

**Experiment Number:** 20403 - 01  
**Test Type:** CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** RATS/HSD

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

Zinc Carbonate, Basic  
**CAS Number:** 5263-02-5

**Date Report Requested:** 05/25/2016  
**Time Report Requested:** 10:24:19  
**First Dose M/F:** 09/03/09 / 09/04/09  
**Lab:** BAT

F1\_Rev.1\_HSD

**NTP Study Number:** C20403  
**Lock Date:** 04/05/2013  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 3.0.2.3\_002  
**PWG Approval Date:** 09/08/2015

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

## SUMMARY OF STATISTICALLY SIGNIFICANT ( $P \leq .05$ ) RESULTS IN THE ANALYSIS OF ZINC CARBONATE, BASIC

### MALE RATS

#### Organ

Adrenal Medulla  
Blood Vessel

Bone Marrow

Bone

Heart

Heart: Atrium

Islets, Pancreatic

Kidney

Liver

Liver: Bile Duct

Liver: Hepatocyte

Lung

Lymph Node, Mesenteric

Lymph Node: Mediastinal

Nose

Pancreas: Acinus

Skin

Skin: Hair Follicle

Spleen

Spleen: Lymphoid Follicle

Stomach, Forestomach

Testes: Bilateral, Germinal Epithelium

Testes: Germinal Epithelium

### FEMALE RATS

#### Organ

#### Morphology

Hyperplasia  
Inflammation  
Mineralization  
Hyperplasia  
Fibrous Osteodystrophy  
Cardiomyopathy  
Thrombosis  
Hyperplasia  
Cyst  
Infarct Chronic  
Eosinophilic Focus  
Hyperplasia  
Necrosis  
Infiltration Cellular Histiocyte  
Inflammation  
Hyperplasia  
Hemorrhage  
Inflammation  
Atrophy  
Inflammation  
Ulcer  
Cyst  
Hematopoietic Cell Proliferation  
Pigmentation Hemosiderin  
Atrophy  
Mineralization  
Ulcer  
Atrophy  
Atrophy

#### Morphology

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**SUMMARY OF STATISTICALLY SIGNIFICANT ( $P \leq .05$ ) RESULTS IN THE ANALYSIS OF ZINC CARBONATE, BASIC**

Bone Marrow  
Kidney  
Liver  
Lymph Node, Mandibular  
Nose  
Ovary  
Pancreas: Acinus  
Spleen  
Thymus  
Thyroid Gland: C-Cell  
Uterus

Hyperplasia  
Cyst  
Mixed Cell Focus  
Infiltration Cellular Plasma Cell  
Inflammation  
Cyst  
Atrophy  
Hematopoietic Cell Proliferation  
Atrophy  
Hyperplasia  
Pigmentation Hemosiderin

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

---

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Adrenal Cortex Degeneration Cystic</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/38.40	1/43.64	0/41.50	0/38.48	0/39.26
POLY-3 PERCENT (g)	0%	2.3%	0%	0%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	---	708	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Adrenal Cortex Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	7/50 (14%)	3/50 (6%)	7/50 (14%)	5/50 (10%)	5/50 (10%)
POLY-3 RATE (b)	7/39.87	3/43.65	7/41.63	5/38.95	5/39.73
POLY-3 PERCENT (g)	17.6%	6.9%	16.8%	12.8%	12.6%
TERMINAL (d)	3/18 (17%)	2/31 (7%)	6/27 (22%)	2/21 (10%)	3/20 (15%)
FIRST INCIDENCE	586	705	701	671	660
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.493N	P=0.121N	P=0.581N	P=0.393N	P=0.379N
POLY 1.5	P=0.468N	P=0.137N	P=0.594N	P=0.389N	P=0.382N
POLY 6	P=0.525N	P=0.099N	P=0.558N	P=0.391N	P=0.368N
COCH-ARM / FISHERS	P=0.430N	P=0.159N	P=0.613N	P=0.380N	P=0.380N
MAX-ISO-POLY-3	P=0.433N	P=0.073N	P=0.465N	P=0.282N	P=0.267N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

---

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Adrenal Cortex Thrombosis</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	0/38.40	0/43.54	0/41.50	1/39.27	0/39.26
POLY-3 PERCENT (g)	0%	0%	0%	2.6%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	---	---	---	436	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Adrenal Medulla Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	22/50 (44%)	24/50 (48%)	22/50 (44%)	19/50 (38%)	16/50 (32%)
POLY-3 RATE (b)	22/42.60	24/46.54	22/44.04	19/41.78	16/40.70
POLY-3 PERCENT (g)	51.7%	51.6%	50%	45.5%	39.3%
TERMINAL (d)	9/18 (50%)	14/31 (45%)	13/27 (48%)	8/21 (38%)	9/20 (45%)
FIRST INCIDENCE	496	467	575	363	599
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.100N	P=0.582N	P=0.524N	P=0.359N	P=0.173N
POLY 1.5	P=0.075N	P=0.516	P=0.548N	P=0.354N	P=0.165N
POLY 6	P=0.138N	P=0.480N	P=0.470N	P=0.348N	P=0.175N
COCH-ARM / FISHERS	P=0.049N*	P=0.421	P=0.580N	P=0.342N	P=0.151N
MAX-ISO-POLY-3	P=0.183N	P=0.497N	P=0.436N	P=0.281N	P=0.126N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Adrenal Medulla: Bilateral Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	6/50 (12%)	3/50 (6%)	8/50 (16%)	4/50 (8%)	5/50 (10%)
POLY-3 RATE (b)	6/39.85	3/43.64	8/42.56	4/39.29	5/39.64
POLY-3 PERCENT (g)	15.1%	6.9%	18.8%	10.2%	12.6%
TERMINAL (d)	3/18 (17%)	2/31 (7%)	5/27 (19%)	1/21 (5%)	3/20 (15%)
FIRST INCIDENCE	537	708	575	635	649
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.452N	P=0.197N	P=0.437	P=0.376N	P=0.504N
POLY 1.5	P=0.428N	P=0.217N	P=0.415	P=0.376N	P=0.505N
POLY 6	P=0.483N	P=0.167N	P=0.478	P=0.367N	P=0.492N
COCH-ARM / FISHERS	P=0.392N	P=0.243N	P=0.387	P=0.370N	P=0.500N
MAX-ISO-POLY-3	P=0.547N	P=0.124N	P=0.331	P=0.258N	P=0.376N



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Blood Vessel Inflammation</b>					
<b>LESION RATES</b>					
<b>OVERALL (a)</b>	24/50 (48%)	29/50 (58%)	29/50 (58%)	27/50 (54%)	16/50 (32%)
<b>POLY-3 RATE (b)</b>	24/43.56	29/44.59	29/43.90	27/43.83	16/40.20
<b>POLY-3 PERCENT (g)</b>	55.1%	65%	66.1%	61.6%	39.8%
<b>TERMINAL (d)</b>	9/18 (50%)	21/31 (68%)	18/27 (67%)	11/21 (52%)	8/20 (40%)
<b>FIRST INCIDENCE</b>	496	675	568	363	669
<b>STATISTICAL TESTS</b>					
<b>POLY 3</b>	P=0.014N*	P=0.222	P=0.192	P=0.339	P=0.110N
<b>POLY 1.5</b>	P=0.010N**	P=0.214	P=0.200	P=0.340	P=0.094N
<b>POLY 6</b>	P=0.022N*	P=0.257	P=0.205	P=0.359	P=0.127N
<b>COCH-ARM / FISHERS</b>	P=0.007N**	P=0.212	P=0.212	P=0.345	P=0.076N
<b>MAX-ISO-POLY-3</b>	P=0.026N*	P=0.163	P=0.135	P=0.261	P=0.080N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Blood Vessel Mineralization</b>					
<b>LESION RATES</b>					
OVERALL (a)	3/50 (6%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	3/39.75	0/43.54	0/41.50	0/38.48	0/39.26
POLY-3 PERCENT (g)	7.6%	0%	0%	0%	0%
TERMINAL (d)	1/18 (6%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	496	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.188N	P=0.103N	P=0.110N	P=0.123N	P=0.120N
POLY 1.5	P=0.177N	P=0.110N	P=0.114N	P=0.122N	P=0.120N
POLY 6	P=0.207N	P=0.091N	P=0.103N	P=0.122N	P=0.116N
COCH-ARM / FISHERS	P=0.166N	P=0.121N	P=0.121N	P=0.121N	P=0.121N
MAX-ISO-POLY-3	P=0.005N**	P=0.037N*	P=0.037N*	P=0.042N*	P=0.039N*

Experiment Number: 20403 - 01  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Zinc Carbonate, Basic  
 CAS Number: 5263-02-5

Date Report Requested: 05/25/2016  
 Time Report Requested: 10:24:19  
 First Dose M/F: 09/03/09 / 09/04/09  
 Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Bone Marrow Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	1/50 (2%)	1/50 (2%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	1/38.53	1/43.68	1/41.67	1/39.23	2/40.14
POLY-3 PERCENT (g)	2.6%	2.3%	2.4%	2.6%	5%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	1/20 (5%)
FIRST INCIDENCE	701	698	688	461	362
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.308	P=0.732N	P=0.743N	P=0.757N	P=0.514
POLY 1.5	P=0.314	P=0.745N	P=0.751N	P=0.759N	P=0.508
POLY 6	P=0.299	P=0.710N	P=0.730N	P=0.752N	P=0.527
COCH-ARM / FISHERS	P=0.321	P=0.753N	P=0.753N	P=0.753N	P=0.500
MAX-ISO-POLY-3	P=0.462	P=0.466N	P=0.478N	P=0.495N	P=0.296

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Bone Marrow Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	4/50 (8%)	4/50 (8%)	0/50 (0%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	4/39.14	4/45.36	0/41.50	1/39.30	1/39.57
POLY-3 PERCENT (g)	10.2%	8.8%	0%	2.5%	2.5%
TERMINAL (d)	2/18 (11%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	538	285	---	420	649
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.168N	P=0.560N	P=0.052N	P=0.175N	P=0.173N
POLY 1.5	P=0.161N	P=0.595N	P=0.056N	P=0.178N	P=0.177N
POLY 6	P=0.178N	P=0.507N	P=0.047N*	P=0.170N	P=0.164N
COCH-ARM / FISHERS	P=0.152N	P=0.643N	P=0.059N	P=0.181N	P=0.181N
MAX-ISO-POLY-3	P=0.076N	P=0.419N	P=0.018N*	P=0.081N	P=0.081N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Bone</b>					
<b>Fibrous Osteodystrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	3/50 (6%)	0/50 (0%)	1/50 (2%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	3/39.65	0/43.54	1/41.50	1/38.81	0/39.26
POLY-3 PERCENT (g)	7.6%	0%	2.4%	2.6%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	1/27 (4%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	514	---	734 (T)	644	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.223N	P=0.102N	P=0.288N	P=0.312N	P=0.119N
POLY 1.5	P=0.211N	P=0.110N	P=0.295N	P=0.310N	P=0.120N
POLY 6	P=0.242N	P=0.091N	P=0.275N	P=0.309N	P=0.117N
COCH-ARM / FISHERS	P=0.194N	P=0.121N	P=0.309N	P=0.309N	P=0.121N
MAX-ISO-POLY-3	P=0.030N*	P=0.037N*	P=0.146N	P=0.160N	P=0.039N*

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

---

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Bone: Maxilla</b>					
<b>Fibrosis</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/38.40	0/43.54	0/41.50	0/38.48	0/39.26
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	---	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Epididymis Degeneration</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	0/38.40	0/43.54	0/41.50	2/39.01	0/39.26
POLY-3 PERCENT (g)	0%	0%	0%	5.1%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	---	---	---	645	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.379	(e)	(e)	P=0.240	(e)
POLY 1.5	P=0.387	(e)	(e)	P=0.238	(e)
POLY 6	P=0.372	(e)	(e)	P=0.247	(e)
COCH-ARM / FISHERS	P=0.400	(e)	(e)	P=0.247	(e)
MAX-ISO-POLY-3	P=0.243	(e)	(e)	P=0.078	(e)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Eye: Anterior Chamber Inflammation Acute</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	0/49 (0%)	1/50 (2%)	0/50 (0%)	0/49 (0%)
POLY-3 RATE (b)	2/38.83	0/42.65	1/41.83	0/38.48	0/38.86
POLY-3 PERCENT (g)	5.2%	0%	2.4%	0%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	615	---	641	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.195N	P=0.217N	P=0.474N	P=0.238N	P=0.236N
POLY 1.5	P=0.185N	P=0.228N	P=0.485N	P=0.239N	P=0.240N
POLY 6	P=0.211N	P=0.200N	P=0.455N	P=0.236N	P=0.229N
COCH-ARM / FISHERS	P=0.172N	P=0.253N	P=0.500N	P=0.247N	P=0.253N
MAX-ISO-POLY-3	P=0.060N	P=0.076N	P=0.265N	P=0.077N	P=0.076N



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Eye: Bilateral, Cornea Inflammation Acute</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	1/49 (2%)	2/50 (4%)	0/50 (0%)	0/49 (0%)
POLY-3 RATE (b)	2/38.83	1/42.79	2/42.35	0/38.48	0/38.86
POLY-3 PERCENT (g)	5.2%	2.3%	4.7%	0%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	615	698	575	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.092N	P=0.466N	P=0.663N	P=0.238N	P=0.236N
POLY 1.5	P=0.087N	P=0.485N	P=0.676N	P=0.239N	P=0.240N
POLY 6	P=0.099N	P=0.436N	P=0.639N	P=0.236N	P=0.229N
COCH-ARM / FISHERS	P=0.080N	P=0.508N	P=0.691N	P=0.247N	P=0.253N
MAX-ISO-POLY-3	P=0.141N	P=0.262N	P=0.466N	P=0.077N	P=0.076N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Eye: Bilateral, Cornea Inflammation Chronic</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	1/49 (2%)	2/50 (4%)	3/50 (6%)	1/49 (2%)
POLY-3 RATE (b)	1/38.40	1/42.65	2/41.63	3/38.85	1/38.94
POLY-3 PERCENT (g)	2.6%	2.3%	4.8%	7.7%	2.6%
TERMINAL (d)	1/18 (6%)	1/31 (3%)	1/27 (4%)	1/21 (5%)	0/20 (0%)
FIRST INCIDENCE	734 (T)	734 (T)	701	644	715
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.528	P=0.737N	P=0.528	P=0.308	P=0.758N
POLY 1.5	P=0.536	P=0.750N	P=0.516	P=0.306	P=0.760
POLY 6	P=0.520	P=0.715N	P=0.550	P=0.318	P=0.749N
COCH-ARM / FISHERS	P=0.549	P=0.747	P=0.500	P=0.309	P=0.747
MAX-ISO-POLY-3	P=0.494	P=0.471N	P=0.310	P=0.156	P=0.496N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Eye: Cornea</b>					
<b>Inflammation Acute</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	2/49 (4%)	2/50 (4%)	2/50 (4%)	1/49 (2%)
POLY-3 RATE (b)	2/38.83	2/42.90	2/42.35	2/39.78	1/39.03
POLY-3 PERCENT (g)	5.2%	4.7%	4.7%	5%	2.6%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	615	698	575	330	691
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.380N	P=0.658N	P=0.663N	P=0.686N	P=0.498N
POLY 1.5	P=0.370N	P=0.678N	P=0.676N	P=0.690N	P=0.504N
POLY 6	P=0.394N	P=0.624N	P=0.639N	P=0.678N	P=0.486N
COCH-ARM / FISHERS	P=0.356N	P=0.684	P=0.691N	P=0.691N	P=0.508N
MAX-ISO-POLY-3	P=0.518N	P=0.461N	P=0.466N	P=0.490N	P=0.279N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Eye: Cornea</b>					
<b>Inflammation Chronic</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	1/49 (2%)	4/50 (8%)	3/50 (6%)	2/49 (4%)
POLY-3 RATE (b)	1/38.40	1/42.65	4/42.18	3/38.85	2/39.00
POLY-3 PERCENT (g)	2.6%	2.3%	9.5%	7.7%	5.1%
TERMINAL (d)	1/18 (6%)	1/31 (3%)	1/27 (4%)	1/21 (5%)	0/20 (0%)
FIRST INCIDENCE	734 (T)	734 (T)	659	644	715
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.482	P=0.737N	P=0.207	P=0.308	P=0.505
POLY 1.5	P=0.491	P=0.750N	P=0.194	P=0.306	P=0.498
POLY 6	P=0.473	P=0.715N	P=0.232	P=0.318	P=0.521
COCH-ARM / FISHERS	P=0.505	P=0.747	P=0.181	P=0.309	P=0.492
MAX-ISO-POLY-3	P=0.313	P=0.471N	P=0.110	P=0.156	P=0.287

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Eye: Cornea</b>					
<b>Necrosis</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	0/49 (0%)	1/50 (2%)	4/50 (8%)	0/49 (0%)
POLY-3 RATE (b)	1/38.42	0/42.65	1/42.02	4/40.15	0/38.86
POLY-3 PERCENT (g)	2.6%	0%	2.4%	10%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	729	---	575	330	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.487	P=0.479N	P=0.741N	P=0.190	P=0.498N
POLY 1.5	P=0.499	P=0.491N	P=0.749N	P=0.185	P=0.501N
POLY 6	P=0.471	P=0.461N	P=0.726N	P=0.203	P=0.490N
COCH-ARM / FISHERS	P=0.521	P=0.505N	P=0.753N	P=0.181	P=0.505N
MAX-ISO-POLY-3	P=0.301	P=0.159N	P=0.475N	P=0.095	P=0.159N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Heart</b>					
<b>Cardiomyopathy</b>					
<b>LESION RATES</b>					
<b>OVERALL (a)</b>	42/50 (84%)	38/50 (76%)	39/50 (78%)	35/50 (70%)	32/50 (64%)
<b>POLY-3 RATE (b)</b>	42/47.21	38/48.14	39/45.29	35/45.36	32/44.67
<b>POLY-3 PERCENT (g)</b>	89%	78.9%	86.1%	77.2%	71.6%
<b>TERMINAL (d)</b>	15/18 (83%)	22/31 (71%)	25/27 (93%)	15/21 (71%)	11/20 (55%)
<b>FIRST INCIDENCE</b>	496	467	406	363	355
<b>STATISTICAL TESTS</b>					
<b>POLY 3</b>	P=0.021N*	P=0.136N	P=0.455N	P=0.090N	P=0.024N*
<b>POLY 1.5</b>	P=0.016N*	P=0.163N	P=0.355N	P=0.076N	P=0.018N*
<b>POLY 6</b>	P=0.029N*	P=0.106N	P=0.609N	P=0.112N	P=0.032N*
<b>COCH-ARM / FISHERS</b>	P=0.014N*	P=0.227N	P=0.306N	P=0.077N	P=0.020N*
<b>MAX-ISO-POLY-3</b>	P=0.026N*	P=0.084N	P=0.323N	P=0.054N	P=0.014N*

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Heart Mineralization</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	2/39.75	0/43.54	0/41.50	1/38.87	0/39.26
POLY-3 PERCENT (g)	5%	0%	0%	2.6%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	496	---	---	622	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.439N	P=0.217N	P=0.227N	P=0.508N	P=0.239N
POLY 1.5	P=0.425N	P=0.226N	P=0.232N	P=0.506N	P=0.240N
POLY 6	P=0.460N	P=0.202N	P=0.218N	P=0.504N	P=0.235N
COCH-ARM / FISHERS	P=0.406N	P=0.247N	P=0.247N	P=0.500N	P=0.247N
MAX-ISO-POLY-3	P=0.062N	P=0.075N	P=0.075N	P=0.288N	P=0.078N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Heart: Atrium Thrombosis</b>					
<b>LESION RATES</b>					
OVERALL (a)	3/50 (6%)	0/50 (0%)	4/50 (8%)	3/50 (6%)	0/50 (0%)
POLY-3 RATE (b)	3/39.16	0/43.54	4/41.79	3/39.20	0/39.26
POLY-3 PERCENT (g)	7.7%	0%	9.6%	7.7%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	2/27 (7%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	611	---	684	593	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.186N	P=0.100N	P=0.536	P=0.663N	P=0.117N
POLY 1.5	P=0.173N	P=0.108N	P=0.521	P=0.662	P=0.118N
POLY 6	P=0.205N	P=0.089N	P=0.562	P=0.656N	P=0.114N
COCH-ARM / FISHERS	P=0.157N	P=0.121N	P=0.500	P=0.661N	P=0.121N
MAX-ISO-POLY-3	P=0.111N	P=0.037N*	P=0.384	P=0.499N	P=0.037N*



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Islets, Pancreatic Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	0/50 (0%)	3/50 (6%)	0/49 (0%)	4/49 (8%)
POLY-3 RATE (b)	1/38.73	0/43.54	3/41.67	0/37.72	4/39.64
POLY-3 PERCENT (g)	2.6%	0%	7.2%	0%	10.1%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	2/27 (7%)	0/21 (0%)	1/20 (5%)
FIRST INCIDENCE	642	---	688	---	642
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.090	P=0.477N	P=0.331	P=0.505N	P=0.184
POLY 1.5	P=0.095	P=0.487N	P=0.320	P=0.505N	P=0.178
POLY 6	P=0.084	P=0.460N	P=0.351	P=0.502N	P=0.195
COCH-ARM / FISHERS	P=0.104	P=0.500N	P=0.309	P=0.505N	P=0.175
MAX-ISO-POLY-3	P=0.044*	P=0.157N	P=0.179	P=0.163N	P=0.090

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Kidney Cyst</b>					
<b>LESION RATES</b>					
<b>OVERALL (a)</b>	0/50 (0%)	1/50 (2%)	4/50 (8%)	4/50 (8%)	0/50 (0%)
<b>POLY-3 RATE (b)</b>	0/38.40	1/43.54	4/41.50	4/39.48	0/39.26
<b>POLY-3 PERCENT (g)</b>	0%	2.3%	9.6%	10.1%	0%
<b>TERMINAL (d)</b>	0/18 (0%)	1/31 (3%)	4/27 (15%)	1/21 (5%)	0/20 (0%)
<b>FIRST INCIDENCE</b>	---	734 (T)	734 (T)	636	---
<b>STATISTICAL TESTS</b>					
<b>POLY 3</b>	P=0.378N	P=0.525	P=0.070	P=0.063	(e)
<b>POLY 1.5</b>	P=0.369N	P=0.514	P=0.066	P=0.061	(e)
<b>POLY 6</b>	P=0.387N	P=0.543	P=0.078	P=0.068	(e)
<b>COCH-ARM / FISHERS</b>	P=0.358N	P=0.500	P=0.059	P=0.059	(e)
<b>MAX-ISO-POLY-3</b>	P=0.149	P=0.187	P=0.027*	P=0.021*	(e)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Kidney Infarct Chronic</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	3/50 (6%)	1/50 (2%)	0/50 (0%)	3/50 (6%)
POLY-3 RATE (b)	0/38.40	3/43.54	1/41.50	0/38.48	3/39.63
POLY-3 PERCENT (g)	0%	6.9%	2.4%	0%	7.6%
TERMINAL (d)	0/18 (0%)	3/31 (10%)	1/27 (4%)	0/21 (0%)	2/20 (10%)
FIRST INCIDENCE	---	734 (T)	734 (T)	---	628
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.260	P=0.142	P=0.515	(e)	P=0.123
POLY 1.5	P=0.260	P=0.131	P=0.509	(e)	P=0.121
POLY 6	P=0.263	P=0.162	P=0.527	(e)	P=0.130
COCH-ARM / FISHERS	P=0.263	P=0.121	P=0.500	(e)	P=0.121
MAX-ISO-POLY-3	P=0.069	P=0.059	P=0.177	(e)	P=0.042*

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

---

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Kidney Mineralization</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/38.40	0/43.54	0/41.50	0/38.48	0/39.26
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	---	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Kidney Nephropathy</b>					
<b>LESION RATES</b>					
OVERALL (a)	49/50 (98%)	50/50 (100%)	48/50 (96%)	49/50 (98%)	49/50 (98%)
POLY-3 RATE (b)	49/49.29	50/50.00	48/49.30	49/49.79	49/49.65
POLY-3 PERCENT (g)	99.4%	100%	97.4%	98.4%	98.7%
TERMINAL (d)	18/18 (100%)	31/31 (100%)	26/27 (96%)	21/21 (100%)	20/20 (100%)
FIRST INCIDENCE	186	285	406	330	355
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.572N	P=0.991	P=0.499N	P=0.729N	P=0.814N
POLY 1.5	P=0.573N	P=0.798	P=0.499N	P=0.737N	P=0.774N
POLY 6	P=0.635N	P=1.000	P=0.499N	P=0.776N	P=0.934N
COCH-ARM / FISHERS	P=0.609N	P=0.500	P=0.500N	P=0.753N	P=0.753N
MAX-ISO-POLY-3	P=0.378N	P=0.160	P=0.177N	P=0.283N	P=0.311N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

---

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Liver					
Angiectasis					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/46 (0%)
POLY-3 RATE (b)	0/38.40	0/43.54	0/41.50	0/38.48	0/36.74
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	---	---	---	---	---
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Liver</b>					
<b>Clear Cell Focus</b>					
<b>LESION RATES</b>					
OVERALL (a)	18/50 (36%)	26/50 (52%)	19/50 (38%)	21/50 (42%)	23/46 (50%)
POLY-3 RATE (b)	18/39.70	26/45.16	19/41.77	21/39.17	23/38.54
POLY-3 PERCENT (g)	45.3%	57.6%	45.5%	53.6%	59.7%
TERMINAL (d)	14/18 (78%)	22/31 (71%)	18/27 (67%)	18/21 (86%)	18/20 (90%)
FIRST INCIDENCE	552	538	660	615	526
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.156	P=0.172	P=0.586	P=0.295	P=0.134
POLY 1.5	P=0.178	P=0.120	P=0.549	P=0.312	P=0.123
POLY 6	P=0.134	P=0.289	P=0.538N	P=0.290	P=0.171
COCH-ARM / FISHERS	P=0.218	P=0.079	P=0.500	P=0.341	P=0.119
MAX-ISO-POLY-3	P=0.173	P=0.134	P=0.494	P=0.219	P=0.090

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Liver</b>					
<b>Eosinophilic Focus</b>					
<b>LESION RATES</b>					
<b>OVERALL (a)</b>	4/50 (8%)	0/50 (0%)	1/50 (2%)	1/50 (2%)	0/46 (0%)
<b>POLY-3 RATE (b)</b>	4/38.94	0/43.54	1/41.50	1/38.48	0/36.74
<b>POLY-3 PERCENT (g)</b>	10.3%	0%	2.4%	2.6%	0%
<b>TERMINAL (d)</b>	2/18 (11%)	0/31 (0%)	1/27 (4%)	1/21 (5%)	0/20 (0%)
<b>FIRST INCIDENCE</b>	615	---	734 (T)	734 (T)	---
<b>STATISTICAL TESTS</b>					
<b>POLY 3</b>	P=0.172N	P=0.047N*	P=0.158N	P=0.180N	P=0.066N
<b>POLY 1.5</b>	P=0.160N	P=0.053N	P=0.167N	P=0.181N	P=0.069N
<b>POLY 6</b>	P=0.191N	P=0.039N*	P=0.145N	P=0.176N	P=0.062N
<b>COCH-ARM / FISHERS</b>	P=0.146N	P=0.059N	P=0.181N	P=0.181N	P=0.069N
<b>MAX-ISO-POLY-3</b>	P=0.009N**	P=0.018N*	P=0.077N	P=0.085N	P=0.022N*



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
Liver Fatty Change					
<b>LESION RATES</b>					
OVERALL (a)	5/50 (10%)	4/50 (8%)	5/50 (10%)	2/50 (4%)	4/46 (9%)
POLY-3 RATE (b)	5/39.83	4/44.11	5/43.21	2/38.93	4/37.06
POLY-3 PERCENT (g)	12.6%	9.1%	11.6%	5.1%	10.8%
TERMINAL (d)	0/18 (0%)	3/31 (10%)	1/27 (4%)	0/21 (0%)	3/20 (15%)
FIRST INCIDENCE	552	551	505	671	645
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.431N	P=0.436N	P=0.579N	P=0.223N	P=0.546N
POLY 1.5	P=0.410N	P=0.464N	P=0.600N	P=0.221N	P=0.549N
POLY 6	P=0.459N	P=0.395N	P=0.545N	P=0.221N	P=0.536N
COCH-ARM / FISHERS	P=0.380N	P=0.500N	P=0.630N	P=0.218N	P=0.553N
MAX-ISO-POLY-3	P=0.451N	P=0.312N	P=0.447N	P=0.125N	P=0.407N

Experiment Number: 20403 - 01  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Zinc Carbonate, Basic  
 CAS Number: 5263-02-5

Date Report Requested: 05/25/2016  
 Time Report Requested: 10:24:19  
 First Dose M/F: 09/03/09 / 09/04/09  
 Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Liver</b>					
<b>Hematopoietic Cell Proliferation</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/46 (2%)
POLY-3 RATE (b)	0/38.40	0/43.54	0/41.50	0/38.48	1/37.05
POLY-3 PERCENT (g)	0%	0%	0%	0%	2.7%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	---	---	---	---	649
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

---

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Liver					
Mixed Cell Focus					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	1/50 (2%)	1/50 (2%)	0/46 (0%)
POLY-3 RATE (b)	0/38.40	0/43.54	1/41.50	1/38.48	0/36.74
POLY-3 PERCENT (g)	0%	0%	2.4%	2.6%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	1/27 (4%)	1/21 (5%)	0/20 (0%)
FIRST INCIDENCE	---	---	734 (T)	734 (T)	---
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Liver: Bile Duct Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	3/50 (6%)	0/46 (0%)
POLY-3 RATE (b)	0/38.40	0/43.54	0/41.50	3/38.72	0/36.74
POLY-3 PERCENT (g)	0%	0%	0%	7.8%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	2/21 (10%)	0/20 (0%)
FIRST INCIDENCE	---	---	---	671	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.280	(e)	(e)	P=0.119	(e)
POLY 1.5	P=0.283	(e)	(e)	P=0.118	(e)
POLY 6	P=0.277	(e)	(e)	P=0.123	(e)
COCH-ARM / FISHERS	P=0.290	(e)	(e)	P=0.121	(e)
MAX-ISO-POLY-3	P=0.145	(e)	(e)	P=0.038*	(e)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Liver: Hepatocyte Necrosis</b>					
<b>LESION RATES</b>					
OVERALL (a)	4/50 (8%)	0/50 (0%)	3/50 (6%)	1/50 (2%)	0/46 (0%)
POLY-3 RATE (b)	4/40.14	0/43.54	3/42.12	1/38.53	0/36.74
POLY-3 PERCENT (g)	10%	0%	7.1%	2.6%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	1/27 (4%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	546	---	575	723	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.092N	P=0.050N*	P=0.474N	P=0.190N	P=0.071N
POLY 1.5	P=0.084N	P=0.055N	P=0.485N	P=0.186N	P=0.071N
POLY 6	P=0.103N	P=0.043N*	P=0.453N	P=0.192N	P=0.069N
COCH-ARM / FISHERS	P=0.076N	P=0.059N	P=0.500N	P=0.181N	P=0.069N
MAX-ISO-POLY-3	P=0.027N*	P=0.019N*	P=0.326N	P=0.094N	P=0.026N*

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

---

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Liver: Hepatocyte Vacuolization Cytoplasmic					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	1/46 (2%)
POLY-3 RATE (b)	0/38.40	0/43.54	0/41.50	1/38.83	1/37.05
POLY-3 PERCENT (g)	0%	0%	0%	2.6%	2.7%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	---	---	---	636	649
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Zinc Carbonate, Basic  
 CAS Number: 5263-02-5

Date Report Requested: 05/25/2016  
 Time Report Requested: 10:24:19  
 First Dose M/F: 09/03/09 / 09/04/09  
 Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lung</b>					
<b>Infiltration Cellular Histiocyte</b>					
<b>LESION RATES</b>					
OVERALL (a)	18/50 (36%)	21/50 (42%)	21/50 (42%)	14/50 (28%)	14/50 (28%)
POLY-3 RATE (b)	18/41.35	21/44.47	21/43.85	14/40.61	14/40.34
POLY-3 PERCENT (g)	43.5%	47.2%	47.9%	34.5%	34.7%
TERMINAL (d)	9/18 (50%)	15/31 (48%)	15/27 (56%)	10/21 (48%)	9/20 (45%)
FIRST INCIDENCE	496	649	406	420	593
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.070N	P=0.449	P=0.424	P=0.264N	P=0.272N
POLY 1.5	P=0.059N	P=0.395	P=0.390	P=0.263N	P=0.271N
POLY 6	P=0.086N	P=0.553	P=0.487	P=0.256N	P=0.254N
COCH-ARM / FISHERS	P=0.045N*	P=0.341	P=0.341	P=0.260N	P=0.260N
MAX-ISO-POLY-3	P=0.129N	P=0.367	P=0.343	P=0.194N	P=0.202N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lung Inflammation</b>					
<b>LESION RATES</b>					
OVERALL (a)	3/50 (6%)	4/50 (8%)	7/50 (14%)	10/50 (20%)	4/50 (8%)
POLY-3 RATE (b)	3/39.43	4/44.08	7/43.69	10/41.18	4/39.49
POLY-3 PERCENT (g)	7.6%	9.1%	16%	24.3%	10.1%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	2/27 (7%)	1/21 (5%)	2/20 (10%)
FIRST INCIDENCE	496	686	505	436	691
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.359	P=0.561	P=0.200	P=0.038*	P=0.501
POLY 1.5	P=0.385	P=0.533	P=0.181	P=0.036*	P=0.498
POLY 6	P=0.326	P=0.606	P=0.235	P=0.045*	P=0.513
COCH-ARM / FISHERS	P=0.428	P=0.500	P=0.159	P=0.036*	P=0.500
MAX-ISO-POLY-3	P=0.195	P=0.410	P=0.130	P=0.021*	P=0.347



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node, Mandibular Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/49 (4%)	1/50 (2%)	2/50 (4%)	2/50 (4%)	2/48 (4%)
POLY-3 RATE (b)	2/38.77	1/43.68	2/42.00	2/39.11	2/39.44
POLY-3 PERCENT (g)	5.2%	2.3%	4.8%	5.1%	5.1%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	1/27 (4%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	611	698	580	622	405
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.452	P=0.458N	P=0.665N	P=0.692N	P=0.689N
POLY 1.5	P=0.460	P=0.474N	P=0.674N	P=0.691N	P=0.694N
POLY 6	P=0.439	P=0.433N	P=0.649N	P=0.688N	P=0.679N
COCH-ARM / FISHERS	P=0.470	P=0.492N	P=0.684N	P=0.684N	P=0.684
MAX-ISO-POLY-3	P=0.644	P=0.256N	P=0.468N	P=0.496N	P=0.493N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node, Mandibular Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	15/49 (31%)	14/50 (28%)	11/50 (22%)	10/50 (20%)	11/48 (23%)
POLY-3 RATE (b)	15/40.81	14/45.52	11/42.78	10/40.86	11/39.69
POLY-3 PERCENT (g)	36.8%	30.8%	25.7%	24.5%	27.7%
TERMINAL (d)	6/18 (33%)	9/31 (29%)	8/27 (30%)	6/21 (29%)	7/20 (35%)
FIRST INCIDENCE	488	505	406	420	355
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.313N	P=0.358N	P=0.193N	P=0.163N	P=0.261N
POLY 1.5	P=0.284N	P=0.408N	P=0.205N	P=0.163N	P=0.261N
POLY 6	P=0.359N	P=0.287N	P=0.175N	P=0.161N	P=0.260N
COCH-ARM / FISHERS	P=0.252N	P=0.474N	P=0.228N	P=0.163N	P=0.266N
MAX-ISO-POLY-3	P=0.264N	P=0.286N	P=0.137N	P=0.110N	P=0.190N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node, Mandibular Infiltration Cellular Plasma Cell</b>					
<b>LESION RATES</b>					
OVERALL (a)	12/49 (24%)	9/50 (18%)	13/50 (26%)	12/50 (24%)	10/48 (21%)
POLY-3 RATE (b)	12/39.01	9/43.90	13/42.96	12/40.66	10/39.78
POLY-3 PERCENT (g)	30.8%	20.5%	30.3%	29.5%	25.1%
TERMINAL (d)	8/18 (44%)	6/31 (19%)	8/27 (30%)	7/21 (33%)	5/20 (25%)
FIRST INCIDENCE	538	687	594	363	526
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.497N	P=0.204N	P=0.576N	P=0.550N	P=0.379N
POLY 1.5	P=0.480N	P=0.244N	P=0.573	P=0.562N	P=0.403N
POLY 6	P=0.521N	P=0.147N	P=0.502N	P=0.515N	P=0.331N
COCH-ARM / FISHERS	P=0.455N	P=0.294N	P=0.523	P=0.570N	P=0.426N
MAX-ISO-POLY-3	P=0.510N	P=0.151N	P=0.480N	P=0.451N	P=0.290N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node, Mesenteric Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/49 (0%)	1/50 (2%)	0/49 (0%)
POLY-3 RATE (b)	2/39.05	0/43.54	0/41.03	1/38.80	0/39.14
POLY-3 PERCENT (g)	5.1%	0%	0%	2.6%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	611	---	---	645	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.442N	P=0.213N	P=0.226N	P=0.502N	P=0.236N
POLY 1.5	P=0.427N	P=0.224N	P=0.232N	P=0.502N	P=0.239N
POLY 6	P=0.463N	P=0.198N	P=0.215N	P=0.498N	P=0.231N
COCH-ARM / FISHERS	P=0.408N	P=0.247N	P=0.253N	P=0.500N	P=0.253N
MAX-ISO-POLY-3	P=0.060N	P=0.075N	P=0.076N	P=0.282N	P=0.076N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node, Mesenteric Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/49 (0%)	2/50 (4%)	4/49 (8%)
POLY-3 RATE (b)	0/38.40	2/43.72	0/41.03	2/39.85	4/39.67
POLY-3 PERCENT (g)	0%	4.6%	0%	5%	10.1%
TERMINAL (d)	0/18 (0%)	1/31 (3%)	0/27 (0%)	0/21 (0%)	2/20 (10%)
FIRST INCIDENCE	---	686	---	420	597
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.016*	P=0.267	(e)	P=0.245	P=0.063
POLY 1.5	P=0.016*	P=0.253	(e)	P=0.241	P=0.061
POLY 6	P=0.015*	P=0.290	(e)	P=0.253	P=0.069
COCH-ARM / FISHERS	P=0.017*	P=0.247	(e)	P=0.247	P=0.056
MAX-ISO-POLY-3	P=0.025*	P=0.104	(e)	P=0.083	P=0.022*

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

---

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node, Mesenteric Infiltration Cellular Histiocyte</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/49 (0%)	0/50 (0%)	0/49 (0%)
POLY-3 RATE (b)	0/38.40	0/43.54	0/41.03	0/38.48	0/39.14
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	---	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node: Mediastinal Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/6 (17%)	0/1 (0%)	2/4 (50%)	0/3 (0%)	0/2 (0%)
POLY-3 RATE (b)	1/4.80	0/0.90	2/3.72	0/1.99	0/1.98
POLY-3 PERCENT (g)	20.8%	0%	53.7%	0%	0%
TERMINAL (d)	0/0 (0%)	0/0 (0%)	0/1 (0%)	0/1 (0%)	0/1 (0%)
FIRST INCIDENCE	701	---	701	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.272N	P=0.826N	P=0.394	P=0.668N	P=0.680N
POLY 1.5	P=0.269N	P=0.826N	P=0.371	P=0.656N	P=0.693N
POLY 6	P=0.259N	P=0.830N	P=0.428	P=0.677N	P=0.659N
COCH-ARM / FISHERS	P=0.238N	P=0.857N	P=0.333	P=0.667N	P=0.750N
MAX-ISO-POLY-3	P=0.382N	P=0.368N	P=0.169	P=0.306N	P=0.284N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node: Mediastinal Hemorrhage</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/6 (33%)	1/1 (100%)	4/4 (100%)	1/3 (33%)	0/2 (0%)
POLY-3 RATE (b)	2/5.53	1/1.00	4/4.00	1/2.79	0/1.98
POLY-3 PERCENT (g)	36.2%	100%	100%	35.9%	0%
TERMINAL (d)	0/0 (0%)	0/0 (0%)	1/1 (100%)	0/1 (0%)	0/1 (0%)
FIRST INCIDENCE	496	708	659	436	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.037N*	P=0.464	P=0.047*	P=0.752N	P=0.480N
POLY 1.5	P=0.044N*	P=0.452	P=0.044*	P=0.749N	P=0.490N
POLY 6	P=0.026N*	P=0.491	P=0.056	P=0.757N	P=0.461N
COCH-ARM / FISHERS	P=0.083N	P=0.429	P=0.071	P=0.762	P=0.536N
MAX-ISO-POLY-3	P=0.068N	P=0.178	P=0.009**	P=0.497N	P=0.215N



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

---

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Mammary Gland Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/49 (0%)	0/50 (0%)	0/48 (0%)	0/49 (0%)
POLY-3 RATE (b)	0/38.40	0/42.84	0/41.50	0/36.83	0/38.26
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/20 (0%)	0/19 (0%)
FIRST INCIDENCE	---	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Nose Inflammation</b>					
<b>LESION RATES</b>					
OVERALL (a)	8/50 (16%)	0/50 (0%)	4/50 (8%)	2/50 (4%)	4/49 (8%)
POLY-3 RATE (b)	8/40.38	0/43.54	4/42.53	2/38.48	4/40.13
POLY-3 PERCENT (g)	19.8%	0%	9.4%	5.2%	10%
TERMINAL (d)	3/18 (17%)	0/31 (0%)	1/27 (4%)	2/21 (10%)	0/20 (0%)
FIRST INCIDENCE	496	---	406	734 (T)	597
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.531N	P=0.002N**	P=0.149N	P=0.050N*	P=0.175N
POLY 1.5	P=0.506N	P=0.003N**	P=0.160N	P=0.049N*	P=0.182N
POLY 6	P=0.565N	P=0.002N**	P=0.131N	P=0.051N	P=0.161N
COCH-ARM / FISHERS	P=0.471N	P=0.003N**	P=0.178N	P=0.046N*	P=0.188N
MAX-ISO-POLY-3	P=0.026N*	P<0.001N**	P=0.093N	P=0.026N*	P=0.105N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Nose: Respiratory Epithelium Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	3/50 (6%)	2/50 (4%)	1/49 (2%)
POLY-3 RATE (b)	0/38.40	0/43.54	3/41.67	2/38.79	1/39.45
POLY-3 PERCENT (g)	0%	0%	7.2%	5.2%	2.5%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	2/27 (7%)	1/21 (5%)	0/20 (0%)
FIRST INCIDENCE	---	---	688	648	649
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.498	(e)	P=0.133	P=0.239	P=0.505
POLY 1.5	P=0.502	(e)	P=0.127	P=0.237	P=0.501
POLY 6	P=0.494	(e)	P=0.145	P=0.244	P=0.514
COCH-ARM / FISHERS	P=0.507	(e)	P=0.121	P=0.247	P=0.495
MAX-ISO-POLY-3	P=0.190	(e)	P=0.051	P=0.077	P=0.165

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Pancreas: Acinus Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	3/49 (6%)	3/50 (6%)	4/48 (8%)	3/48 (6%)	13/48 (27%)
POLY-3 RATE (b)	3/38.13	3/43.72	4/40.68	3/37.89	13/39.04
POLY-3 PERCENT (g)	7.9%	6.9%	9.8%	7.9%	33.3%
TERMINAL (d)	2/18 (11%)	2/31 (7%)	3/27 (11%)	1/21 (5%)	10/20 (50%)
FIRST INCIDENCE	693	687	701	565	649
<b>STATISTICAL TESTS</b>					
POLY 3	P<0.001**	P=0.598N	P=0.536	P=0.661	P=0.005**
POLY 1.5	P<0.001**	P=0.623N	P=0.515	P=0.655	P=0.005**
POLY 6	P<0.001**	P=0.556N	P=0.570	P=0.653N	P=0.005**
COCH-ARM / FISHERS	P<0.001**	P=0.651N	P=0.488	P=0.651	P=0.005**
MAX-ISO-POLY-3	P<0.001**	P=0.435N	P=0.384	P=0.496	P=0.003**

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Pancreas: Acinus Basophilic Focus</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/49 (2%)	0/50 (0%)	1/48 (2%)	0/48 (0%)	2/48 (4%)
POLY-3 RATE (b)	1/37.97	0/43.54	1/40.55	0/37.11	2/38.26
POLY-3 PERCENT (g)	2.6%	0%	2.5%	0%	5.2%
TERMINAL (d)	1/18 (6%)	0/31 (0%)	1/27 (4%)	0/21 (0%)	2/20 (10%)
FIRST INCIDENCE	734 (T)	---	734 (T)	---	734 (T)
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.218	P=0.473N	P=0.746N	P=0.505N	P=0.503
POLY 1.5	P=0.226	P=0.483N	P=0.755N	P=0.505N	P=0.498
POLY 6	P=0.207	P=0.456N	P=0.732N	P=0.500N	P=0.513
COCH-ARM / FISHERS	P=0.237	P=0.495N	P=0.747	P=0.505N	P=0.492
MAX-ISO-POLY-3	P=0.208	P=0.156N	P=0.481N	P=0.162N	P=0.283

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Pancreas: Acinus Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	23/49 (47%)	32/50 (64%)	23/48 (48%)	21/48 (44%)	28/48 (58%)
POLY-3 RATE (b)	23/41.62	32/44.90	23/40.84	21/39.22	28/40.74
POLY-3 PERCENT (g)	55.3%	71.3%	56.3%	53.5%	68.7%
TERMINAL (d)	10/18 (56%)	27/31 (87%)	21/27 (78%)	14/21 (67%)	17/20 (85%)
FIRST INCIDENCE	537	551	687	593	412
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.319	P=0.080	P=0.552	P=0.528N	P=0.135
POLY 1.5	P=0.360	P=0.072	P=0.556	P=0.500N	P=0.155
POLY 6	P=0.272	P=0.100	P=0.544	P=0.547N	P=0.113
COCH-ARM / FISHERS	P=0.419	P=0.066	P=0.543	P=0.456N	P=0.179
MAX-ISO-POLY-3	P=0.169	P=0.056	P=0.459	P=0.436N	P=0.091

Experiment Number: 20403 - 01  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Zinc Carbonate, Basic  
 CAS Number: 5263-02-5

Date Report Requested: 05/25/2016  
 Time Report Requested: 10:24:19  
 First Dose M/F: 09/03/09 / 09/04/09  
 Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Parathyroid Gland Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	6/47 (13%)	2/41 (5%)	2/44 (5%)	6/40 (15%)	5/42 (12%)
POLY-3 RATE (b)	6/37.81	2/35.50	2/36.79	6/31.57	5/33.02
POLY-3 PERCENT (g)	15.9%	5.6%	5.4%	19%	15.1%
TERMINAL (d)	0/17 (0%)	1/25 (4%)	0/24 (0%)	1/16 (6%)	2/16 (13%)
FIRST INCIDENCE	514	715	568	622	649
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.132	P=0.150N	P=0.138N	P=0.490	P=0.596N
POLY 1.5	P=0.148	P=0.163N	P=0.145N	P=0.494	P=0.589N
POLY 6	P=0.112	P=0.130N	P=0.126N	P=0.496	P=0.601N
COCH-ARM / FISHERS	P=0.174	P=0.182N	P=0.156N	P=0.502	P=0.580N
MAX-ISO-POLY-3	P=0.240	P=0.079N	P=0.072N	P=0.371	P=0.467N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Pituitary Gland: Pars Distalis Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	12/50 (24%)	17/50 (34%)	17/50 (34%)	13/50 (26%)	15/49 (31%)
POLY-3 RATE (b)	12/39.88	17/45.00	17/43.43	13/40.56	15/40.65
POLY-3 PERCENT (g)	30.1%	37.8%	39.2%	32.1%	36.9%
TERMINAL (d)	6/18 (33%)	11/31 (36%)	11/27 (41%)	7/21 (33%)	7/20 (35%)
FIRST INCIDENCE	553	505	568	565	412
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.529N	P=0.301	P=0.259	P=0.521	P=0.338
POLY 1.5	P=0.508N	P=0.246	P=0.226	P=0.506	P=0.319
POLY 6	P=0.524	P=0.400	P=0.325	P=0.561	P=0.382
COCH-ARM / FISHERS	P=0.472N	P=0.189	P=0.189	P=0.500	P=0.304
MAX-ISO-POLY-3	P=0.469	P=0.237	P=0.197	P=0.424	P=0.257



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Preputial Gland Inflammation</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/38.40	0/43.54	2/41.68	0/38.48	0/39.26
POLY-3 PERCENT (g)	0%	0%	4.8%	0%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	1/27 (4%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	---	---	687	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.283N	(e)	P=0.255	(e)	(e)
POLY 1.5	P=0.279N	(e)	P=0.247	(e)	(e)
POLY 6	P=0.286N	(e)	P=0.270	(e)	(e)
COCH-ARM / FISHERS	P=0.277N	(e)	P=0.247	(e)	(e)
MAX-ISO-POLY-3	P=0.418	(e)	P=0.093	(e)	(e)

Experiment Number: 20403 - 01  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Zinc Carbonate, Basic  
 CAS Number: 5263-02-5

Date Report Requested: 05/25/2016  
 Time Report Requested: 10:24:19  
 First Dose M/F: 09/03/09 / 09/04/09  
 Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Prostate: Epithelium Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/38.89	0/43.54	1/41.50	0/38.48	0/39.26
POLY-3 PERCENT (g)	5.1%	0%	2.4%	0%	0%
TERMINAL (d)	1/18 (6%)	0/31 (0%)	1/27 (4%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	586	---	734 (T)	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.194N	P=0.213N	P=0.477N	P=0.239N	P=0.234N
POLY 1.5	P=0.184N	P=0.224N	P=0.487N	P=0.239N	P=0.237N
POLY 6	P=0.209N	P=0.196N	P=0.460N	P=0.236N	P=0.229N
COCH-ARM / FISHERS	P=0.171N	P=0.247N	P=0.500N	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.059N	P=0.075N	P=0.267N	P=0.077N	P=0.075N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Skin</b>					
Cyst Epithelial Inclusion					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	1/50 (2%)	1/50 (2%)	0/50 (0%)	2/50 (4%)
POLY-3 RATE (b)	1/38.40	1/43.54	1/41.50	0/38.48	2/39.72
POLY-3 PERCENT (g)	2.6%	2.3%	2.4%	0%	5%
TERMINAL (d)	1/18 (6%)	1/31 (3%)	1/27 (4%)	0/21 (0%)	1/20 (5%)
FIRST INCIDENCE	734 (T)	734 (T)	734 (T)	---	597
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.371	P=0.732N	P=0.744N	P=0.500N	P=0.512
POLY 1.5	P=0.378	P=0.745N	P=0.751N	P=0.500N	P=0.505
POLY 6	P=0.362	P=0.710N	P=0.730N	P=0.496N	P=0.527
COCH-ARM / FISHERS	P=0.388	P=0.753N	P=0.753N	P=0.500N	P=0.500
MAX-ISO-POLY-3	P=0.347	P=0.466N	P=0.478N	P=0.157N	P=0.293

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Skin Inflammation</b>					
<b>LESION RATES</b>					
OVERALL (a)	4/50 (8%)	0/50 (0%)	2/50 (4%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	4/38.40	0/43.54	2/41.79	1/38.48	0/39.26
POLY-3 PERCENT (g)	10.4%	0%	4.8%	2.6%	0%
TERMINAL (d)	4/18 (22%)	0/31 (0%)	0/27 (0%)	1/21 (5%)	0/20 (0%)
FIRST INCIDENCE	734 (T)	---	660	734 (T)	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.118N	P=0.045N*	P=0.298N	P=0.176N	P=0.056N
POLY 1.5	P=0.107N	P=0.052N	P=0.315N	P=0.178N	P=0.059N
POLY 6	P=0.135N	P=0.037N*	P=0.268N	P=0.168N	P=0.051N
COCH-ARM / FISHERS	P=0.096N	P=0.059N	P=0.339N	P=0.181N	P=0.059N
MAX-ISO-POLY-3	P=0.013N*	P=0.018N*	P=0.179N	P=0.081N	P=0.018N*

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
Skin Ulcer					
<b>LESION RATES</b>					
OVERALL (a)	3/50 (6%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	3/38.91	0/43.54	0/41.50	1/38.72	2/39.63
POLY-3 PERCENT (g)	7.7%	0%	0%	2.6%	5.1%
TERMINAL (d)	1/18 (6%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	1/20 (5%)
FIRST INCIDENCE	586	---	---	671	628
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.290	P=0.099N	P=0.107N	P=0.306N	P=0.492N
POLY 1.5	P=0.306	P=0.108N	P=0.112N	P=0.307N	P=0.497N
POLY 6	P=0.269	P=0.087N	P=0.098N	P=0.299N	P=0.477N
COCH-ARM / FISHERS	P=0.329	P=0.121N	P=0.121N	P=0.309N	P=0.500N
MAX-ISO-POLY-3	P=0.121N	P=0.037N*	P=0.037N*	P=0.154N	P=0.316N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Skin: Epidermis Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	2/50 (4%)	2/50 (4%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	2/38.57	2/43.54	2/41.50	1/38.48	0/39.26
POLY-3 PERCENT (g)	5.2%	4.6%	4.8%	2.6%	0%
TERMINAL (d)	1/18 (6%)	2/31 (7%)	2/27 (7%)	1/21 (5%)	0/20 (0%)
FIRST INCIDENCE	691	734 (T)	734 (T)	734 (T)	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.110N	P=0.650N	P=0.668N	P=0.501N	P=0.232N
POLY 1.5	P=0.106N	P=0.670N	P=0.679N	P=0.502N	P=0.235N
POLY 6	P=0.116N	P=0.617N	P=0.648N	P=0.495N	P=0.226N
COCH-ARM / FISHERS	P=0.098N	P=0.691N	P=0.691N	P=0.500N	P=0.247N
MAX-ISO-POLY-3	P=0.201N	P=0.453N	P=0.470N	P=0.280N	P=0.075N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Skin: Hair Follicle Cyst</b>					
<b>LESION RATES</b>					
OVERALL (a)	3/50 (6%)	1/50 (2%)	0/50 (0%)	5/50 (10%)	2/50 (4%)
POLY-3 RATE (b)	3/38.59	1/43.54	0/41.50	5/39.19	2/39.45
POLY-3 PERCENT (g)	7.8%	2.3%	0%	12.8%	5.1%
TERMINAL (d)	2/18 (11%)	1/31 (3%)	0/27 (0%)	3/21 (14%)	0/20 (0%)
FIRST INCIDENCE	684	734 (T)	---	593	704
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.203	P=0.263N	P=0.105N	P=0.363	P=0.490N
POLY 1.5	P=0.216	P=0.282N	P=0.111N	P=0.358	P=0.496N
POLY 6	P=0.187	P=0.235N	P=0.096N	P=0.379	P=0.474N
COCH-ARM / FISHERS	P=0.240	P=0.309N	P=0.121N	P=0.357	P=0.500N
MAX-ISO-POLY-3	P=0.255	P=0.138N	P=0.037N*	P=0.235	P=0.315N

Experiment Number: 20403 - 01  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/HSD

**P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS**  
 Zinc Carbonate, Basic  
 CAS Number: 5263-02-5

Date Report Requested: 05/25/2016  
 Time Report Requested: 10:24:19  
 First Dose M/F: 09/03/09 / 09/04/09  
 Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Spleen</b>					
<b>Hematopoietic Cell Proliferation</b>					
<b>LESION RATES</b>					
<b>OVERALL (a)</b>	27/50 (54%)	37/50 (74%)	24/49 (49%)	26/48 (54%)	24/45 (53%)
<b>POLY-3 RATE (b)</b>	27/43.76	37/48.97	24/44.45	26/40.80	24/40.17
<b>POLY-3 PERCENT (g)</b>	61.7%	75.6%	54%	63.7%	59.7%
<b>TERMINAL (d)</b>	13/18 (72%)	24/31 (77%)	16/27 (59%)	16/21 (76%)	12/20 (60%)
<b>FIRST INCIDENCE</b>	537	285	406	420	412
<b>STATISTICAL TESTS</b>					
<b>POLY 3</b>	P=0.323N	P=0.102	P=0.296N	P=0.514	P=0.517N
<b>POLY 1.5</b>	P=0.290N	P=0.065	P=0.323N	P=0.541	P=0.532N
<b>POLY 6</b>	P=0.355N	P=0.171	P=0.263N	P=0.487	P=0.483N
<b>COCH-ARM / FISHERS</b>	P=0.243N	P=0.030*	P=0.383N	P=0.574	P=0.556N
<b>MAX-ISO-POLY-3</b>	P=0.300N	P=0.076	P=0.225N	P=0.421	P=0.425N



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Spleen</b>					
<b>Pigmentation Hemosiderin</b>					
<b>LESION RATES</b>					
OVERALL (a)	44/50 (88%)	43/50 (86%)	49/49 (100%)	40/48 (83%)	34/45 (76%)
POLY-3 RATE (b)	44/47.85	43/49.18	49/49.00	40/45.78	34/42.57
POLY-3 PERCENT (g)	92%	87.4%	100%	87.4%	79.9%
TERMINAL (d)	17/18 (94%)	28/31 (90%)	27/27 (100%)	18/21 (86%)	17/20 (85%)
FIRST INCIDENCE	186	285	406	330	355
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.004N**	P=0.334N	P=0.035*	P=0.336N	P=0.065N
POLY 1.5	P=0.003N**	P=0.406N	P=0.023*	P=0.357N	P=0.075N
POLY 6	P=0.007N**	P=0.249N	P=0.082	P=0.283N	P=0.059N
COCH-ARM / FISHERS	P=0.003N**	P=0.500N	P=0.014*	P=0.355N	P=0.095N
MAX-ISO-POLY-3	P=0.008N**	P=0.217N	P=0.008**	P=0.214N	P=0.036N*

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Spleen: Lymphoid Follicle Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	6/50 (12%)	1/50 (2%)	3/49 (6%)	3/48 (6%)	4/45 (9%)
POLY-3 RATE (b)	6/40.66	1/43.68	3/42.04	3/38.21	4/37.92
POLY-3 PERCENT (g)	14.8%	2.3%	7.1%	7.9%	10.6%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	514	698	490	565	405
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.375	P=0.044N*	P=0.223N	P=0.271N	P=0.413N
POLY 1.5	P=0.387	P=0.049N*	P=0.236N	P=0.270N	P=0.423N
POLY 6	P=0.356	P=0.036N*	P=0.203N	P=0.263N	P=0.395N
COCH-ARM / FISHERS	P=0.403	P=0.056N	P=0.254N	P=0.264N	P=0.439N
MAX-ISO-POLY-3	P=0.191N	P=0.021N*	P=0.136N	P=0.172N	P=0.290N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Spleen: Lymphoid Follicle Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	7/50 (14%)	8/50 (16%)	10/49 (20%)	8/48 (17%)	3/45 (7%)
POLY-3 RATE (b)	7/40.53	8/45.00	10/41.82	8/38.88	3/37.13
POLY-3 PERCENT (g)	17.3%	17.8%	23.9%	20.6%	8.1%
TERMINAL (d)	0/18 (0%)	4/31 (13%)	8/27 (30%)	4/21 (19%)	1/20 (5%)
FIRST INCIDENCE	552	504	505	436	649
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.098N	P=0.588	P=0.318	P=0.464	P=0.191N
POLY 1.5	P=0.091N	P=0.551	P=0.304	P=0.465	P=0.196N
POLY 6	P=0.107N	P=0.586N	P=0.338	P=0.468	P=0.183N
COCH-ARM / FISHERS	P=0.084N	P=0.500	P=0.282	P=0.465	P=0.205N
MAX-ISO-POLY-3	P=0.169N	P=0.476	P=0.230	P=0.353	P=0.116N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Stomach, Forestomach Mineralization</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/49 (0%)
POLY-3 RATE (b)	2/39.75	0/43.54	0/41.50	0/38.48	0/39.09
POLY-3 PERCENT (g)	5%	0%	0%	0%	0%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	496	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.289N	P=0.217N	P=0.227N	P=0.244N	P=0.240N
POLY 1.5	P=0.277N	P=0.226N	P=0.232N	P=0.242N	P=0.242N
POLY 6	P=0.308N	P=0.202N	P=0.218N	P=0.243N	P=0.236N
COCH-ARM / FISHERS	P=0.263N	P=0.247N	P=0.247N	P=0.247N	P=0.253N
MAX-ISO-POLY-3	P=0.023N*	P=0.075N	P=0.075N	P=0.082N	P=0.078N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Stomach, Forestomach Ulcer</b>					
<b>LESION RATES</b>					
OVERALL (a)	3/50 (6%)	0/50 (0%)	1/50 (2%)	2/50 (4%)	2/49 (4%)
POLY-3 RATE (b)	3/38.82	0/43.54	1/41.83	2/39.19	2/39.46
POLY-3 PERCENT (g)	7.7%	0%	2.4%	5.1%	5.1%
TERMINAL (d)	1/18 (6%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	656	---	641	551	649
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.340	P=0.099N	P=0.278N	P=0.496N	P=0.492N
POLY 1.5	P=0.354	P=0.108N	P=0.290N	P=0.499N	P=0.501N
POLY 6	P=0.319	P=0.087N	P=0.259N	P=0.485N	P=0.476N
COCH-ARM / FISHERS	P=0.374	P=0.121N	P=0.309N	P=0.500N	P=0.510N
MAX-ISO-POLY-3	P=0.274N	P=0.037N*	P=0.143N	P=0.319N	P=0.318N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Stomach, Forestomach: Epithelium Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	11/50 (22%)	16/50 (32%)	11/50 (22%)	14/50 (28%)	7/49 (14%)
POLY-3 RATE (b)	11/40.05	16/45.18	11/44.29	14/41.80	7/40.01
POLY-3 PERCENT (g)	27.5%	35.4%	24.8%	33.5%	17.5%
TERMINAL (d)	2/18 (11%)	12/31 (39%)	4/27 (15%)	4/21 (19%)	3/20 (15%)
FIRST INCIDENCE	652	505	439	474	649
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.140N	P=0.288	P=0.490N	P=0.361	P=0.209N
POLY 1.5	P=0.126N	P=0.240	P=0.532N	P=0.341	P=0.219N
POLY 6	P=0.159N	P=0.364	P=0.431N	P=0.400	P=0.194N
COCH-ARM / FISHERS	P=0.109N	P=0.184	P=0.595N	P=0.322	P=0.232N
MAX-ISO-POLY-3	P=0.149N	P=0.226	P=0.396N	P=0.279	P=0.140N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Stomach, Glandular Mineralization</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	0/50 (0%)	1/50 (2%)	1/50 (2%)	1/49 (2%)
POLY-3 RATE (b)	2/39.75	0/43.54	1/41.72	1/38.87	1/39.56
POLY-3 PERCENT (g)	5%	0%	2.4%	2.6%	2.5%
TERMINAL (d)	0/18 (0%)	0/31 (0%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	496	---	676	622	593
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.582	P=0.217N	P=0.483N	P=0.508N	P=0.502N
POLY 1.5	P=0.594	P=0.226N	P=0.491N	P=0.506N	P=0.505N
POLY 6	P=0.566	P=0.202N	P=0.467N	P=0.504N	P=0.492N
COCH-ARM / FISHERS	P=0.609	P=0.247N	P=0.500N	P=0.500N	P=0.508N
MAX-ISO-POLY-3	P=0.330N	P=0.075N	P=0.270N	P=0.288N	P=0.281N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
Testes					
Edema					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/38.40	2/43.84	0/41.50	0/38.48	0/39.26
POLY-3 PERCENT (g)	0%	4.6%	0%	0%	0%
TERMINAL (d)	0/18 (0%)	1/31 (3%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	---	649	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.257N	P=0.268	(e)	(e)	(e)
POLY 1.5	P=0.262N	P=0.253	(e)	(e)	(e)
POLY 6	P=0.248N	P=0.292	(e)	(e)	(e)
COCH-ARM / FISHERS	P=0.269N	P=0.247	(e)	(e)	(e)
MAX-ISO-POLY-3	P=0.265N	P=0.104	(e)	(e)	(e)



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

---

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Testes: Bilateral, Germinal Epithelium Atrophy					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	7/50 (14%)	1/50 (2%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/38.40	7/46.78	1/41.68	0/38.48	1/39.34
POLY-3 PERCENT (g)	0%	15%	2.4%	0%	2.5%
TERMINAL (d)	0/18 (0%)	1/31 (3%)	0/27 (0%)	0/21 (0%)	0/20 (0%)
FIRST INCIDENCE	---	467	687	---	715
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.091N	P=0.016*	P=0.516	(e)	P=0.505
POLY 1.5	P=0.096N	P=0.012*	P=0.509	(e)	P=0.502
POLY 6	P=0.085N	P=0.025*	P=0.529	(e)	P=0.512
COCH-ARM / FISHERS	P=0.111N	P=0.006**	P=0.500	(e)	P=0.500
MAX-ISO-POLY-3	P=0.128N	P=0.010**	P=0.178	(e)	P=0.163

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Testes: Germinal Epithelium Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	5/50 (10%)	10/50 (20%)	1/50 (2%)	3/50 (6%)	5/50 (10%)
POLY-3 RATE (b)	5/39.21	10/46.78	1/41.68	3/39.27	5/39.90
POLY-3 PERCENT (g)	12.8%	21.4%	2.4%	7.6%	12.5%
TERMINAL (d)	2/18 (11%)	4/31 (13%)	0/27 (0%)	1/21 (5%)	2/20 (10%)
FIRST INCIDENCE	638	467	687	565	649
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.427N	P=0.223	P=0.086N	P=0.354N	P=0.621N
POLY 1.5	P=0.416N	P=0.179	P=0.093N	P=0.357N	P=0.627N
POLY 6	P=0.440N	P=0.294	P=0.076N	P=0.344N	P=0.604N
COCH-ARM / FISHERS	P=0.400N	P=0.131	P=0.102N	P=0.357N	P=0.630N
MAX-ISO-POLY-3	P=0.157N	P=0.167	P=0.041N*	P=0.226N	P=0.488N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

---

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Thymus Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	37/47 (79%)	40/49 (82%)	35/50 (70%)	36/47 (77%)	37/48 (77%)
POLY-3 RATE (b)	37/44.96	40/47.85	35/48.89	36/44.57	37/45.55
POLY-3 PERCENT (g)	82.3%	83.6%	71.6%	80.8%	81.2%
TERMINAL (d)	12/18 (67%)	25/31 (81%)	16/27 (59%)	16/20 (80%)	15/19 (79%)
FIRST INCIDENCE	514	285	406	363	362
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.402	P=0.545	P=0.159N	P=0.536N	P=0.558N
POLY 1.5	P=0.455	P=0.537	P=0.170N	P=0.501N	P=0.525N
POLY 6	P=0.334	P=0.536	P=0.154N	P=0.606N	P=0.609N
COCH-ARM / FISHERS	P=0.526	P=0.459	P=0.227N	P=0.500N	P=0.522N
MAX-ISO-POLY-3	P=0.464N	P=0.433	P=0.112N	P=0.424N	P=0.446N

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
Thymus Hyperplasia					
<b>LESION RATES</b>					
OVERALL (a)	0/47 (0%)	1/49 (2%)	3/50 (6%)	1/47 (2%)	1/48 (2%)
POLY-3 RATE (b)	0/36.61	1/42.84	3/41.68	1/36.38	1/37.34
POLY-3 PERCENT (g)	0%	2.3%	7.2%	2.8%	2.7%
TERMINAL (d)	0/18 (0%)	1/31 (3%)	2/27 (7%)	1/20 (5%)	1/19 (5%)
FIRST INCIDENCE	---	734 (T)	687	734 (T)	734 (T)
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.517N	P=0.531	P=0.142	P=0.499	P=0.504
POLY 1.5	P=0.509N	P=0.521	P=0.137	P=0.499	P=0.503
POLY 6	P=0.528N	P=0.548	P=0.153	P=0.502	P=0.508
COCH-ARM / FISHERS	P=0.497N	P=0.510	P=0.133	P=0.500	P=0.505
MAX-ISO-POLY-3	P=0.266	P=0.193	P=0.057	P=0.157	P=0.161

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Thyroid Gland: C-Cell Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	16/50 (32%)	16/50 (32%)	13/50 (26%)	10/50 (20%)	12/49 (24%)
POLY-3 RATE (b)	16/39.85	16/44.78	13/42.58	10/39.83	12/40.34
POLY-3 PERCENT (g)	40.2%	35.7%	30.5%	25.1%	29.8%
TERMINAL (d)	10/18 (56%)	12/31 (39%)	8/27 (30%)	5/21 (24%)	7/20 (35%)
FIRST INCIDENCE	586	504	659	565	526
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.203N	P=0.422N	P=0.243N	P=0.110N	P=0.223N
POLY 1.5	P=0.190N	P=0.495N	P=0.279N	P=0.118N	P=0.249N
POLY 6	P=0.219N	P=0.315N	P=0.186N	P=0.092N	P=0.180N
COCH-ARM / FISHERS	P=0.169N	P=0.585N	P=0.330N	P=0.127N	P=0.272N
MAX-ISO-POLY-3	P=0.208N	P=0.344N	P=0.183N	P=0.070N	P=0.161N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

---

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Tooth Inflammation</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/3 (0%)	0/0 (0%)	0/1 (0%)	0/0 (0%)	1/2 (50%)
POLY-3 RATE (b)	0/1.60	0/0.00	0/0.76	0/0.00	1/1.80
POLY-3 PERCENT (g)	0%	0%	0%	0%	55.6%
TERMINAL (d)	0/1 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/1 (100%)
FIRST INCIDENCE	---	---	---	---	734 (T)
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Tooth Necrosis</b>					
<b>LESION RATES</b>					
OVERALL (a)	3/3 (100%)	0/0 (0%)	0/1 (0%)	0/0 (0%)	2/2 (100%)
POLY-3 RATE (b)	3/3.00	0/0.00	0/0.76	0/0.00	2/2.00
POLY-3 PERCENT (g)	100%	0%	0%	0%	100%
TERMINAL (d)	1/1 (100%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/1 (100%)
FIRST INCIDENCE	488	---	---	---	681
<b>STATISTICAL TESTS</b>					
POLY 3	(e)	(e)	P=0.250N	(e)	(e)
POLY 1.5	(e)	(e)	P=0.250N	(e)	(e)
POLY 6	(e)	(e)	P=0.250N	(e)	(e)
COCH-ARM / FISHERS	P=0.434	(e)	P=0.250N	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

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

DOSE	Males				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Urinary Bladder Inflammation</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/49 (0%)
POLY-3 RATE (b)	2/38.57	0/43.54	0/41.50	1/38.48	0/39.14
POLY-3 PERCENT (g)	5.2%	0%	0%	2.6%	0%
TERMINAL (d)	1/18 (6%)	0/31 (0%)	0/27 (0%)	1/21 (5%)	0/20 (0%)
FIRST INCIDENCE	691	---	---	734 (T)	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.444N	P=0.211N	P=0.221N	P=0.501N	P=0.233N
POLY 1.5	P=0.429N	P=0.223N	P=0.228N	P=0.502N	P=0.237N
POLY 6	P=0.467N	P=0.194N	P=0.209N	P=0.495N	P=0.226N
COCH-ARM / FISHERS	P=0.410N	P=0.247N	P=0.247N	P=0.500N	P=0.253N
MAX-ISO-POLY-3	P=0.060N	P=0.075N	P=0.075N	P=0.280N	P=0.076N



Experiment Number: 20403 - 01  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Zinc Carbonate, Basic  
 CAS Number: 5263-02-5

Date Report Requested: 05/25/2016  
 Time Report Requested: 10:24:19  
 First Dose M/F: 09/03/09 / 09/04/09  
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Adrenal Cortex Degeneration Cystic</b>					
<b>LESION RATES</b>					
OVERALL (a)	3/50 (6%)	4/50 (8%)	1/50 (2%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	3/39.46	4/42.11	1/44.72	1/39.10	2/40.49
POLY-3 PERCENT (g)	7.6%	9.5%	2.2%	2.6%	4.9%
TERMINAL (d)	3/25 (12%)	4/32 (13%)	0/34 (0%)	1/27 (4%)	1/31 (3%)
FIRST INCIDENCE	725 (T)	725 (T)	615	725 (T)	701
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.371N	P=0.536	P=0.262N	P=0.308N	P=0.488N
POLY 1.5	P=0.360N	P=0.519	P=0.278N	P=0.309N	P=0.498N
POLY 6	P=0.379N	P=0.562	P=0.241N	P=0.303N	P=0.467N
COCH-ARM / FISHERS	P=0.333N	P=0.500	P=0.309N	P=0.309N	P=0.500N
MAX-ISO-POLY-3	P=0.273N	P=0.384	P=0.138N	P=0.155N	P=0.314N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Adrenal Cortex Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	6/50 (12%)	5/50 (10%)	5/50 (10%)	4/50 (8%)	5/50 (10%)
POLY-3 RATE (b)	6/40.62	5/42.11	5/44.47	4/39.50	5/40.39
POLY-3 PERCENT (g)	14.8%	11.9%	11.2%	10.1%	12.4%
TERMINAL (d)	3/25 (12%)	5/32 (16%)	4/34 (12%)	2/27 (7%)	5/31 (16%)
FIRST INCIDENCE	435	725 (T)	690	659	725 (T)
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.500N	P=0.474N	P=0.436N	P=0.386N	P=0.504N
POLY 1.5	P=0.486N	P=0.487N	P=0.461N	P=0.383N	P=0.509N
POLY 6	P=0.508N	P=0.451N	P=0.406N	P=0.382N	P=0.485N
COCH-ARM / FISHERS	P=0.447N	P=0.500N	P=0.500N	P=0.370N	P=0.500N
MAX-ISO-POLY-3	P=0.550N	P=0.351N	P=0.321N	P=0.268N	P=0.377N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Adrenal Cortex Thrombosis</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	1/50 (2%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	1/44.33	2/39.25	0/40.39
POLY-3 PERCENT (g)	0%	0%	2.3%	5.1%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	1/34 (3%)	1/27 (4%)	0/31 (0%)
FIRST INCIDENCE	---	---	725 (T)	687	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.582	(e)	P=0.523	P=0.235	(e)
POLY 1.5	P=0.579	(e)	P=0.514	P=0.235	(e)
POLY 6	P=0.592	(e)	P=0.534	P=0.238	(e)
COCH-ARM / FISHERS	P=0.586	(e)	P=0.500	P=0.247	(e)
MAX-ISO-POLY-3	P=0.326	(e)	P=0.186	P=0.075	(e)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Adrenal Medulla Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	6/50 (12%)	4/50 (8%)	3/50 (6%)	3/50 (6%)	2/50 (4%)
POLY-3 RATE (b)	6/39.60	4/42.40	3/44.52	3/39.10	2/40.39
POLY-3 PERCENT (g)	15.2%	9.4%	6.7%	7.7%	5%
TERMINAL (d)	5/25 (20%)	3/32 (9%)	2/34 (6%)	3/27 (11%)	2/31 (7%)
FIRST INCIDENCE	690	648	676	725 (T)	725 (T)
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.186N	P=0.326N	P=0.186N	P=0.245N	P=0.124N
POLY 1.5	P=0.176N	P=0.346N	P=0.207N	P=0.247N	P=0.131N
POLY 6	P=0.193N	P=0.294N	P=0.162N	P=0.239N	P=0.111N
COCH-ARM / FISHERS	P=0.154N	P=0.370N	P=0.243N	P=0.243N	P=0.134N
MAX-ISO-POLY-3	P=0.105N	P=0.221N	P=0.118N	P=0.148N	P=0.064N

Experiment Number: 20403 - 01  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Zinc Carbonate, Basic  
 CAS Number: 5263-02-5

Date Report Requested: 05/25/2016  
 Time Report Requested: 10:24:19  
 First Dose M/F: 09/03/09 / 09/04/09  
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Adrenal Medulla: Bilateral Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/39.10	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Blood Vessel Inflammation					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	1/50 (2%)	0/50 (0%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	1/39.46	1/42.11	0/44.33	1/39.10	1/40.39
POLY-3 PERCENT (g)	2.5%	2.4%	0%	2.6%	2.5%
TERMINAL (d)	1/25 (4%)	1/32 (3%)	0/34 (0%)	1/27 (4%)	1/31 (3%)
FIRST INCIDENCE	725 (T)	725 (T)	---	725 (T)	725 (T)
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Blood Vessel Mineralization					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/39.10	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Bone Marrow Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	0/49 (0%)	1/50 (2%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	1/40.19	0/41.55	1/44.33	2/39.10	0/40.39
POLY-3 PERCENT (g)	2.5%	0%	2.3%	5.1%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	1/34 (3%)	2/27 (7%)	0/31 (0%)
FIRST INCIDENCE	469	---	725 (T)	725 (T)	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.541N	P=0.493N	P=0.739N	P=0.490	P=0.499N
POLY 1.5	P=0.536N	P=0.499N	P=0.747N	P=0.492	P=0.501N
POLY 6	P=0.543N	P=0.484N	P=0.727N	P=0.492	P=0.492N
COCH-ARM / FISHERS	P=0.521N	P=0.505N	P=0.753N	P=0.500	P=0.500N
MAX-ISO-POLY-3	P=0.384N	P=0.159N	P=0.473N	P=0.274	P=0.157N



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Bone Marrow Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	14/50 (28%)	10/49 (20%)	9/50 (18%)	14/50 (28%)	18/50 (36%)
POLY-3 RATE (b)	14/43.13	10/44.74	9/46.75	14/43.99	18/46.93
POLY-3 PERCENT (g)	32.5%	22.4%	19.3%	31.8%	38.4%
TERMINAL (d)	6/25 (24%)	3/32 (9%)	4/34 (12%)	3/27 (11%)	5/31 (16%)
FIRST INCIDENCE	540	350	463	449	357
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.034*	P=0.204N	P=0.115N	P=0.566N	P=0.358
POLY 1.5	P=0.031*	P=0.225N	P=0.132N	P=0.580N	P=0.314
POLY 6	P=0.040*	P=0.179N	P=0.100N	P=0.546N	P=0.418
COCH-ARM / FISHERS	P=0.032*	P=0.259N	P=0.171N	P=0.588N	P=0.260
MAX-ISO-POLY-3	P=0.063	P=0.147N	P=0.082N	P=0.474N	P=0.288

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Bone</b>					
<b>Fibrous Osteodystrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/39.10	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Bone: Maxilla</b>					
<b>Fibrosis</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	2/39.66	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	5%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	1/27 (4%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	552	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.388	(e)	(e)	P=0.238	(e)
POLY 1.5	P=0.387	(e)	(e)	P=0.236	(e)
POLY 6	P=0.394	(e)	(e)	P=0.242	(e)
COCH-ARM / FISHERS	P=0.400	(e)	(e)	P=0.247	(e)
MAX-ISO-POLY-3	P=0.241	(e)	(e)	P=0.076	(e)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Eye: Anterior Chamber Inflammation Acute</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/49 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/38.23	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Eye: Bilateral, Cornea Inflammation Acute					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/49 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/38.23	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Eye: Bilateral, Cornea Inflammation Chronic					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/49 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/38.23	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Eye: Cornea					
Inflammation Acute					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/49 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/38.23	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Eye: Cornea					
Inflammation Chronic					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/49 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/38.23	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Eye: Cornea</b>					
<b>Necrosis</b>					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/49 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/38.23	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Heart</b>					
<b>Cardiomyopathy</b>					
<b>LESION RATES</b>					
OVERALL (a)	7/50 (14%)	10/50 (20%)	4/50 (8%)	8/50 (16%)	6/50 (12%)
POLY-3 RATE (b)	7/40.31	10/42.11	4/44.33	8/40.99	6/40.69
POLY-3 PERCENT (g)	17.4%	23.8%	9%	19.5%	14.8%
TERMINAL (d)	4/25 (16%)	10/32 (31%)	4/34 (12%)	5/27 (19%)	5/31 (16%)
FIRST INCIDENCE	568	725 (T)	725 (T)	488	645
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.502N	P=0.328	P=0.207N	P=0.514	P=0.493N
POLY 1.5	P=0.492N	P=0.314	P=0.227N	P=0.504	P=0.503N
POLY 6	P=0.499N	P=0.353	P=0.186N	P=0.530	P=0.467N
COCH-ARM / FISHERS	P=0.450N	P=0.298	P=0.262N	P=0.500	P=0.500N
MAX-ISO-POLY-3	P=0.405N	P=0.240	P=0.136N	P=0.402	P=0.374N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Heart Mineralization</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/39.10	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Heart: Atrium Thrombosis					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/39.10	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Islets, Pancreatic Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/49 (0%)	0/49 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	1/44.33	0/39.04	0/40.35
POLY-3 PERCENT (g)	0%	0%	2.3%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	1/34 (3%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	725 (T)	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Kidney Cyst</b>					
<b>LESION RATES</b>					
<b>OVERALL (a)</b>	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/49 (0%)
<b>POLY-3 RATE (b)</b>	2/40.05	0/42.11	0/44.33	0/39.10	0/40.35
<b>POLY-3 PERCENT (g)</b>	5%	0%	0%	0%	0%
<b>TERMINAL (d)</b>	1/25 (4%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
<b>FIRST INCIDENCE</b>	540	---	---	---	---
<b>STATISTICAL TESTS</b>					
<b>POLY 3</b>	P=0.290N	P=0.226N	P=0.215N	P=0.242N	P=0.235N
<b>POLY 1.5</b>	P=0.279N	P=0.231N	P=0.223N	P=0.241N	P=0.239N
<b>POLY 6</b>	P=0.305N	P=0.217N	P=0.205N	P=0.241N	P=0.227N
<b>COCH-ARM / FISHERS</b>	P=0.263N	P=0.247N	P=0.247N	P=0.247N	P=0.253N
<b>MAX-ISO-POLY-3</b>	P=0.022N*	P=0.075N	P=0.075N	P=0.080N	P=0.076N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Kidney</b>					
<b>Infarct Chronic</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/49 (0%)
POLY-3 RATE (b)	0/39.46	1/42.11	0/44.33	0/39.10	0/40.35
POLY-3 PERCENT (g)	0%	2.4%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	1/32 (3%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	725 (T)	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Kidney Mineralization</b>					
<b>LESION RATES</b>					
<b>OVERALL (a)</b>	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	2/49 (4%)
<b>POLY-3 RATE (b)</b>	0/39.46	1/42.86	0/44.33	0/39.10	2/40.35
<b>POLY-3 PERCENT (g)</b>	0%	2.3%	0%	0%	5%
<b>TERMINAL (d)</b>	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	2/31 (7%)
<b>FIRST INCIDENCE</b>	---	459	---	---	725 (T)
<b>STATISTICAL TESTS</b>					
<b>POLY 3</b>	P=0.100	P=0.516	(e)	(e)	P=0.242
<b>POLY 1.5</b>	P=0.101	P=0.509	(e)	(e)	P=0.237
<b>POLY 6</b>	P=0.100	P=0.527	(e)	(e)	P=0.252
<b>COCH-ARM / FISHERS</b>	P=0.105	P=0.500	(e)	(e)	P=0.242
<b>MAX-ISO-POLY-3</b>	P=0.066	P=0.178	(e)	(e)	P=0.081



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Kidney Nephropathy</b>					
<b>LESION RATES</b>					
OVERALL (a)	27/50 (54%)	28/50 (56%)	21/50 (42%)	31/50 (62%)	29/49 (59%)
POLY-3 RATE (b)	27/44.39	28/45.55	21/47.01	31/45.29	29/45.57
POLY-3 PERCENT (g)	60.8%	61.5%	44.7%	68.4%	63.6%
TERMINAL (d)	14/25 (56%)	22/32 (69%)	12/34 (35%)	18/27 (67%)	19/31 (61%)
FIRST INCIDENCE	435	350	483	278	357
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.110	P=0.563	P=0.086N	P=0.291	P=0.477
POLY 1.5	P=0.107	P=0.545	P=0.108N	P=0.276	P=0.435
POLY 6	P=0.125	P=0.576	P=0.064N	P=0.322	P=0.537
COCH-ARM / FISHERS	P=0.114	P=0.500	P=0.158N	P=0.272	P=0.376
MAX-ISO-POLY-3	P=0.202	P=0.474	P=0.062N	P=0.219	P=0.391

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
Liver Angiectasis					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	2/50 (4%)	3/50 (6%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	0/39.46	2/42.21	3/44.52	1/39.10	1/40.39
POLY-3 PERCENT (g)	0%	4.7%	6.7%	2.6%	2.5%
TERMINAL (d)	0/25 (0%)	1/32 (3%)	2/34 (6%)	1/27 (4%)	1/31 (3%)
FIRST INCIDENCE	---	701	676	725 (T)	725 (T)
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.381N	P=0.252	P=0.142	P=0.498	P=0.505
POLY 1.5	P=0.382N	P=0.245	P=0.132	P=0.498	P=0.501
POLY 6	P=0.375N	P=0.264	P=0.154	P=0.500	P=0.513
COCH-ARM / FISHERS	P=0.377N	P=0.247	P=0.121	P=0.500	P=0.500
MAX-ISO-POLY-3	P=0.284	P=0.090	P=0.058	P=0.157	P=0.163

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Liver</b>					
<b>Clear Cell Focus</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	2/50 (4%)	7/50 (14%)	5/50 (10%)	5/50 (10%)
POLY-3 RATE (b)	2/39.46	2/42.11	7/44.33	5/40.39	5/41.23
POLY-3 PERCENT (g)	5.1%	4.8%	15.8%	12.4%	12.1%
TERMINAL (d)	2/25 (8%)	2/32 (6%)	7/34 (21%)	3/27 (11%)	4/31 (13%)
FIRST INCIDENCE	725 (T)	725 (T)	725 (T)	488	396
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.284	P=0.671N	P=0.109	P=0.223	P=0.232
POLY 1.5	P=0.281	P=0.682N	P=0.097	P=0.218	P=0.222
POLY 6	P=0.295	P=0.653N	P=0.125	P=0.234	P=0.253
COCH-ARM / FISHERS	P=0.288	P=0.691N	P=0.080	P=0.218	P=0.218
MAX-ISO-POLY-3	P=0.197	P=0.474N	P=0.066	P=0.126	P=0.134

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Liver</b>					
<b>Eosinophilic Focus</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	1/50 (2%)	3/50 (6%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	0/39.46	1/42.11	3/44.52	1/39.25	2/40.39
POLY-3 PERCENT (g)	0%	2.4%	6.7%	2.6%	5%
TERMINAL (d)	0/25 (0%)	1/32 (3%)	2/34 (6%)	0/27 (0%)	2/31 (7%)
FIRST INCIDENCE	---	725 (T)	676	687	725 (T)
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.432	P=0.513	P=0.142	P=0.499	P=0.242
POLY 1.5	P=0.430	P=0.507	P=0.132	P=0.498	P=0.238
POLY 6	P=0.440	P=0.523	P=0.154	P=0.502	P=0.251
COCH-ARM / FISHERS	P=0.435	P=0.500	P=0.121	P=0.500	P=0.247
MAX-ISO-POLY-3	P=0.215	P=0.173	P=0.058	P=0.157	P=0.080

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
Liver Fatty Change					
<b>LESION RATES</b>					
OVERALL (a)	6/50 (12%)	4/50 (8%)	11/50 (22%)	4/50 (8%)	3/50 (6%)
POLY-3 RATE (b)	6/41.36	4/42.11	11/46.64	4/39.61	3/40.39
POLY-3 PERCENT (g)	14.5%	9.5%	23.6%	10.1%	7.4%
TERMINAL (d)	1/25 (4%)	4/32 (13%)	6/34 (18%)	2/27 (7%)	3/31 (10%)
FIRST INCIDENCE	469	725 (T)	447	656	725 (T)
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.073N	P=0.357N	P=0.210	P=0.396N	P=0.252N
POLY 1.5	P=0.068N	P=0.363N	P=0.184	P=0.388N	P=0.252N
POLY 6	P=0.076N	P=0.345N	P=0.242	P=0.400N	P=0.245N
COCH-ARM / FISHERS	P=0.059N	P=0.370N	P=0.143	P=0.370N	P=0.243N
MAX-ISO-POLY-3	P=0.134N	P=0.242N	P=0.154	P=0.278N	P=0.155N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Liver</b>					
<b>Hematopoietic Cell Proliferation</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	1/39.46	2/42.75	0/44.33	0/39.10	0/40.39
POLY-3 PERCENT (g)	2.5%	4.7%	0%	0%	0%
TERMINAL (d)	1/25 (4%)	1/32 (3%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	725 (T)	518	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.185N	P=0.528	P=0.477N	P=0.502N	P=0.495N
POLY 1.5	P=0.181N	P=0.515	P=0.486N	P=0.502N	P=0.499N
POLY 6	P=0.189N	P=0.547	P=0.466N	P=0.500N	P=0.487N
COCH-ARM / FISHERS	P=0.171N	P=0.500	P=0.500N	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.169N	P=0.310	P=0.157N	P=0.160N	P=0.157N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Liver</b>					
<b>Mixed Cell Focus</b>					
<b>LESION RATES</b>					
<b>OVERALL (a)</b>	0/50 (0%)	1/50 (2%)	2/50 (4%)	4/50 (8%)	0/50 (0%)
<b>POLY-3 RATE (b)</b>	0/39.46	1/42.11	2/44.33	4/39.63	0/40.39
<b>POLY-3 PERCENT (g)</b>	0%	2.4%	4.5%	10.1%	0%
<b>TERMINAL (d)</b>	0/25 (0%)	1/32 (3%)	2/34 (6%)	1/27 (4%)	0/31 (0%)
<b>FIRST INCIDENCE</b>	---	725 (T)	725 (T)	659	---
<b>STATISTICAL TESTS</b>					
<b>POLY 3</b>	P=0.571N	P=0.513	P=0.264	P=0.060	(e)
<b>POLY 1.5</b>	P=0.571N	P=0.507	P=0.253	P=0.059	(e)
<b>POLY 6</b>	P=0.560N	P=0.523	P=0.277	P=0.062	(e)
<b>COCH-ARM / FISHERS</b>	P=0.560N	P=0.500	P=0.247	P=0.059	(e)
<b>MAX-ISO-POLY-3</b>	P=0.207	P=0.173	P=0.101	P=0.019*	(e)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Liver: Bile Duct Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	2/42.11	0/44.33	0/39.10	0/40.39
POLY-3 PERCENT (g)	0%	4.8%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	2/32 (6%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	725 (T)	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.277N	P=0.252	(e)	(e)	(e)
POLY 1.5	P=0.274N	P=0.245	(e)	(e)	(e)
POLY 6	P=0.276N	P=0.263	(e)	(e)	(e)
COCH-ARM / FISHERS	P=0.269N	P=0.247	(e)	(e)	(e)
MAX-ISO-POLY-3	P=0.249N	P=0.089	(e)	(e)	(e)



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Liver: Hepatocyte Necrosis</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	1/50 (2%)	2/50 (4%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/39.46	1/42.55	2/44.82	0/39.10	1/40.86
POLY-3 PERCENT (g)	0%	2.4%	4.5%	0%	2.5%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	599	644	---	587
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.535N	P=0.515	P=0.267	(e)	P=0.507
POLY 1.5	P=0.536N	P=0.508	P=0.255	(e)	P=0.502
POLY 6	P=0.533N	P=0.526	P=0.283	(e)	P=0.517
COCH-ARM / FISHERS	P=0.535N	P=0.500	P=0.247	(e)	P=0.500
MAX-ISO-POLY-3	P=0.397	P=0.176	P=0.103	(e)	P=0.166

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Liver: Hepatocyte Vacuolization Cytoplasmic</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	1/50 (2%)	0/50 (0%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	1/39.79	1/42.36	0/44.33	2/39.81	0/40.39
POLY-3 PERCENT (g)	2.5%	2.4%	0%	5%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	1/27 (4%)	0/31 (0%)
FIRST INCIDENCE	635	659	---	481	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.547N	P=0.747N	P=0.478N	P=0.500	P=0.497N
POLY 1.5	P=0.540N	P=0.753N	P=0.487N	P=0.498	P=0.500N
POLY 6	P=0.548N	P=0.736N	P=0.469N	P=0.504	P=0.490N
COCH-ARM / FISHERS	P=0.520N	P=0.753N	P=0.500N	P=0.500	P=0.500N
MAX-ISO-POLY-3	P=0.383N	P=0.482N	P=0.157N	P=0.280	P=0.157N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lung</b>					
<b>Infiltration Cellular Histiocyte</b>					
<b>LESION RATES</b>					
OVERALL (a)	37/50 (74%)	38/50 (76%)	40/50 (80%)	38/50 (76%)	35/50 (70%)
POLY-3 RATE (b)	37/46.02	38/47.00	40/49.12	38/45.77	35/44.54
POLY-3 PERCENT (g)	80.4%	80.9%	81.4%	83%	78.6%
TERMINAL (d)	21/25 (84%)	27/32 (84%)	27/34 (79%)	23/27 (85%)	24/31 (77%)
FIRST INCIDENCE	362	350	447	449	330
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.455N	P=0.587	P=0.555	P=0.476	P=0.520N
POLY 1.5	P=0.382N	P=0.554	P=0.466	P=0.467	P=0.496N
POLY 6	P=0.489N	P=0.605N	P=0.571N	P=0.500	P=0.501N
COCH-ARM / FISHERS	P=0.218N	P=0.500	P=0.318	P=0.500	P=0.412N
MAX-ISO-POLY-3	P=0.619N	P=0.476	P=0.448	P=0.364	P=0.412N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Lung Inflammation					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/39.46	1/42.11	0/44.33	0/39.10	1/40.39
POLY-3 PERCENT (g)	0%	2.4%	0%	0%	2.5%
TERMINAL (d)	0/25 (0%)	1/32 (3%)	0/34 (0%)	0/27 (0%)	1/31 (3%)
FIRST INCIDENCE	---	725 (T)	---	---	725 (T)
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node, Mandibular Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	2/49 (4%)	1/49 (2%)	1/48 (2%)	0/48 (0%)
POLY-3 RATE (b)	0/39.46	2/41.88	1/44.02	1/38.50	0/39.82
POLY-3 PERCENT (g)	0%	4.8%	2.3%	2.6%	0%
TERMINAL (d)	0/25 (0%)	1/32 (3%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	599	615	278	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.296N	P=0.250	P=0.522	P=0.495	(e)
POLY 1.5	P=0.298N	P=0.242	P=0.512	P=0.493	(e)
POLY 6	P=0.291N	P=0.264	P=0.535	P=0.499	(e)
COCH-ARM / FISHERS	P=0.297N	P=0.242	P=0.495	P=0.490	(e)
MAX-ISO-POLY-3	P=0.400N	P=0.089	P=0.185	P=0.155	(e)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node, Mandibular Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	8/50 (16%)	12/49 (24%)	8/49 (16%)	8/48 (17%)	6/48 (13%)
POLY-3 RATE (b)	8/40.76	12/41.79	8/45.00	8/39.17	6/41.53
POLY-3 PERCENT (g)	19.6%	28.7%	17.8%	20.4%	14.5%
TERMINAL (d)	4/25 (16%)	10/32 (31%)	5/34 (15%)	4/27 (15%)	4/31 (13%)
FIRST INCIDENCE	435	659	463	537	362
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.185N	P=0.238	P=0.523N	P=0.576	P=0.370N
POLY 1.5	P=0.186N	P=0.223	P=0.563N	P=0.567	P=0.391N
POLY 6	P=0.182N	P=0.269	P=0.473N	P=0.599	P=0.339N
COCH-ARM / FISHERS	P=0.181N	P=0.212	P=0.590	P=0.572	P=0.419N
MAX-ISO-POLY-3	P=0.255N	P=0.170	P=0.417N	P=0.464	P=0.270N

Experiment Number: 20403 - 01  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Zinc Carbonate, Basic  
 CAS Number: 5263-02-5

Date Report Requested: 05/25/2016  
 Time Report Requested: 10:24:19  
 First Dose M/F: 09/03/09 / 09/04/09  
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node, Mandibular Infiltration Cellular Plasma Cell</b>					
<b>LESION RATES</b>					
OVERALL (a)	15/50 (30%)	18/49 (37%)	8/49 (16%)	14/48 (29%)	10/48 (21%)
POLY-3 RATE (b)	15/45.21	18/44.32	8/46.40	14/41.49	10/42.71
POLY-3 PERCENT (g)	33.2%	40.6%	17.2%	33.7%	23.4%
TERMINAL (d)	5/25 (20%)	12/32 (38%)	2/34 (6%)	5/27 (19%)	5/31 (16%)
FIRST INCIDENCE	253	513	447	481	330
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.290N	P=0.304	P=0.062N	P=0.569	P=0.217N
POLY 1.5	P=0.273N	P=0.298	P=0.070N	P=0.576	P=0.218N
POLY 6	P=0.303N	P=0.329	P=0.053N	P=0.582	P=0.209N
COCH-ARM / FISHERS	P=0.236N	P=0.310	P=0.084N	P=0.552N	P=0.210N
MAX-ISO-POLY-3	P=0.155N	P=0.232	P=0.040N*	P=0.478	P=0.157N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node, Mesenteric Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	1/49 (2%)	1/50 (2%)	0/50 (0%)	0/49 (0%)
POLY-3 RATE (b)	0/39.46	1/42.00	1/44.72	0/39.10	0/40.35
POLY-3 PERCENT (g)	0%	2.4%	2.2%	0%	0%
TERMINAL (d)	0/25 (0%)	1/32 (3%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	725 (T)	615	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node, Mesenteric Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	1/49 (2%)	0/50 (0%)	0/50 (0%)	1/49 (2%)
POLY-3 RATE (b)	1/39.46	1/42.91	0/44.33	0/39.10	1/41.26
POLY-3 PERCENT (g)	2.5%	2.3%	0%	0%	2.4%
TERMINAL (d)	1/25 (4%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	725 (T)	323	---	---	330
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node, Mesenteric Infiltration Cellular Histiocyte</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	3/49 (6%)	2/50 (4%)	0/50 (0%)	3/49 (6%)
POLY-3 RATE (b)	1/39.46	3/42.00	2/44.33	0/39.10	3/40.45
POLY-3 PERCENT (g)	2.5%	7.1%	4.5%	0%	7.4%
TERMINAL (d)	1/25 (4%)	3/32 (9%)	2/34 (6%)	0/27 (0%)	2/31 (7%)
FIRST INCIDENCE	725 (T)	725 (T)	725 (T)	---	701
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.459	P=0.327	P=0.540	P=0.502N	P=0.313
POLY 1.5	P=0.463	P=0.315	P=0.525	P=0.502N	P=0.305
POLY 6	P=0.460	P=0.346	P=0.560	P=0.500N	P=0.330
COCH-ARM / FISHERS	P=0.474	P=0.301	P=0.500	P=0.500N	P=0.301
MAX-ISO-POLY-3	P=0.274	P=0.177	P=0.324	P=0.160N	P=0.163

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node: Mediastinal Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/1 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/1 (0%)
POLY-3 RATE (b)	0/1.00	0/0.00	0/0.00	0/0.00	0/0.63
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/1 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	---	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Lymph Node: Mediastinal Hemorrhage</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/1 (100%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/1 (0%)
POLY-3 RATE (b)	1/1.00	0/0.00	0/0.00	0/0.00	0/0.63
POLY-3 PERCENT (g)	100%	0%	0%	0%	0%
TERMINAL (d)	1/1 (100%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)
FIRST INCIDENCE	725 (T)	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Mammary Gland Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	5/50 (10%)	2/50 (4%)	2/50 (4%)	2/50 (4%)
POLY-3 RATE (b)	2/39.73	5/42.39	2/44.33	2/39.10	2/40.69
POLY-3 PERCENT (g)	5%	11.8%	4.5%	5.1%	4.9%
TERMINAL (d)	0/25 (0%)	4/32 (13%)	2/34 (6%)	2/27 (7%)	1/31 (3%)
FIRST INCIDENCE	677	649	725 (T)	725 (T)	645
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.349N	P=0.242	P=0.654N	P=0.689	P=0.686N
POLY 1.5	P=0.343N	P=0.230	P=0.669N	P=0.689	P=0.693N
POLY 6	P=0.348N	P=0.262	P=0.636N	P=0.691	P=0.671N
COCH-ARM / FISHERS	P=0.323N	P=0.218	P=0.691N	P=0.691N	P=0.691N
MAX-ISO-POLY-3	P=0.451N	P=0.143	P=0.457N	P=0.493	P=0.490N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Nose Inflammation</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	2/50 (4%)	0/50 (0%)	2/50 (4%)	4/50 (8%)
POLY-3 RATE (b)	1/39.87	2/42.11	0/44.33	2/39.10	4/40.39
POLY-3 PERCENT (g)	2.5%	4.8%	0%	5.1%	9.9%
TERMINAL (d)	0/25 (0%)	2/32 (6%)	0/34 (0%)	2/27 (7%)	4/31 (13%)
FIRST INCIDENCE	609	725 (T)	---	725 (T)	725 (T)
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.034*	P=0.519	P=0.479N	P=0.493	P=0.181
POLY 1.5	P=0.036*	P=0.510	P=0.487N	P=0.494	P=0.178
POLY 6	P=0.033*	P=0.533	P=0.469N	P=0.494	P=0.191
COCH-ARM / FISHERS	P=0.042*	P=0.500	P=0.500N	P=0.500	P=0.181
MAX-ISO-POLY-3	P=0.062	P=0.301	P=0.157N	P=0.275	P=0.086

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Nose: Respiratory Epithelium Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	1/44.33	0/39.10	0/40.39
POLY-3 PERCENT (g)	0%	0%	2.3%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	1/34 (3%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	725 (T)	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Ovary Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	31/50 (62%)	29/50 (58%)	30/50 (60%)	29/50 (58%)	26/49 (53%)
POLY-3 RATE (b)	31/42.90	29/43.86	30/46.76	29/40.96	26/41.97
POLY-3 PERCENT (g)	72.3%	66.1%	64.2%	70.8%	62%
TERMINAL (d)	19/25 (76%)	23/32 (72%)	21/34 (62%)	22/27 (82%)	20/31 (65%)
FIRST INCIDENCE	540	459	572	488	621
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.341N	P=0.341N	P=0.268N	P=0.540N	P=0.205N
POLY 1.5	P=0.298N	P=0.371N	P=0.351N	P=0.490N	P=0.224N
POLY 6	P=0.374N	P=0.308N	P=0.188N	P=0.610N	P=0.173N
COCH-ARM / FISHERS	P=0.224N	P=0.419N	P=0.500N	P=0.419N	P=0.243N
MAX-ISO-POLY-3	P=0.269N	P=0.258N	P=0.205N	P=0.437N	P=0.143N



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
Ovary Cyst					
<b>LESION RATES</b>					
OVERALL (a)	12/50 (24%)	8/50 (16%)	7/50 (14%)	11/50 (22%)	4/49 (8%)
POLY-3 RATE (b)	12/41.06	8/42.99	7/44.44	11/40.35	4/40.35
POLY-3 PERCENT (g)	29.2%	18.6%	15.8%	27.3%	9.9%
TERMINAL (d)	7/25 (28%)	6/32 (19%)	6/34 (18%)	8/27 (30%)	4/31 (13%)
FIRST INCIDENCE	549	519	697	552	725 (T)
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.148N	P=0.186N	P=0.106N	P=0.520N	P=0.025N*
POLY 1.5	P=0.138N	P=0.203N	P=0.121N	P=0.517N	P=0.027N*
POLY 6	P=0.155N	P=0.162N	P=0.090N	P=0.516N	P=0.022N*
COCH-ARM / FISHERS	P=0.119N	P=0.227N	P=0.154N	P=0.500N	P=0.030N*
MAX-ISO-POLY-3	P=0.027N*	P=0.129N	P=0.072N	P=0.421N	P=0.012N*

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Ovary: Bilateral Cyst</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	0/50 (0%)	0/49 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	2/44.33	0/39.10	0/40.35
POLY-3 PERCENT (g)	0%	0%	4.5%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	2/34 (6%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	725 (T)	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.270N	(e)	P=0.264	(e)	(e)
POLY 1.5	P=0.273N	(e)	P=0.253	(e)	(e)
POLY 6	P=0.266N	(e)	P=0.277	(e)	(e)
COCH-ARM / FISHERS	P=0.280N	(e)	P=0.247	(e)	(e)
MAX-ISO-POLY-3	P=0.422	(e)	P=0.101	(e)	(e)

Experiment Number: 20403 - 01  
 Test Type: CHRONIC  
 Route: DOSED FEED  
 Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS  
 Zinc Carbonate, Basic  
 CAS Number: 5263-02-5

Date Report Requested: 05/25/2016  
 Time Report Requested: 10:24:19  
 First Dose M/F: 09/03/09 / 09/04/09  
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Ovary: Interstitial Cell Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	0/50 (0%)	1/49 (2%)
POLY-3 RATE (b)	0/39.46	2/43.00	0/44.33	0/39.10	1/40.89
POLY-3 PERCENT (g)	0%	4.7%	0%	0%	2.5%
TERMINAL (d)	0/25 (0%)	1/32 (3%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	350	---	---	562
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.579	P=0.257	(e)	(e)	P=0.507
POLY 1.5	P=0.578	P=0.248	(e)	(e)	P=0.501
POLY 6	P=0.585	P=0.269	(e)	(e)	P=0.517
COCH-ARM / FISHERS	P=0.582	P=0.247	(e)	(e)	P=0.495
MAX-ISO-POLY-3	P=0.339	P=0.094	(e)	(e)	P=0.168

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Pancreas: Acinus Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	4/48 (8%)	2/49 (4%)	5/49 (10%)	10/49 (20%)
POLY-3 RATE (b)	2/39.89	4/41.77	2/43.63	5/39.54	10/41.71
POLY-3 PERCENT (g)	5%	9.6%	4.6%	12.6%	24%
TERMINAL (d)	1/25 (4%)	3/32 (9%)	2/34 (6%)	4/27 (15%)	6/31 (19%)
FIRST INCIDENCE	601	350	725 (T)	575	488
<b>STATISTICAL TESTS</b>					
POLY 3	P<0.001**	P=0.358	P=0.662N	P=0.210	P=0.015*
POLY 1.5	P<0.001**	P=0.341	P=0.677N	P=0.209	P=0.014*
POLY 6	P<0.001**	P=0.384	P=0.642N	P=0.214	P=0.019*
COCH-ARM / FISHERS	P=0.002**	P=0.319	P=0.684	P=0.210	P=0.013*
MAX-ISO-POLY-3	P=0.002**	P=0.222	P=0.465N	P=0.114	P=0.008**

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Pancreas: Acinus Basophilic Focus</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/48 (0%)	2/49 (4%)	0/49 (0%)	0/49 (0%)
POLY-3 RATE (b)	0/39.46	0/40.88	2/43.63	0/39.04	0/40.35
POLY-3 PERCENT (g)	0%	0%	4.6%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	2/34 (6%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	725 (T)	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.265N	(e)	P=0.260	(e)	(e)
POLY 1.5	P=0.269N	(e)	P=0.249	(e)	(e)
POLY 6	P=0.263N	(e)	P=0.275	(e)	(e)
COCH-ARM / FISHERS	P=0.277N	(e)	P=0.242	(e)	(e)
MAX-ISO-POLY-3	P=0.423	(e)	P=0.098	(e)	(e)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Pancreas: Acinus Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	1/48 (2%)	5/49 (10%)	0/49 (0%)	1/49 (2%)
POLY-3 RATE (b)	2/39.46	1/40.88	5/43.63	0/39.04	1/40.35
POLY-3 PERCENT (g)	5.1%	2.5%	11.5%	0%	2.5%
TERMINAL (d)	2/25 (8%)	1/32 (3%)	5/34 (15%)	0/27 (0%)	1/31 (3%)
FIRST INCIDENCE	725 (T)	725 (T)	725 (T)	---	725 (T)
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.113N	P=0.488N	P=0.258	P=0.239N	P=0.492N
POLY 1.5	P=0.112N	P=0.500N	P=0.238	P=0.241N	P=0.500N
POLY 6	P=0.114N	P=0.467N	P=0.285	P=0.236N	P=0.477N
COCH-ARM / FISHERS	P=0.114N	P=0.515N	P=0.210	P=0.253N	P=0.508N
MAX-ISO-POLY-3	P=0.206N	P=0.275N	P=0.160	P=0.076N	P=0.276N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Parathyroid Gland Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/42 (0%)	1/43 (2%)	0/41 (0%)	0/42 (0%)	0/43 (0%)
POLY-3 RATE (b)	0/33.40	1/36.62	0/36.40	0/33.78	0/34.82
POLY-3 PERCENT (g)	0%	2.7%	0%	0%	0%
TERMINAL (d)	0/22 (0%)	1/28 (4%)	0/27 (0%)	0/23 (0%)	0/26 (0%)
FIRST INCIDENCE	---	725 (T)	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Pituitary Gland: Pars Distalis Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	15/50 (30%)	15/50 (30%)	22/50 (44%)	13/50 (26%)	17/50 (34%)
POLY-3 RATE (b)	15/41.24	15/42.53	22/45.33	13/40.50	17/41.38
POLY-3 PERCENT (g)	36.4%	35.3%	48.5%	32.1%	41.1%
TERMINAL (d)	9/25 (36%)	13/32 (41%)	19/34 (56%)	9/27 (33%)	15/31 (48%)
FIRST INCIDENCE	575	649	582	537	488
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.466N	P=0.549N	P=0.173	P=0.430N	P=0.414
POLY 1.5	P=0.448N	P=0.567N	P=0.145	P=0.428N	P=0.404
POLY 6	P=0.473N	P=0.519N	P=0.208	P=0.428N	P=0.443
COCH-ARM / FISHERS	P=0.395N	P=0.586N	P=0.107	P=0.412N	P=0.415
MAX-ISO-POLY-3	P=0.540	P=0.458N	P=0.131	P=0.341N	P=0.327



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Skin</b>					
<b>Cyst Epithelial Inclusion</b>					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/39.10	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Skin Inflammation</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	1/42.11	0/44.33	0/39.10	0/40.39
POLY-3 PERCENT (g)	0%	2.4%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	1/32 (3%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	725 (T)	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Skin					
Ulcer					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/39.10	1/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	2.5%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	1/31 (3%)
FIRST INCIDENCE	---	---	---	---	725 (T)
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Skin: Epidermis Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/39.10	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<hr/>					
Skin: Hair Follicle Cyst					
<hr/>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/39.10	0/40.39
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<hr/>					
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Spleen</b>					
<b>Hematopoietic Cell Proliferation</b>					
<b>LESION RATES</b>					
<b>OVERALL (a)</b>	25/50 (50%)	28/50 (56%)	31/50 (62%)	39/50 (78%)	34/49 (69%)
<b>POLY-3 RATE (b)</b>	25/44.97	28/47.81	31/48.27	39/47.37	34/46.89
<b>POLY-3 PERCENT (g)</b>	55.6%	58.6%	64.2%	82.3%	72.5%
<b>TERMINAL (d)</b>	12/25 (48%)	17/32 (53%)	21/34 (62%)	21/27 (78%)	21/31 (68%)
<b>FIRST INCIDENCE</b>	435	323	447	179	357
<b>STATISTICAL TESTS</b>					
<b>POLY 3</b>	P=0.014*	P=0.468	P=0.258	P=0.003**	P=0.064
<b>POLY 1.5</b>	P=0.013*	P=0.427	P=0.223	P=0.003**	P=0.052
<b>POLY 6</b>	P=0.017*	P=0.511	P=0.293	P=0.004**	P=0.082
<b>COCH-ARM / FISHERS</b>	P=0.015*	P=0.344	P=0.157	P=0.003**	P=0.039*
<b>MAX-ISO-POLY-3</b>	P=0.024*	P=0.388	P=0.200	P=0.002**	P=0.044*

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Spleen</b>					
<b>Pigmentation Hemosiderin</b>					
<b>LESION RATES</b>					
OVERALL (a)	39/50 (78%)	38/50 (76%)	43/50 (86%)	42/50 (84%)	33/49 (67%)
POLY-3 RATE (b)	39/46.51	38/46.38	43/48.83	42/48.31	33/44.34
POLY-3 PERCENT (g)	83.9%	81.9%	88.1%	86.9%	74.4%
TERMINAL (d)	21/25 (84%)	29/32 (91%)	30/34 (88%)	24/27 (89%)	26/31 (84%)
FIRST INCIDENCE	253	323	447	278	330
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.103N	P=0.513N	P=0.375	P=0.443	P=0.181N
POLY 1.5	P=0.095N	P=0.504N	P=0.307	P=0.362	P=0.175N
POLY 6	P=0.110N	P=0.528N	P=0.460	P=0.548	P=0.190N
COCH-ARM / FISHERS	P=0.077N	P=0.500N	P=0.218	P=0.306	P=0.168N
MAX-ISO-POLY-3	P=0.140N	P=0.396N	P=0.268	P=0.329	P=0.121N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Spleen: Lymphoid Follicle Atrophy</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	2/50 (4%)	1/50 (2%)	3/50 (6%)	0/49 (0%)
POLY-3 RATE (b)	1/40.33	2/42.73	1/44.84	3/41.00	0/40.35
POLY-3 PERCENT (g)	2.5%	4.7%	2.2%	7.3%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	362	633	572	278	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.393N	P=0.520	P=0.737N	P=0.310	P=0.500N
POLY 1.5	P=0.388N	P=0.510	P=0.746N	P=0.307	P=0.503N
POLY 6	P=0.393N	P=0.539	P=0.723N	P=0.319	P=0.492N
COCH-ARM / FISHERS	P=0.374N	P=0.500	P=0.753N	P=0.309	P=0.505N
MAX-ISO-POLY-3	P=0.283N	P=0.302	P=0.471N	P=0.159	P=0.159N



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Spleen: Lymphoid Follicle Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	11/50 (22%)	9/50 (18%)	7/50 (14%)	7/50 (14%)	8/49 (16%)
POLY-3 RATE (b)	11/41.85	9/46.00	7/46.46	7/40.75	8/44.38
POLY-3 PERCENT (g)	26.3%	19.6%	15.1%	17.2%	18%
TERMINAL (d)	6/25 (24%)	1/32 (3%)	3/34 (9%)	3/27 (11%)	2/31 (7%)
FIRST INCIDENCE	435	323	447	488	357
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.403N	P=0.310N	P=0.148N	P=0.229N	P=0.253N
POLY 1.5	P=0.396N	P=0.345N	P=0.172N	P=0.228N	P=0.281N
POLY 6	P=0.405N	P=0.266N	P=0.123N	P=0.225N	P=0.217N
COCH-ARM / FISHERS	P=0.374N	P=0.402N	P=0.218N	P=0.218N	P=0.323N
MAX-ISO-POLY-3	P=0.253N	P=0.235N	P=0.105N	P=0.159N	P=0.184N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Stomach, Forestomach Mineralization</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/49 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/39.10	0/40.35
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Stomach, Forestomach Ulcer</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/50 (2%)	1/50 (2%)	0/50 (0%)	1/50 (2%)	1/49 (2%)
POLY-3 RATE (b)	1/39.94	1/42.76	0/44.33	1/39.79	1/40.68
POLY-3 PERCENT (g)	2.5%	2.3%	0%	2.5%	2.5%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	584	513	---	488	635
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Stomach, Forestomach: Epithelium Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	5/50 (10%)	8/50 (16%)	4/50 (8%)	2/50 (4%)	4/49 (8%)
POLY-3 RATE (b)	5/42.03	8/44.18	4/45.22	2/40.50	4/42.48
POLY-3 PERCENT (g)	11.9%	18.1%	8.8%	4.9%	9.4%
TERMINAL (d)	0/25 (0%)	4/32 (13%)	1/34 (3%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	469	459	582	481	330
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.211N	P=0.307	P=0.454N	P=0.230N	P=0.493N
POLY 1.5	P=0.206N	P=0.294	P=0.471N	P=0.226N	P=0.503N
POLY 6	P=0.214N	P=0.327	P=0.434N	P=0.234N	P=0.475N
COCH-ARM / FISHERS	P=0.192N	P=0.277	P=0.500N	P=0.218N	P=0.513N
MAX-ISO-POLY-3	P=0.228N	P=0.215	P=0.326N	P=0.132N	P=0.357N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Stomach, Glandular Mineralization</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/49 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	0/39.10	0/40.35
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
Thymus Atrophy					
<b>LESION RATES</b>					
OVERALL (a)	35/48 (73%)	34/50 (68%)	31/48 (65%)	32/49 (65%)	33/49 (67%)
POLY-3 RATE (b)	35/43.15	34/44.90	31/46.59	32/44.16	33/44.12
POLY-3 PERCENT (g)	81.1%	75.7%	66.5%	72.5%	74.8%
TERMINAL (d)	22/24 (92%)	25/32 (78%)	22/34 (65%)	20/27 (74%)	23/31 (74%)
FIRST INCIDENCE	362	459	447	278	396
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.534	P=0.351N	P=0.082N	P=0.224N	P=0.314N
POLY 1.5	P=0.515N	P=0.372N	P=0.134N	P=0.251N	P=0.343N
POLY 6	P=0.531	P=0.288N	P=0.039N*	P=0.182N	P=0.239N
COCH-ARM / FISHERS	P=0.435N	P=0.378N	P=0.255N	P=0.277N	P=0.353N
MAX-ISO-POLY-3	P=0.248N	P=0.255N	P=0.056N	P=0.151N	P=0.223N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
Thymus Hyperplasia					
<b>LESION RATES</b>					
OVERALL (a)	0/48 (0%)	0/50 (0%)	1/48 (2%)	0/49 (0%)	0/49 (0%)
POLY-3 RATE (b)	0/38.19	0/42.11	1/42.87	0/38.79	0/40.35
POLY-3 PERCENT (g)	0%	0%	2.3%	0%	0%
TERMINAL (d)	0/24 (0%)	0/32 (0%)	1/34 (3%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	725 (T)	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

## P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Thyroid Gland: C-Cell Hyperplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	18/50 (36%)	14/49 (29%)	9/50 (18%)	14/50 (28%)	5/48 (10%)
POLY-3 RATE (b)	18/42.89	14/42.11	9/45.82	14/40.74	5/40.15
POLY-3 PERCENT (g)	42%	33.2%	19.6%	34.4%	12.5%
TERMINAL (d)	8/25 (32%)	11/32 (34%)	5/34 (15%)	10/27 (37%)	4/31 (13%)
FIRST INCIDENCE	469	601	483	481	635
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.027N*	P=0.270N	P=0.017N*	P=0.309N	P=0.002N**
POLY 1.5	P=0.024N*	P=0.276N	P=0.022N*	P=0.291N	P=0.002N**
POLY 6	P=0.030N*	P=0.257N	P=0.014N*	P=0.332N	P=0.002N**
COCH-ARM / FISHERS	P=0.019N*	P=0.283N	P=0.035N*	P=0.260N	P=0.003N**
MAX-ISO-POLY-3	P=0.003N**	P=0.200N	P=0.011N*	P=0.238N	P<0.001N**



Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Tooth Inflammation</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/1 (0%)	0/1 (0%)	0/0 (0%)	3/6 (50%)	0/0 (0%)
POLY-3 RATE (b)	0/1.00	0/1.00	0/0.00	3/5.11	0/0.00
POLY-3 PERCENT (g)	0%	0%	0%	58.7%	0%
TERMINAL (d)	0/1 (0%)	0/1 (0%)	0/0 (0%)	0/1 (0%)	0/0 (0%)
FIRST INCIDENCE	---	---	---	449	---
<b>STATISTICAL TESTS</b>					
POLY 3	(e)	(e)	(e)	P=0.508	(e)
POLY 1.5	(e)	(e)	(e)	P=0.532	(e)
POLY 6	(e)	(e)	(e)	P=0.469	(e)
COCH-ARM / FISHERS	P=0.339	(e)	(e)	P=0.571	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	P=0.191	(e)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Tooth Necrosis</b>					
<b>LESION RATES</b>					
OVERALL (a)	1/1 (100%)	0/1 (0%)	0/0 (0%)	3/6 (50%)	0/0 (0%)
POLY-3 RATE (b)	1/1.00	0/1.00	0/0.00	3/3.88	0/0.00
POLY-3 PERCENT (g)	100%	0%	0%	77.4%	0%
TERMINAL (d)	1/1 (100%)	0/1 (0%)	0/0 (0%)	1/1 (100%)	0/0 (0%)
FIRST INCIDENCE	725 (T)	---	---	552	---
<b>STATISTICAL TESTS</b>					
POLY 3	(e)	(e)	(e)	P=0.930N	(e)
POLY 1.5	(e)	(e)	(e)	P=0.732N	(e)
POLY 6	(e)	(e)	(e)	P=1.000N	(e)
COCH-ARM / FISHERS	P=0.791N	P=0.500N	(e)	P=0.571N	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	P=0.243N	(e)

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Urinary Bladder Inflammation</b>					
<b>LESION RATES</b>					
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/49 (0%)
POLY-3 RATE (b)	0/39.46	0/42.11	0/44.33	1/39.81	0/40.35
POLY-3 PERCENT (g)	0%	0%	0%	2.5%	0%
TERMINAL (d)	0/25 (0%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	---	---	---	481	---
<b>STATISTICAL TESTS</b>					
POLY 3	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)

---

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Uterus</b>					
<b>Metaplasia</b>					
<b>LESION RATES</b>					
OVERALL (a)	21/50 (42%)	19/50 (38%)	18/49 (37%)	15/50 (30%)	20/50 (40%)
POLY-3 RATE (b)	21/42.12	19/44.95	18/45.05	15/40.50	20/42.26
POLY-3 PERCENT (g)	49.9%	42.3%	40%	37%	47.3%
TERMINAL (d)	13/25 (52%)	14/32 (44%)	15/34 (44%)	12/27 (44%)	15/31 (48%)
FIRST INCIDENCE	582	350	483	481	568
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.467	P=0.307N	P=0.234N	P=0.163N	P=0.494N
POLY 1.5	P=0.502	P=0.347N	P=0.279N	P=0.158N	P=0.511N
POLY 6	P=0.457	P=0.267N	P=0.193N	P=0.173N	P=0.448N
COCH-ARM / FISHERS	P=0.465N	P=0.419N	P=0.371N	P=0.149N	P=0.500N
MAX-ISO-POLY-3	P=0.391N	P=0.241N	P=0.181N	P=0.117N	P=0.406N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Uterus</b>					
<b>Pigmentation Hemosiderin</b>					
<b>LESION RATES</b>					
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/49 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/39.91	0/42.11	0/43.72	0/39.10	0/40.39
POLY-3 PERCENT (g)	5%	0%	0%	0%	0%
TERMINAL (d)	1/25 (4%)	0/32 (0%)	0/34 (0%)	0/27 (0%)	0/31 (0%)
FIRST INCIDENCE	593	---	---	---	---
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.288N	P=0.225N	P=0.217N	P=0.241N	P=0.234N
POLY 1.5	P=0.276N	P=0.231N	P=0.226N	P=0.241N	P=0.237N
POLY 6	P=0.303N	P=0.216N	P=0.206N	P=0.240N	P=0.226N
COCH-ARM / FISHERS	P=0.260N	P=0.247N	P=0.253N	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.022N*	P=0.075N	P=0.076N	P=0.079N	P=0.075N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN RATS(HSD)  
TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females				
	Control (38ppm)	3.5ppm SevZnDef	7ppm ZnDef	250ppmModZnExc	500ppm ZnExc
<b>Uterus: Endometrium Hyperplasia Cystic</b>					
<b>LESION RATES</b>					
OVERALL (a)	9/50 (18%)	13/50 (26%)	5/49 (10%)	7/50 (14%)	7/50 (14%)
POLY-3 RATE (b)	9/41.50	13/42.46	5/43.91	7/40.38	7/40.96
POLY-3 PERCENT (g)	21.7%	30.6%	11.4%	17.3%	17.1%
TERMINAL (d)	5/25 (20%)	11/32 (34%)	4/34 (12%)	5/27 (19%)	5/31 (16%)
FIRST INCIDENCE	362	659	676	449	645
<b>STATISTICAL TESTS</b>					
POLY 3	P=0.299N	P=0.246	P=0.159N	P=0.414N	P=0.401N
POLY 1.5	P=0.286N	P=0.237	P=0.177N	P=0.410N	P=0.408N
POLY 6	P=0.302N	P=0.269	P=0.139N	P=0.412N	P=0.376N
COCH-ARM / FISHERS	P=0.244N	P=0.235	P=0.205N	P=0.393N	P=0.393N
MAX-ISO-POLY-3	P=0.192N	P=0.176	P=0.105N	P=0.311N	P=0.300N

Experiment Number: 20403 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Zinc Carbonate, Basic

CAS Number: 5263-02-5

Date Report Requested: 05/25/2016

Time Report Requested: 10:24:19

First Dose M/F: 09/03/09 / 09/04/09

Lab: BAT

**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 \*\*\*