</b>				
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	P<0.001**	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lung: Alveolar Epithelium Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	4/50 (8%)	3/50 (6%)	1/50 (2%)	7/50 (14%)
POLY-3 RATE (b)	4/45.77	3/44.21	1/46.54	7/46.20
POLY-3 PERCENT (g)	8.7%	6.8%	2.2%	15.2%
TERMINAL (d)	3/35 (9%)	1/32 (3%)	0/36 (0%)	4/29 (14%)
FIRST INCIDENCE	402	619	719	586
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.088	P=0.519N	P=0.174N	P=0.266
POLY 1.5	P=0.087	P=0.511N	P=0.176N	P=0.265
POLY 6	P=0.089	P=0.528N	P=0.172N	P=0.264
COCH-ARM / FISHERS	P=0.086	P=0.500N	P=0.181N	P=0.262
MAX-ISO-POLY-3	P=0.083	P=0.367N	P=0.082N	P=0.174

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lung: Bronchus-Associated Lymphoid Tissue Hyperplasia Lymphohistiocytic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	5/50 (10%)
POLY-3 RATE (b)	0/44.94	0/43.71	0/46.49	5/46.00
POLY-3 PERCENT (g)	0%	0%	0%	10.9%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	4/29 (14%)
FIRST INCIDENCE	---	---	---	635
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	(e)	(e)	P=0.032*
POLY 1.5	P<0.001**	(e)	(e)	P=0.032*
POLY 6	P<0.001**	(e)	(e)	P=0.032*
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	P=0.028*
MAX-ISO-POLY-3	P<0.001**	(e)	(e)	P=0.011*

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node, Bronchial Hyperplasia Lymphohistiocytic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/38 (0%)	0/35 (0%)	7/32 (22%)	30/35 (86%)
POLY-3 RATE (b)	0/34.28	0/29.63	7/29.48	30/34.77
POLY-3 PERCENT (g)	0%	0%	23.8%	86.3%
TERMINAL (d)	0/27 (0%)	0/21 (0%)	6/22 (27%)	16/20 (80%)
FIRST INCIDENCE	---	---	642	523
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	(e)	P=0.003**	P<0.001**
POLY 1.5	P<0.001**	(e)	P=0.003**	P<0.001**
POLY 6	P<0.001**	(e)	P=0.003**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	P=0.003**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	P<0.001**	P<0.001**



Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node, Mandibular Ectasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/49 (0%)	1/47 (2%)	0/43 (0%)	2/49 (4%)
POLY-3 RATE (b)	0/43.94	1/41.08	0/39.93	2/44.76
POLY-3 PERCENT (g)	0%	2.4%	0%	4.5%
TERMINAL (d)	0/34 (0%)	1/31 (3%)	0/30 (0%)	1/28 (4%)
FIRST INCIDENCE	---	731 (T)	---	703
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.161	P=0.487	(e)	P=0.241
POLY 1.5	P=0.161	P=0.489	(e)	P=0.240
POLY 6	P=0.161	P=0.483	(e)	P=0.240
COCH-ARM / FISHERS	P=0.158	P=0.490	(e)	P=0.247
MAX-ISO-POLY-3	P=0.091	P=0.156	(e)	P=0.080

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node, Mediastinal Hyperplasia Lymphohistiocytic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/49 (0%)	0/46 (0%)	4/45 (9%)	23/47 (49%)
POLY-3 RATE (b)	0/43.94	0/39.71	4/42.30	23/43.92
POLY-3 PERCENT (g)	0%	0%	9.5%	52.4%
TERMINAL (d)	0/34 (0%)	0/28 (0%)	3/33 (9%)	14/27 (52%)
FIRST INCIDENCE	---	---	681	635
<b>STATISTICAL TESTS</b>				
POLY 3	P<0.001**	(e)	P=0.055	P<0.001**
POLY 1.5	P<0.001**	(e)	P=0.053	P<0.001**
POLY 6	P<0.001**	(e)	P=0.057	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	P=0.049*	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	P=0.017*	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node, Mesenteric Ectasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/49 (2%)	1/50 (2%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	1/44.23	1/44.06	0/46.49	1/45.65
POLY-3 PERCENT (g)	2.3%	2.3%	0%	2.2%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	1/29 (3%)
FIRST INCIDENCE	698	633	---	731 (T)
<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: 20515 - 03  
Test Type: CHRONIC  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Metal working fluids (CIMSTAR 3800)  
CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node: Iliac Ectasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/2 (0%)	0/2 (0%)	0/1 (0%)	0/0 (0%)
POLY-3 RATE (b)	0/2.00	0/1.42	0/0.81	0/0.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/2 (0%)	0/0 (0%)	0/0 (0%)	0/0 (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: 20515 - 03  
Test Type: CHRONIC  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Metal working fluids (CIMSTAR 3800)  
CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
Time Report Requested: 08:51:01  
First Dose M/F: 04/14/08 / 04/14/08  
Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node: Lumbar Ectasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/2 (0%)	1/2 (50%)	0/1 (0%)	0/0 (0%)
POLY-3 RATE (b)	0/2.00	1/1.61	0/0.81	0/0.00
POLY-3 PERCENT (g)	0%	62.2%	0%	0%
TERMINAL (d)	0/2 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	683	---	---
<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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node: Lumbar Infiltration Cellular Plasma Cell</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/2 (0%)	0/2 (0%)	0/1 (0%)	0/0 (0%)
POLY-3 RATE (b)	0/2.00	0/1.42	0/0.81	0/0.00
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/2 (0%)	0/0 (0%)	0/0 (0%)	0/0 (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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Lymph Node: Renal Ectasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/2 (50%)	0/2 (0%)	0/1 (0%)	0/0 (0%)
POLY-3 RATE (b)	1/2.00	0/1.42	0/0.81	0/0.00
POLY-3 PERCENT (g)	50%	0%	0%	0%
TERMINAL (d)	1/2 (50%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	731 (T)	---	---	---
<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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Mammary Gland</b>				
<b>Galactocele</b>				
<b>LESION RATES</b>				
OVERALL (a)	3/50 (6%)	1/50 (2%)	2/50 (4%)	1/50 (2%)
POLY-3 RATE (b)	3/44.94	1/43.88	2/46.80	1/45.68
POLY-3 PERCENT (g)	6.7%	2.3%	4.3%	2.2%
TERMINAL (d)	3/35 (9%)	0/32 (0%)	1/36 (3%)	0/29 (0%)
FIRST INCIDENCE	731 (T)	687	646	725
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.337N	P=0.314N	P=0.482N	P=0.299N
POLY 1.5	P=0.341N	P=0.310N	P=0.488N	P=0.301N
POLY 6	P=0.335N	P=0.320N	P=0.475N	P=0.300N
COCH-ARM / FISHERS	P=0.347N	P=0.309N	P=0.500N	P=0.309N
MAX-ISO-POLY-3	P=0.223N	P=0.163N	P=0.311N	P=0.152N



Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Mammary Gland Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	2/50 (4%)
POLY-3 RATE (b)	0/44.94	0/43.71	0/46.49	2/45.65
POLY-3 PERCENT (g)	0%	0%	0%	4.4%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	2/29 (7%)
FIRST INCIDENCE	---	---	---	731 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.042*	(e)	(e)	P=0.241
POLY 1.5	P=0.042*	(e)	(e)	P=0.240
POLY 6	P=0.042*	(e)	(e)	P=0.239
COCH-ARM / FISHERS	P=0.042*	(e)	(e)	P=0.247
MAX-ISO-POLY-3	P=0.038*	(e)	(e)	P=0.079

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Mesentery: Fat Necrosis</b>				
<b>LESION RATES</b>				
OVERALL (a)	7/7 (100%)	8/8 (100%)	8/8 (100%)	4/5 (80%)
POLY-3 RATE (b)	7/7.00	8/8.00	8/8.00	4/4.78
POLY-3 PERCENT (g)	100%	100%	100%	83.7%
TERMINAL (d)	7/7 (100%)	5/5 (100%)	6/6 (100%)	4/4 (100%)
FIRST INCIDENCE	731 (T)	530	598	731 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.214N	(e)	(e)	P=0.538N
POLY 1.5	P=0.174N	(e)	(e)	P=0.481N
POLY 6	P=0.326N	(e)	(e)	P=0.669N
COCH-ARM / FISHERS	P=0.147N	(e)	(e)	P=0.417N
MAX-ISO-POLY-3	P=0.069N	(e)	(e)	P=0.136N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Nose</b>				
<b>Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	0/50 (0%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	2/45.03	0/43.71	1/46.58	0/45.65
POLY-3 PERCENT (g)	4.4%	0%	2.2%	0%
TERMINAL (d)	1/35 (3%)	0/32 (0%)	0/36 (0%)	0/29 (0%)
FIRST INCIDENCE	709	---	708	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.268N	P=0.244N	P=0.488N	P=0.234N
POLY 1.5	P=0.271N	P=0.241N	P=0.492N	P=0.235N
POLY 6	P=0.265N	P=0.249N	P=0.485N	P=0.235N
COCH-ARM / FISHERS	P=0.276N	P=0.247N	P=0.500N	P=0.247N
MAX-ISO-POLY-3	P=0.080N	P=0.082N	P=0.274N	P=0.076N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Nose: Goblet Cell Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	0/50 (0%)	25/50 (50%)	34/50 (68%)	42/50 (84%)
POLY-3 RATE (b)	0/44.94	25/47.64	34/49.00	42/49.20
POLY-3 PERCENT (g)	0%	52.5%	69.4%	85.4%
TERMINAL (d)	0/35 (0%)	16/32 (50%)	22/36 (61%)	26/29 (90%)
FIRST INCIDENCE	---	481	603	523
<b>STATISTICAL TESTS</b>				
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	P<0.001**	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Nose: Olfactory Epithelium Accumulation, Hyaline Droplet</b>				
<b>LESION RATES</b>				
OVERALL (a)	16/50 (32%)	50/50 (100%)	50/50 (100%)	50/50 (100%)
POLY-3 RATE (b)	16/47.52	50/50.00	50/50.00	50/50.00
POLY-3 PERCENT (g)	33.7%	100%	100%	100%
TERMINAL (d)	9/35 (26%)	32/32 (100%)	36/36 (100%)	29/29 (100%)
FIRST INCIDENCE	499	481	563	523
<b>STATISTICAL TESTS</b>				
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	P<0.001**	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Nose: Olfactory Epithelium, Glands Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	32/50 (64%)	48/50 (96%)	49/50 (98%)
POLY-3 RATE (b)	1/44.94	32/47.13	48/50.00	49/50.00
POLY-3 PERCENT (g)	2.2%	67.9%	96%	98%
TERMINAL (d)	1/35 (3%)	21/32 (66%)	34/36 (94%)	28/29 (97%)
FIRST INCIDENCE	731 (T)	530	563	523
<b>STATISTICAL TESTS</b>				
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	P<0.001**	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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Date Report Requested: 05/08/2013  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Nose: Respiratory Epithelium Accumulation, Hyaline Droplet</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	24/50 (48%)	31/50 (62%)	34/50 (68%)
POLY-3 RATE (b)	1/44.94	24/46.06	31/49.28	34/48.68
POLY-3 PERCENT (g)	2.2%	52.1%	62.9%	69.9%
TERMINAL (d)	1/35 (3%)	17/32 (53%)	20/36 (56%)	22/29 (76%)
FIRST INCIDENCE	731 (T)	530	563	523
<b>STATISTICAL TESTS</b>				
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	P<0.001**	P<0.001**	P<0.001**	P<0.001**

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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Date Report Requested: 05/08/2013  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
Ovary Cyst				
<b>LESION RATES</b>				
OVERALL (a)	11/50 (22%)	9/50 (18%)	5/50 (10%)	11/50 (22%)
POLY-3 RATE (b)	11/45.39	9/44.51	5/46.59	11/46.42
POLY-3 PERCENT (g)	24.2%	20.2%	10.7%	23.7%
TERMINAL (d)	10/35 (29%)	7/32 (22%)	4/36 (11%)	6/29 (21%)
FIRST INCIDENCE	599	530	705	633
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.445	P=0.419N	P=0.074N	P=0.573N
POLY 1.5	P=0.435	P=0.410N	P=0.078N	P=0.579N
POLY 6	P=0.452	P=0.435N	P=0.071N	P=0.571N
COCH-ARM / FISHERS	P=0.419	P=0.402N	P=0.086N	P=0.595N
MAX-ISO-POLY-3	P=0.324N	P=0.325N	P=0.044N*	P=0.475N



Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Pancreas Atrophy</b>				
<b>LESION RATES</b>				
OVERALL (a)	6/49 (12%)	4/50 (8%)	2/50 (4%)	5/50 (10%)
POLY-3 RATE (b)	6/45.67	4/43.90	2/47.04	5/46.29
POLY-3 PERCENT (g)	13.1%	9.1%	4.3%	10.8%
TERMINAL (d)	2/35 (6%)	3/32 (9%)	0/36 (0%)	4/29 (14%)
FIRST INCIDENCE	599	681	598	523
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.581N	P=0.394N	P=0.124N	P=0.491N
POLY 1.5	P=0.583N	P=0.377N	P=0.124N	P=0.485N
POLY 6	P=0.583N	P=0.422N	P=0.126N	P=0.508N
COCH-ARM / FISHERS	P=0.587	P=0.357N	P=0.128N	P=0.486N
MAX-ISO-POLY-3	P=0.286N	P=0.279N	P=0.065N	P=0.365N

Experiment Number: 20515 - 03  
Test Type: CHRONIC  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: RATS/Wistar Han

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
Metal working fluids (CIMSTAR 3800)  
CAS Number: CIMSTAR3800

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Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Pancreas</b>				
<b>Basophilic Focus</b>				
<hr/>				
<b>LESION RATES</b>				
OVERALL (a)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/44.10	1/43.71	0/46.49	0/45.65
POLY-3 PERCENT (g)	0%	2.3%	0%	0%
TERMINAL (d)	0/35 (0%)	1/32 (3%)	0/36 (0%)	0/29 (0%)
FIRST INCIDENCE	---	731 (T)	---	---
<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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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Date Report Requested: 05/08/2013  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Pituitary Gland: Pars Distalis Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	8/50 (16%)	11/50 (22%)	10/50 (20%)	9/50 (18%)
POLY-3 RATE (b)	8/45.86	11/43.71	10/47.11	9/45.84
POLY-3 PERCENT (g)	17.4%	25.2%	21.2%	19.6%
TERMINAL (d)	6/35 (17%)	11/32 (34%)	8/36 (22%)	8/29 (28%)
FIRST INCIDENCE	402	731 (T)	603	681
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.513N	P=0.262	P=0.421	P=0.500
POLY 1.5	P=0.517N	P=0.281	P=0.412	P=0.501
POLY 6	P=0.514N	P=0.239	P=0.432	P=0.493
COCH-ARM / FISHERS	P=0.527N	P=0.306	P=0.398	P=0.500
MAX-ISO-POLY-3	P=0.476	P=0.191	P=0.325	P=0.392

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Pituitary Gland: Pars Intermedia Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	1/44.94	0/43.71	0/46.49	1/45.65
POLY-3 PERCENT (g)	2.2%	0%	0%	2.2%
TERMINAL (d)	1/35 (3%)	0/32 (0%)	0/36 (0%)	1/29 (3%)
FIRST INCIDENCE	731 (T)	---	---	731 (T)
<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: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Skin</b>				
<b>Inflammation Chronic</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	4/50 (8%)	5/50 (10%)	4/50 (8%)
POLY-3 RATE (b)	2/44.94	4/44.09	5/46.98	4/45.97
POLY-3 PERCENT (g)	4.5%	9.1%	10.6%	8.7%
TERMINAL (d)	2/35 (6%)	2/32 (6%)	3/36 (8%)	2/29 (7%)
FIRST INCIDENCE	731 (T)	627	603	645
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.436	P=0.328	P=0.235	P=0.348
POLY 1.5	P=0.430	P=0.333	P=0.228	P=0.345
POLY 6	P=0.439	P=0.321	P=0.241	P=0.348
COCH-ARM / FISHERS	P=0.416	P=0.339	P=0.218	P=0.339
MAX-ISO-POLY-3	P=0.302	P=0.196	P=0.137	P=0.211

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Spleen</b>				
<b>Hematopoietic Cell Proliferation</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	2/50 (4%)	3/50 (6%)	1/50 (2%)
POLY-3 RATE (b)	1/45.03	2/44.82	3/47.21	1/45.72
POLY-3 PERCENT (g)	2.2%	4.5%	6.4%	2.2%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	0/29 (0%)
FIRST INCIDENCE	709	481	646	715
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.494N	P=0.498	P=0.323	P=0.757N
POLY 1.5	P=0.496N	P=0.500	P=0.316	P=0.758N
POLY 6	P=0.495N	P=0.495	P=0.329	P=0.759N
COCH-ARM / FISHERS	P=0.501N	P=0.500	P=0.309	P=0.753N
MAX-ISO-POLY-3	P=0.475N	P=0.279	P=0.172	P=0.495N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Stomach, Forestomach Inflammation Acute</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	0/50 (0%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	1/45.77	0/43.71	2/46.72	0/45.65
POLY-3 PERCENT (g)	2.2%	0%	4.3%	0%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	0/29 (0%)
FIRST INCIDENCE	402	---	683	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.435N	P=0.509N	P=0.507	P=0.501N
POLY 1.5	P=0.438N	P=0.505N	P=0.504	P=0.500N
POLY 6	P=0.432N	P=0.514N	P=0.510	P=0.502N
COCH-ARM / FISHERS	P=0.444N	P=0.500N	P=0.500	P=0.500N
MAX-ISO-POLY-3	P=0.332N	P=0.170N	P=0.289	P=0.159N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
 Time Report Requested: 08:51:01  
 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Stomach, Forestomach Ulcer</b>				
<b>LESION RATES</b>				
OVERALL (a)	1/50 (2%)	1/50 (2%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	1/45.77	1/44.33	1/46.54	2/46.03
POLY-3 PERCENT (g)	2.2%	2.3%	2.2%	4.4%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	0/29 (0%)
FIRST INCIDENCE	402	530	719	673
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.370	P=0.754	P=0.757N	P=0.502
POLY 1.5	P=0.368	P=0.756	P=0.758N	P=0.501
POLY 6	P=0.372	P=0.750	P=0.756N	P=0.501
COCH-ARM / FISHERS	P=0.363	P=0.753N	P=0.753N	P=0.500
MAX-ISO-POLY-3	P=0.427	P=0.490	P=0.495N	P=0.283



Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Stomach, Glandular Necrosis</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/45.86	0/43.71	0/46.49	0/45.65
POLY-3 PERCENT (g)	4.4%	0%	0%	0%
TERMINAL (d)	0/35 (0%)	0/32 (0%)	0/36 (0%)	0/29 (0%)
FIRST INCIDENCE	402	---	---	---
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.252N	P=0.248N	P=0.234N	P=0.238N
POLY 1.5	P=0.255N	P=0.243N	P=0.235N	P=0.238N
POLY 6	P=0.248N	P=0.254N	P=0.234N	P=0.240N
COCH-ARM / FISHERS	P=0.260N	P=0.247N	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.036N*	P=0.086N	P=0.076N	P=0.077N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
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Date Report Requested: 05/08/2013  
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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Thyroid Gland: C-Cell Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	37/50 (74%)	44/50 (88%)	43/50 (86%)	35/49 (71%)
POLY-3 RATE (b)	37/47.57	44/48.59	43/49.04	35/47.22
POLY-3 PERCENT (g)	77.8%	90.6%	87.7%	74.1%
TERMINAL (d)	28/35 (80%)	30/32 (94%)	32/36 (89%)	23/29 (79%)
FIRST INCIDENCE	499	481	598	523
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.092N	P=0.063	P=0.144	P=0.428N
POLY 1.5	P=0.101N	P=0.063	P=0.127	P=0.438N
POLY 6	P=0.098N	P=0.063	P=0.166	P=0.441N
COCH-ARM / FISHERS	P=0.130N	P=0.062	P=0.105	P=0.475N
MAX-ISO-POLY-3	P=0.103N	P=0.035*	P=0.093	P=0.333N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Thyroid Gland: Follicular Cell Hyperplasia</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	0/50 (0%)	1/50 (2%)	1/49 (2%)
POLY-3 RATE (b)	2/44.94	0/43.71	1/46.49	1/45.01
POLY-3 PERCENT (g)	4.5%	0%	2.2%	2.2%
TERMINAL (d)	2/35 (6%)	0/32 (0%)	1/36 (3%)	1/29 (3%)
FIRST INCIDENCE	731 (T)	---	731 (T)	731 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.623N	P=0.243N	P=0.488N	P=0.499N
POLY 1.5	P=0.627N	P=0.240N	P=0.492N	P=0.502N
POLY 6	P=0.619N	P=0.248N	P=0.485N	P=0.500N
COCH-ARM / FISHERS	P=0.634N	P=0.247N	P=0.500N	P=0.508N
MAX-ISO-POLY-3	P=0.279N	P=0.082N	P=0.274N	P=0.281N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
 CAS Number: CIMSTAR3800

Date Report Requested: 05/08/2013  
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 First Dose M/F: 04/14/08 / 04/14/08  
 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Uterus: Cervix Hypertrophy</b>				
<b>LESION RATES</b>				
OVERALL (a)	2/50 (4%)	0/50 (0%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	2/45.33	0/43.71	1/46.81	1/45.65
POLY-3 PERCENT (g)	4.4%	0%	2.1%	2.2%
TERMINAL (d)	1/35 (3%)	0/32 (0%)	0/36 (0%)	1/29 (3%)
FIRST INCIDENCE	619	---	642	731 (T)
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.617N	P=0.245N	P=0.489N	P=0.498N
POLY 1.5	P=0.621N	P=0.241N	P=0.493N	P=0.497N
POLY 6	P=0.614N	P=0.251N	P=0.486N	P=0.501N
COCH-ARM / FISHERS	P=0.627N	P=0.247N	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.278N	P=0.084N	P=0.274N	P=0.279N

Experiment Number: 20515 - 03  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Metal working fluids (CIMSTAR 3800)  
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Date Report Requested: 05/08/2013  
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 Lab: BNW

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(Wistar Han)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	Control	10 mg/m3	30 mg/m3	100 mg/m3
<b>Uterus: Endometrium Hyperplasia Cystic</b>				
<b>LESION RATES</b>				
OVERALL (a)	11/50 (22%)	4/50 (8%)	9/50 (18%)	5/50 (10%)
POLY-3 RATE (b)	11/45.02	4/43.71	9/46.49	5/45.83
POLY-3 PERCENT (g)	24.4%	9.2%	19.4%	10.9%
TERMINAL (d)	10/35 (29%)	4/32 (13%)	9/36 (25%)	3/29 (10%)
FIRST INCIDENCE	712	731 (T)	731 (T)	703
<b>STATISTICAL TESTS</b>				
POLY 3	P=0.168N	P=0.048N*	P=0.369N	P=0.076N
POLY 1.5	P=0.177N	P=0.046N*	P=0.380N	P=0.079N
POLY 6	P=0.160N	P=0.052N	P=0.362N	P=0.075N
COCH-ARM / FISHERS	P=0.193N	P=0.045N*	P=0.402N	P=0.086N
MAX-ISO-POLY-3	P=0.063N	P=0.027N*	P=0.282N	P=0.045N*

**Experiment Number:** 20515 - 03  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/Wistar Han

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
Metal working fluids (CIMSTAR 3800)  
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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 \*\*\*