

**TDMS No.** 20005 - 05  
**Test Type:** CHRONIC  
**Route:** GAVAGE  
**Species/Strain:** RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
**CAS Number:** 50647-08-0

**Date Report Requested:** 07/23/2008  
**Time Report Requested:** 11:57:36  
**First Dose M/F:** 01/21/04 / 01/22/04  
**Lab:** BAT

F1\_R2

**C Number:** C20005  
**Lock Date:** 09/07/2006  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 2.0.0

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## HISTORICAL CONTROL STUDIES From October 2007 Report

### SAME ROUTE

88123-05 -- Formamide (GAVAGE WATER)  
95011-07 -- 5-(Hydroxymethyl)-2-furfural (GAVAGE WATER)

### ALL ROUTES

88138-03 -- Benzophenone (ORAL FEED)  
99027-03 -- Chromium picolinate monohydrate (ORAL FEED)  
05174-05 -- Cresols (ORAL FEED)  
96011-05 -- Cumene (INHALATION AIR)  
97003-07 -- 1,2-Dibromo-2,4-dicyanobutane (SKIN ETHANOL)  
93020-07 -- Diisopropylcarbodiimide (SKIN ETHANOL)  
88004-05 -- Divinylbenzene (INHALATION AIR)  
88123-05 -- Formamide (GAVAGE WATER)  
95011-07 -- 5-(Hydroxymethyl)-2-furfural (GAVAGE WATER)  
88105-03 -- Isoeugenol (GAVAGE CORN OIL)  
97006-01 -- Methyl isobutyl ketone (INHALATION AIR)  
91005-07 -- Methylene blue trihydrate (GAVAGE METHYLCELLULOSE)  
92013-05 -- 4-Methylimidazole (ORAL FEED)  
88006-03 -- alpha-Methylstyrene (INHALATION AIR)  
99023-03 -- beta-Myrcene (GAVAGE CORN OIL)  
97008-05 -- Propargyl alcohol (INHALATION AIR)  
20114-07 -- Sodium dichromate dihydrate (VI) (ORAL WATER)  
96019-05 -- Water disinfection byproducts (Bromochloroacetic acid) (ORAL WATER)  
96017-05 -- Water disinfection byproducts (Dibromoacetic acid) (ORAL WATER)  
96015-05 -- Water disinfection byproducts (Dibromoacetonitrile) (ORAL WATER)

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**FOR ALL DOSES THE TUMOR RATES IN THE FOLLOWING TISSUES/ORGANS ARE BASED ON NUMBER OF TISSUES EXAMINED.  
IN OTHER TISSUES/ORGANS RATES ARE BASED ON THE NUMBER OF ANIMALS NECROPSIED.**

Adrenal Cortex  
Adrenal Medulla  
Brain  
Clitoral/Preputial Gland  
Islets, Pancreatic  
Kidney  
Liver  
Lung  
Nose  
Ovary  
Pituitary Gland  
Prostate  
Salivary Glands  
Testes  
Thymus  
Thyroid Gland

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## SUMMARY OF STATISTICALLY SIGNIFICANT ( $P \leq .05$ ) RESULTS IN THE ANALYSIS OF Ginseng

### MALE RATS

<u>Organ</u>	<u>Morphology</u>
Kidney: Renal Tubule	Carcinoma or Adenoma
Skin	Fibroma Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma
All Organs	Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated Malignant Tumors

### FEMALE RATS

<u>Organ</u>	<u>Morphology</u>
Mammary Gland	Carcinoma Fibroadenoma Fibroma, Fibroadenoma or Adenoma
Skin	Fibroma, Fibroadenoma, Carcinoma, or Adenoma Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma
All Organs	Squamous Cell Papilloma, Papilloma, or Keratoacanthoma Benign Tumors Malignant and Benign Tumors

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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

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DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

---

**Adrenal Cortex  
 Adenoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/42.38	2/43.21	0/45.64	1/39.62
POLY-3 PERCENT (g)	0%	4.6%	0%	2.5%
TERMINAL (d)	0/30 (0%)	2/30 (7%)	0/37 (0%)	1/23 (4%)
FIRST INCIDENCE	---	727 (T)	---	727 (T)
HC TUMORS SAME RTE	0/100 (0%)			
HC TUMORS ALL RTES	6/998 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.523	P=0.241	(e)	P=0.487
POLY 1.5	P=0.526	P=0.240	(e)	P=0.490
POLY 6	P=0.518	P=0.242	(e)	P=0.481
COCH-ARM / FISHERS	P=0.539	P=0.247	(e)	P=0.500
MAX-ISO-POLY-3	P=0.332	P=0.080	(e)	P=0.158
HISTCONT SAME RTE	P=0.422	P=0.107	(e)	P=0.121
HISTCONT ALL RTES	P=0.386	P=0.070	(e)	P=0.189

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 TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

Adrenal Medulla  
 Pheochromocytoma Benign

TUMOR RATES

OVERALL (a)	4/50 (8%)	8/50 (16%)	6/50 (12%)	3/50 (6%)
POLY-3 RATE (b)	4/42.7	8/43.55	6/45.75	3/40.15
POLY-3 PERCENT (g)	9.4%	18.4%	13.1%	7.5%
TERMINAL (d)	2/30 (7%)	6/30 (20%)	5/37 (14%)	1/23 (4%)
FIRST INCIDENCE	671	666	699	605
HC TUMORS SAME RTE	14/100 (14%)			
HC TUMORS ALL RTES	154/997 (15%)			

STATISTICAL TESTS

POLY 3	P=0.317N	P=0.184	P=0.413	P=0.534N
POLY 1.5	P=0.310N	P=0.183	P=0.392	P=0.525N
POLY 6	P=0.328N	P=0.184	P=0.437	P=0.546N
COCH-ARM / FISHERS	P=0.279N	P=0.178	P=0.370	P=0.500N
MAX-ISO-POLY-3	P=0.318N	P=0.115	P=0.297	P=0.381N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

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 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Clitoral/Preputial Gland  
 Adenoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/42.38	1/43.21	0/45.64	0/39.62
POLY-3 PERCENT (g)	0%	2.3%	0%	0%
TERMINAL (d)	0/30 (0%)	1/30 (3%)	0/37 (0%)	0/23 (0%)
FIRST INCIDENCE	---	727 (T)	---	---
HC TUMORS SAME RTE	6/100 (6%)			
HC TUMORS ALL RTES	40/995 (4%)			

**STATISTICAL TESTS**

POLY 3	P=0.560N	P=0.504	(e)	(e)
POLY 1.5	P=0.564N	P=0.503	(e)	(e)
POLY 6	P=0.555N	P=0.505	(e)	(e)
COCH-ARM / FISHERS	P=0.567N	P=0.500	(e)	(e)
MAX-ISO-POLY-3	P=0.413N	P=0.163	(e)	(e)
HISTCONT SAME RTE	(h)	(h)	(e)	(e)
HISTCONT ALL RTES	(h)	(h)	(e)	(e)

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 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Clitoral/Preputial Gland  
 Carcinoma or Adenoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/42.38	1/43.21	0/45.64	0/39.62
POLY-3 PERCENT (g)	0%	2.3%	0%	0%
TERMINAL (d)	0/30 (0%)	1/30 (3%)	0/37 (0%)	0/23 (0%)
FIRST INCIDENCE	---	727 (T)	---	---
HC TUMORS SAME RTE	8/100 (8%)			
HC TUMORS ALL RTES	50/995 (5%)			

**STATISTICAL TESTS**

POLY 3	P=0.560N	P=0.504	(e)	(e)
POLY 1.5	P=0.564N	P=0.503	(e)	(e)
POLY 6	P=0.555N	P=0.505	(e)	(e)
COCH-ARM / FISHERS	P=0.567N	P=0.500	(e)	(e)
MAX-ISO-POLY-3	P=0.413N	P=0.163	(e)	(e)
HISTCONT SAME RTE	(h)	(h)	(e)	(e)
HISTCONT ALL RTES	(h)	(h)	(e)	(e)



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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Intestine Large: Colon/Rectum  
 Carcinoma or Adenoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	0/42.38	1/43.21	2/46.06	0/39.62
POLY-3 PERCENT (g)	0%	2.3%	4.3%	0%
TERMINAL (d)	0/30 (0%)	1/30 (3%)	1/37 (3%)	0/23 (0%)
FIRST INCIDENCE	---	727 (T)	609	---
HC TUMORS SAME RTE	0/100 (0%)			
HC TUMORS ALL RTES	3/999 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.643N	P=0.504	P=0.256	(e)
POLY 1.5	P=0.636N	P=0.503	P=0.247	(e)
POLY 6	P=0.630	P=0.505	P=0.267	(e)
COCH-ARM / FISHERS	P=0.616N	P=0.500	P=0.247	(e)
MAX-ISO-POLY-3	P=0.361	P=0.163	P=0.094	(e)
HISTCONT SAME RTE	(h)	(h)	(h)	(e)
HISTCONT ALL RTES	(h)	(h)	(h)	(e)

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 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Islets, Pancreatic  
 Adenoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	1/50 (2%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	0/42.38	1/43.21	2/45.64	0/39.62
POLY-3 PERCENT (g)	0%	2.3%	4.4%	0%
TERMINAL (d)	0/30 (0%)	1/30 (3%)	2/37 (5%)	0/23 (0%)
FIRST INCIDENCE	---	727 (T)	727 (T)	---
HC TUMORS SAME RTE	4/100 (4%)			
HC TUMORS ALL RTES	64/995 (6%)			

**STATISTICAL TESTS**

POLY 3	P=0.643N	P=0.504	P=0.254	(e)
POLY 1.5	P=0.636N	P=0.503	P=0.246	(e)
POLY 6	P=0.630	P=0.505	P=0.264	(e)
COCH-ARM / FISHERS	P=0.616N	P=0.500	P=0.247	(e)
MAX-ISO-POLY-3	P=0.360	P=0.163	P=0.092	(e)
HISTCONT SAME RTE	(h)	(h)	(h)	(e)
HISTCONT ALL RTES	(h)	(h)	(h)	(e)

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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Kidney: Renal Tubule  
 Carcinoma or Adenoma**

**TUMOR RATES**

OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/43.12	0/43.21	0/45.64	0/39.62
POLY-3 PERCENT (g)	4.6%	0%	0%	0%
TERMINAL (d)	1/30 (3%)	0/30 (0%)	0/37 (0%)	0/23 (0%)
FIRST INCIDENCE	464	---	---	---
HC TUMORS SAME RTE	1/100 (1%)			
HC TUMORS ALL RTES	6/995 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.108N	P=0.236N	P=0.225N	P=0.256N
POLY 1.5	P=0.110N	P=0.236N	P=0.231N	P=0.251N
POLY 6	P=0.104N	P=0.237N	P=0.217N	P=0.264N
COCH-ARM / FISHERS	P=0.115N	P=0.247N	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.048N*	P=0.076N	P=0.076N	P=0.094N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

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 TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

---

Liver  
 Hepatocellular Adenoma

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	1/50 (2%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	0/42.38	1/43.21	1/45.82	2/39.62
POLY-3 PERCENT (g)	0%	2.3%	2.2%	5.1%
TERMINAL (d)	0/30 (0%)	1/30 (3%)	0/37 (0%)	2/23 (9%)
FIRST INCIDENCE	---	727 (T)	681	727 (T)
HC TUMORS SAME RTE	0/100 (0%)			
HC TUMORS ALL RTES	9/999 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.139	P=0.504	P=0.516	P=0.222
POLY 1.5	P=0.143	P=0.503	P=0.508	P=0.226
POLY 6	P=0.135	P=0.505	P=0.525	P=0.216
COCH-ARM / FISHERS	P=0.153	P=0.500	P=0.500	P=0.247
MAX-ISO-POLY-3	P=0.121	P=0.163	P=0.178	P=0.075
HISTCONT SAME RTE	P=0.100	P=0.109	P=0.102	P=0.105
HISTCONT ALL RTES	P=0.039*	P=0.195	P=0.214	P=0.072

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DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Liver  
 Hepatocellular Carcinoma or Hepatocellular Adenoma**

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	1/50 (2%)	2/50 (4%)	2/50 (4%)
POLY-3 RATE (b)	1/42.93	1/43.21	2/45.9	2/39.62
POLY-3 PERCENT (g)	2.3%	2.3%	4.4%	5.1%
TERMINAL (d)	0/30 (0%)	1/30 (3%)	0/37 (0%)	2/23 (9%)
FIRST INCIDENCE	559	727 (T)	681	727 (T)
HC TUMORS SAME RTE	0/100 (0%)			
HC TUMORS ALL RTES	11/999 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.305	P=0.759N	P=0.523	P=0.472
POLY 1.5	P=0.314	P=0.759N	P=0.511	P=0.480
POLY 6	P=0.294	P=0.761N	P=0.537	P=0.460
COCH-ARM / FISHERS	P=0.337	P=0.753N	P=0.500	P=0.500
MAX-ISO-POLY-3	P=0.425	P=0.497N	P=0.306	P=0.265
HISTCONT SAME RTE	P=0.082	P=0.165	P=0.082	P=0.100
HISTCONT ALL RTES	P=0.016*	P=0.396	P=0.092	P=0.083

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 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

Liver  
 Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	1/50 (2%)	2/50 (4%)	2/50 (4%)
POLY-3 RATE (b)	1/42.93	1/43.21	2/45.9	2/39.62
POLY-3 PERCENT (g)	2.3%	2.3%	4.4%	5.1%
TERMINAL (d)	0/30 (0%)	1/30 (3%)	0/37 (0%)	2/23 (9%)
FIRST INCIDENCE	559	727 (T)	681	727 (T)
HC TUMORS SAME RTE	0/100 (0%)			
HC TUMORS ALL RTES	11/999 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.305	P=0.759N	P=0.523	P=0.472
POLY 1.5	P=0.314	P=0.759N	P=0.511	P=0.480
POLY 6	P=0.294	P=0.761N	P=0.537	P=0.460
COCH-ARM / FISHERS	P=0.337	P=0.753N	P=0.500	P=0.500
MAX-ISO-POLY-3	P=0.425	P=0.497N	P=0.306	P=0.265
HISTCONT SAME RTE	P=0.082	P=0.165	P=0.082	P=0.100
HISTCONT ALL RTES	P=0.016*	P=0.396	P=0.092	P=0.083

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 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Mammary Gland Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/42.38	0/43.21	0/45.64	0/39.62
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/30 (0%)	0/30 (0%)	0/37 (0%)	0/23 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	1/100 (1%)			
HC TUMORS ALL RTES	4/999 (0%)			

**STATISTICAL TESTS**

POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

---

**Mammary Gland  
 Carcinoma**

---

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/42.38	0/43.21	0/45.64	0/39.62
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/30 (0%)	0/30 (0%)	0/37 (0%)	0/23 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	0/100 (0%)			
HC TUMORS ALL RTES	8/999 (1%)			

**STATISTICAL TESTS**

---

POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

---



TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

---

**Mammary Gland  
 Carcinoma or Adenoma**

**TUMOR RATES**

	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/42.38	0/43.21	0/45.64	0/39.62
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/30 (0%)	0/30 (0%)	0/37 (0%)	0/23 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	1/100 (1%)			
HC TUMORS ALL RTES	12/999 (1%)			

**STATISTICAL TESTS**

POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

---

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Mammary Gland Fibroadenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	2/50 (4%)	2/50 (4%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	2/42.66	2/43.21	2/45.64	0/39.62
POLY-3 PERCENT (g)	4.7%	4.6%	4.4%	0%
TERMINAL (d)	1/30 (3%)	2/30 (7%)	2/37 (5%)	0/23 (0%)
FIRST INCIDENCE	652	727 (T)	727 (T)	---
HC TUMORS SAME RTE	3/100 (3%)			
HC TUMORS ALL RTES	37/999 (4%)			

**STATISTICAL TESTS**

POLY 3	P=0.181N	P=0.690N	P=0.669N	P=0.254N
POLY 1.5	P=0.177N	P=0.690N	P=0.682N	P=0.249N
POLY 6	P=0.186N	P=0.691N	P=0.656N	P=0.261N
COCH-ARM / FISHERS	P=0.163N	P=0.691N	P=0.691N	P=0.247N
MAX-ISO-POLY-3	P=0.222N	P=0.494N	P=0.472N	P=0.092N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Mammary Gland</b>				
<b>Fibroma, Fibroadenoma or Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	2/50 (4%)	2/50 (4%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	2/42.66	2/43.21	2/45.64	0/39.62
POLY-3 PERCENT (g)	4.7%	4.6%	4.4%	0%
TERMINAL (d)	1/30 (3%)	2/30 (7%)	2/37 (5%)	0/23 (0%)
FIRST INCIDENCE	652	727 (T)	727 (T)	---
HC TUMORS SAME RTE	5/100 (5%)			
HC TUMORS ALL RTES	42/999 (4%)			

STATISTICAL TESTS

POLY 3	P=0.181N	P=0.690N	P=0.669N	P=0.254N
POLY 1.5	P=0.177N	P=0.690N	P=0.682N	P=0.249N
POLY 6	P=0.186N	P=0.691N	P=0.656N	P=0.261N
COCH-ARM / FISHERS	P=0.163N	P=0.691N	P=0.691N	P=0.247N
MAX-ISO-POLY-3	P=0.222N	P=0.494N	P=0.472N	P=0.092N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Mammary Gland  
 Fibroma, Fibroadenoma, Carcinoma, or Adenoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	2/50 (4%)	2/50 (4%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	2/42.66	2/43.21	2/45.64	0/39.62
POLY-3 PERCENT (g)	4.7%	4.6%	4.4%	0%
TERMINAL (d)	1/30 (3%)	2/30 (7%)	2/37 (5%)	0/23 (0%)
FIRST INCIDENCE	652	727 (T)	727 (T)	---
HC TUMORS SAME RTE	5/100 (5%)			
HC TUMORS ALL RTES	48/999 (5%)			

**STATISTICAL TESTS**

POLY 3	P=0.181N	P=0.690N	P=0.669N	P=0.254N
POLY 1.5	P=0.177N	P=0.690N	P=0.682N	P=0.249N
POLY 6	P=0.186N	P=0.691N	P=0.656N	P=0.261N
COCH-ARM / FISHERS	P=0.163N	P=0.691N	P=0.691N	P=0.247N
MAX-ISO-POLY-3	P=0.222N	P=0.494N	P=0.472N	P=0.092N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

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DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

---

**Pituitary Gland: Pars Distalis or Unspecified Site  
 Adenoma**

**TUMOR RATES**

OVERALL (a)	20/50 (40%)	15/50 (30%)	16/50 (32%)	16/50 (32%)
POLY-3 RATE (b)	20/44.6	15/44.51	16/46.43	16/42.01
POLY-3 PERCENT (g)	44.9%	33.7%	34.5%	38.1%
TERMINAL (d)	12/30 (40%)	9/30 (30%)	13/37 (35%)	7/23 (30%)
FIRST INCIDENCE	440	589	652	551
HC TUMORS SAME RTE	26/100 (26%)			
HC TUMORS ALL RTES	456/995 (46%)			

**STATISTICAL TESTS**

POLY 3	P=0.356N	P=0.191N	P=0.210N	P=0.335N
POLY 1.5	P=0.351N	P=0.194N	P=0.240N	P=0.322N
POLY 6	P=0.360N	P=0.191N	P=0.181N	P=0.349N
COCH-ARM / FISHERS	P=0.297N	P=0.201N	P=0.266N	P=0.266N
MAX-ISO-POLY-3	P=0.304N	P=0.137N	P=0.158N	P=0.265N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

---

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Skin  
 Basal Cell Adenoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	1/50 (2%)	1/50 (2%)	2/50 (4%)	1/50 (2%)
POLY-3 RATE (b)	1/42.38	1/43.21	2/46.08	1/39.62
POLY-3 PERCENT (g)	2.4%	2.3%	4.3%	2.5%
TERMINAL (d)	1/30 (3%)	1/30 (3%)	0/37 (0%)	1/23 (4%)
FIRST INCIDENCE	727 (T)	727 (T)	657	727 (T)
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	11/999 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.556	P=0.757N	P=0.529	P=0.746
POLY 1.5	P=0.564	P=0.758N	P=0.515	P=0.750
POLY 6	P=0.544	P=0.756N	P=0.546	P=0.740
COCH-ARM / FISHERS	P=0.591	P=0.753N	P=0.500	P=0.753N
MAX-ISO-POLY-3	P=0.602	P=0.494N	P=0.312	P=0.480
HISTCONT SAME RTE	P=0.397	P=1.000	P=0.107	P=0.268
HISTCONT ALL RTES	P=0.166	P=0.396	P=0.092	P=0.374

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Skin**  
 Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma

TUMOR RATES	#	#	#	#
OVERALL (a)	1/50 (2%)	1/50 (2%)	2/50 (4%)	2/50 (4%)
POLY-3 RATE (b)	1/42.38	1/43.21	2/46.08	2/39.62
POLY-3 PERCENT (g)	2.4%	2.3%	4.3%	5.1%
TERMINAL (d)	1/30 (3%)	1/30 (3%)	0/37 (0%)	2/23 (9%)
FIRST INCIDENCE	727 (T)	727 (T)	657	727 (T)
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	21/999 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.309	P=0.757N	P=0.529	P=0.476
POLY 1.5	P=0.316	P=0.758N	P=0.515	P=0.483
POLY 6	P=0.300	P=0.756N	P=0.546	P=0.467
COCH-ARM / FISHERS	P=0.337	P=0.753N	P=0.500	P=0.500
MAX-ISO-POLY-3	P=0.427	P=0.494N	P=0.312	P=0.267
HISTCONT SAME RTE	P=0.159	P=1.000	P=0.107	P=0.126
HISTCONT ALL RTES	P=0.265	P=1.000	P=0.332	P=0.287

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Skin**  
 Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma

TUMOR RATES	#	#	#	#
OVERALL (a)	2/50 (4%)	2/50 (4%)	3/50 (6%)	2/50 (4%)
POLY-3 RATE (b)	2/42.38	2/43.32	3/46.42	2/39.62
POLY-3 PERCENT (g)	4.7%	4.6%	6.5%	5.1%
TERMINAL (d)	2/30 (7%)	1/30 (3%)	0/37 (0%)	2/23 (9%)
FIRST INCIDENCE	727 (T)	699	633	727 (T)
HC TUMORS SAME RTE	14/100 (14%)			
HC TUMORS ALL RTES	100/999 (10%)			

**STATISTICAL TESTS**

POLY 3	P=0.530	P=0.686N	P=0.541	P=0.670
POLY 1.5	P=0.539	P=0.689N	P=0.521	P=0.676
POLY 6	P=0.518	P=0.685N	P=0.566	P=0.661
COCH-ARM / FISHERS	P=0.569	P=0.691N	P=0.500	P=0.691N
MAX-ISO-POLY-3	P=0.641	P=0.490N	P=0.367	P=0.472
HISTCONT SAME RTE	P=0.774	P=1.000	P=0.503	P=0.625
HISTCONT ALL RTES	P=0.753	P=1.000	P=0.465	P=0.599



TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Skin Fibroma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	2/50 (4%)	6/50 (12%)	2/50 (4%)	7/50 (14%)
POLY-3 RATE (b)	2/42.77	6/43.92	2/46.25	7/40.98
POLY-3 PERCENT (g)	4.7%	13.7%	4.3%	17.1%
TERMINAL (d)	1/30 (3%)	2/30 (7%)	1/37 (3%)	2/23 (9%)
FIRST INCIDENCE	617	617	533	605
HC TUMORS SAME RTE	11/100 (11%)			
HC TUMORS ALL RTES	102/999 (10%)			

STATISTICAL TESTS

POLY 3	P=0.096	P=0.140	P=0.666N	P=0.067
POLY 1.5	P=0.096	P=0.138	P=0.679N	P=0.069
POLY 6	P=0.096	P=0.142	P=0.650N	P=0.065
COCH-ARM / FISHERS	P=0.107	P=0.134	P=0.691N	P=0.080
MAX-ISO-POLY-3	P=0.049*	P=0.076	P=0.468N	P=0.035*
HISTCONT SAME RTE	P=0.067	P=0.106	P=1.000	P=0.047*
HISTCONT ALL RTES	P=0.056	P=0.086	P=1.000	P=0.037*

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Skin  
 Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	3/50 (6%)	6/50 (12%)	4/50 (8%)	8/50 (16%)
POLY-3 RATE (b)	3/42.77	6/43.92	4/46.25	8/41.17
POLY-3 PERCENT (g)	7%	13.7%	8.7%	19.4%
TERMINAL (d)	2/30 (7%)	2/30 (7%)	3/37 (8%)	2/23 (9%)
FIRST INCIDENCE	617	617	533	605
HC TUMORS SAME RTE	13/100 (13%)			
HC TUMORS ALL RTES	124/999 (12%)			

**STATISTICAL TESTS**

POLY 3	P=0.087	P=0.254	P=0.543	P=0.084
POLY 1.5	P=0.088	P=0.250	P=0.522	P=0.087
POLY 6	P=0.088	P=0.258	P=0.565	P=0.083
COCH-ARM / FISHERS	P=0.099	P=0.243	P=0.500	P=0.100
MAX-ISO-POLY-3	P=0.071	P=0.159	P=0.390	P=0.047*
HISTCONT SAME RTE	P=0.095	P=0.223	P=0.532	P=0.064
HISTCONT ALL RTES	P=0.080	P=0.189	P=0.497	P=0.051

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Skin  
 Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	1/50 (2%)	0/50 (0%)	2/50 (4%)	1/50 (2%)
POLY-3 RATE (b)	1/42.38	0/43.21	2/45.64	1/39.81
POLY-3 PERCENT (g)	2.4%	0%	4.4%	2.5%
TERMINAL (d)	1/30 (3%)	0/30 (0%)	2/37 (5%)	0/23 (0%)
FIRST INCIDENCE	727 (T)	---	727 (T)	678
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	23/999 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.466	P=0.496N	P=0.526	P=0.747
POLY 1.5	P=0.475	P=0.497N	P=0.513	P=0.750
POLY 6	P=0.456	P=0.495N	P=0.540	P=0.742
COCH-ARM / FISHERS	P=0.500	P=0.500N	P=0.500	P=0.753N
MAX-ISO-POLY-3	P=0.408	P=0.158N	P=0.308	P=0.482
HISTCONT SAME RTE	P=0.394	(e)	P=0.108	P=0.268
HISTCONT ALL RTES	P=0.478	(e)	P=0.325	P=0.610

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Skin</b>				
<b>Keratoacanthoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/42.38	0/43.21	0/45.64	0/39.62
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/30 (0%)	0/30 (0%)	0/37 (0%)	0/23 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	10/100 (10%)			
HC TUMORS ALL RTES	63/999 (6%)			

**STATISTICAL TESTS**

POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

Skin  
 Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma

TUMOR RATES	#	#	#	#
OVERALL (a)	1/50 (2%)	1/50 (2%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	1/42.38	1/43.32	1/45.98	0/39.62
POLY-3 PERCENT (g)	2.4%	2.3%	2.2%	0%
TERMINAL (d)	1/30 (3%)	0/30 (0%)	0/37 (0%)	0/23 (0%)
FIRST INCIDENCE	727 (T)	699	633	---
HC TUMORS SAME RTE	12/100 (12%)			
HC TUMORS ALL RTES	82/999 (8%)			

STATISTICAL TESTS

POLY 3	P=0.324N	P=0.756N	P=0.742N	P=0.513N
POLY 1.5	P=0.322N	P=0.757N	P=0.751N	P=0.510N
POLY 6	P=0.326N	P=0.755N	P=0.731N	P=0.519N
COCH-ARM / FISHERS	P=0.311N	P=0.753N	P=0.753N	P=0.500N
MAX-ISO-POLY-3	P=0.360N	P=0.493N	P=0.477N	P=0.175N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Skin  
 Squamous Cell Papilloma, Papilloma, or Keratoacanthoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	0/42.38	1/43.32	1/45.98	0/39.62
POLY-3 PERCENT (g)	0%	2.3%	2.2%	0%
TERMINAL (d)	0/30 (0%)	0/30 (0%)	0/37 (0%)	0/23 (0%)
FIRST INCIDENCE	---	699	633	---
HC TUMORS SAME RTE	11/100 (11%)			
HC TUMORS ALL RTES	78/999 (8%)			

**STATISTICAL TESTS**

POLY 3	P=0.609N	P=0.504	P=0.516	(e)
POLY 1.5	P=0.606N	P=0.503	P=0.508	(e)
POLY 6	P=0.613N	P=0.506	P=0.526	(e)
COCH-ARM / FISHERS	P=0.595N	P=0.500	P=0.500	(e)
MAX-ISO-POLY-3	P=0.433	P=0.164	P=0.178	(e)
HISTCONT SAME RTE	(h)	(h)	(h)	(e)
HISTCONT ALL RTES	(h)	(h)	(h)	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Testes  
 Adenoma**

**TUMOR RATES**

OVERALL (a)	45/50 (90%)	44/50 (88%)	46/50 (92%)	46/50 (92%)
POLY-3 RATE (b)	45/47.37	44/48.49	46/48.46	46/46.74
POLY-3 PERCENT (g)	95%	90.7%	94.9%	98.4%
TERMINAL (d)	30/30 (100%)	29/30 (97%)	36/37 (97%)	23/23 (100%)
FIRST INCIDENCE	464	527	533	461
HC TUMORS SAME RTE	92/100 (92%)			
HC TUMORS ALL RTES	856/999 (86%)			

**STATISTICAL TESTS**

POLY 3	P=0.151	P=0.321N	P=0.698N	P=0.326
POLY 1.5	P=0.148	P=0.390N	P=0.570	P=0.296
POLY 6	P=0.186	P=0.257N	P=0.617N	P=0.464
COCH-ARM / FISHERS	P=0.357	P=0.500N	P=0.500	P=0.500
MAX-ISO-POLY-3	P=0.139	P=0.184N	P=0.492N	P=0.118
HISTCONT SAME RTE	P=0.187	P=1.000	P=1.000	P=0.166
HISTCONT ALL RTES	P=0.159	P=0.604	P=0.373	P=0.138

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

Thyroid Gland: C-Cell  
 Adenoma

TUMOR RATES

OVERALL (a)	11/50 (22%)	8/50 (16%)	6/50 (12%)	5/50 (10%)
POLY-3 RATE (b)	11/43.35	8/44.3	6/45.82	5/39.73
POLY-3 PERCENT (g)	25.4%	18.1%	13.1%	12.6%
TERMINAL (d)	8/30 (27%)	3/30 (10%)	5/37 (14%)	4/23 (17%)
FIRST INCIDENCE	533	576	681	699
HC TUMORS SAME RTE	7/100 (7%)			
HC TUMORS ALL RTEs	118/994 (12%)			

STATISTICAL TESTS

POLY 3	P=0.079N	P=0.283N	P=0.112N	P=0.113N
POLY 1.5	P=0.075N	P=0.291N	P=0.127N	P=0.104N
POLY 6	P=0.085N	P=0.275N	P=0.098N	P=0.128N
COCH-ARM / FISHERS	P=0.062N	P=0.306N	P=0.143N	P=0.086N
MAX-ISO-POLY-3	P=0.115N	P=0.205N	P=0.074N	P=0.076N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTEs	(h)	(h)	(h)	(h)



TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

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DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

---

**Thyroid Gland: C-Cell  
 Carcinoma or Adenoma**

**TUMOR RATES**

OVERALL (a)	11/50 (22%)	8/50 (16%)	7/50 (14%)	5/50 (10%)
POLY-3 RATE (b)	11/43.35	8/44.3	7/45.82	5/39.73
POLY-3 PERCENT (g)	25.4%	18.1%	15.3%	12.6%
TERMINAL (d)	8/30 (27%)	3/30 (10%)	6/37 (16%)	4/23 (17%)
FIRST INCIDENCE	533	576	681	699
HC TUMORS SAME RTE	7/100 (7%)			
HC TUMORS ALL RTEs	149/994 (15%)			

**STATISTICAL TESTS**

POLY 3	P=0.090N	P=0.283N	P=0.177N	P=0.113N
POLY 1.5	P=0.085N	P=0.291N	P=0.197N	P=0.104N
POLY 6	P=0.098N	P=0.275N	P=0.157N	P=0.128N
COCH-ARM / FISHERS	P=0.069N	P=0.306N	P=0.218N	P=0.086N
MAX-ISO-POLY-3	P=0.120N	P=0.205N	P=0.123N	P=0.076N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTEs	(h)	(h)	(h)	(h)

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TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Thyroid Gland: Follicular Cell  
 Adenoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	2/50 (4%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/42.38	2/43.21	0/45.64	1/39.62
POLY-3 PERCENT (g)	0%	4.6%	0%	2.5%
TERMINAL (d)	0/30 (0%)	2/30 (7%)	0/37 (0%)	1/23 (4%)
FIRST INCIDENCE	---	727 (T)	---	727 (T)
HC TUMORS SAME RTE	1/100 (1%)			
HC TUMORS ALL RTES	13/994 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.523	P=0.241	(e)	P=0.487
POLY 1.5	P=0.526	P=0.240	(e)	P=0.490
POLY 6	P=0.518	P=0.242	(e)	P=0.481
COCH-ARM / FISHERS	P=0.539	P=0.247	(e)	P=0.500
MAX-ISO-POLY-3	P=0.332	P=0.080	(e)	P=0.158
HISTCONT SAME RTE	P=0.433	P=0.112	(e)	P=0.223
HISTCONT ALL RTES	P=0.386	P=0.091	(e)	P=0.189

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Thyroid Gland: Follicular Cell  
 Carcinoma or Adenoma**

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	2/50 (4%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	1/42.68	2/43.21	0/45.64	1/39.62
POLY-3 PERCENT (g)	2.3%	4.6%	0%	2.5%
TERMINAL (d)	0/30 (0%)	2/30 (7%)	0/37 (0%)	1/23 (4%)
FIRST INCIDENCE	646	727 (T)	---	727 (T)
HC TUMORS SAME RTE	4/100 (4%)			
HC TUMORS ALL RTES	24/994 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.502N	P=0.504	P=0.487N	P=0.744
POLY 1.5	P=0.504N	P=0.504	P=0.493N	P=0.749
POLY 6	P=0.500N	P=0.503	P=0.479N	P=0.737
COCH-ARM / FISHERS	P=0.500N	P=0.500	P=0.500N	P=0.753N
MAX-ISO-POLY-3	P=0.413N	P=0.285	P=0.158N	P=0.478
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**All Organs  
 Histiocytic Sarcoma**

**TUMOR RATES**

	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	0/42.38	0/43.21	2/45.64	0/39.62
POLY-3 PERCENT (g)	0%	0%	4.4%	0%
TERMINAL (d)	0/30 (0%)	0/30 (0%)	2/37 (5%)	0/23 (0%)
FIRST INCIDENCE	---	---	727 (T)	---
HC TUMORS SAME RTE	1/100 (1%)			
HC TUMORS ALL RTES	7/999 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.546	(e)	P=0.254	(e)
POLY 1.5	P=0.561	(e)	P=0.246	(e)
POLY 6	P=0.525	(e)	P=0.264	(e)
COCH-ARM / FISHERS	P=0.595	(e)	P=0.247	(e)
MAX-ISO-POLY-3	P=0.280	(e)	P=0.092	(e)
HISTCONT SAME RTE	P=0.369	(e)	P=0.129	(e)
HISTCONT ALL RTES	P=0.325	(e)	P=0.042*	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**All Organs**  
**Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated**

TUMOR RATES	#	#	#	#
OVERALL (a)	18/50 (36%)	25/50 (50%)	15/50 (30%)	12/50 (24%)
POLY-3 RATE (b)	18/45.59	25/47.7	15/46.63	12/41.11
POLY-3 PERCENT (g)	39.5%	52.4%	32.2%	29.2%
TERMINAL (d)	9/30 (30%)	12/30 (40%)	10/37 (27%)	4/23 (17%)
FIRST INCIDENCE	533	527	609	624
HC TUMORS SAME RTE	43/100 (43%)			
HC TUMORS ALL RTES	396/999 (40%)			

**STATISTICAL TESTS**

POLY 3	P=0.066N	P=0.145	P=0.303N	P=0.216N
POLY 1.5	P=0.053N	P=0.132	P=0.323N	P=0.189N
POLY 6	P=0.085N	P=0.163	P=0.285N	P=0.253N
COCH-ARM / FISHERS	P=0.032N*	P=0.113	P=0.335N	P=0.138N
MAX-ISO-POLY-3	P=0.099N	P=0.107	P=0.234N	P=0.168N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

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DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

---

**All Organs  
 Mesothelioma: Benign, Malignant, NOS**

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TUMOR RATES	#	#	#	#
OVERALL (a)	2/50 (4%)	3/50 (6%)	4/50 (8%)	2/50 (4%)
POLY-3 RATE (b)	2/43.18	3/44.3	4/46.3	2/39.84
POLY-3 PERCENT (g)	4.6%	6.8%	8.6%	5%
TERMINAL (d)	0/30 (0%)	1/30 (3%)	2/37 (5%)	1/23 (4%)
FIRST INCIDENCE	542	539	609	671
HC TUMORS SAME RTE	4/100 (4%)			
HC TUMORS ALL RTES	30/999 (3%)			

**STATISTICAL TESTS**

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POLY 3	P=0.548	P=0.512	P=0.370	P=0.665
POLY 1.5	P=0.563	P=0.508	P=0.353	P=0.673
POLY 6	P=0.528	P=0.514	P=0.389	P=0.653
COCH-ARM / FISHERS	P=0.562N	P=0.500	P=0.339	P=0.691N
MAX-ISO-POLY-3	P=0.541	P=0.336	P=0.234	P=0.467
HISTCONT SAME RTE	P=0.413	P=0.119	P=0.108	P=0.220
HISTCONT ALL RTES	P=0.121	P=0.190	P=0.070	P=0.416

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TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**All Organs  
 Mesothelioma: Malignant**

TUMOR RATES	#	#	#	#
OVERALL (a)	2/50 (4%)	3/50 (6%)	4/50 (8%)	2/50 (4%)
POLY-3 RATE (b)	2/43.18	3/44.3	4/46.3	2/39.84
POLY-3 PERCENT (g)	4.6%	6.8%	8.6%	5%
TERMINAL (d)	0/30 (0%)	1/30 (3%)	2/37 (5%)	1/23 (4%)
FIRST INCIDENCE	542	539	609	671
HC TUMORS SAME RTE	4/100 (4%)			
HC TUMORS ALL RTES	29/999 (3%)			

**STATISTICAL TESTS**

POLY 3	P=0.548	P=0.512	P=0.370	P=0.665
POLY 1.5	P=0.563	P=0.508	P=0.353	P=0.673
POLY 6	P=0.528	P=0.514	P=0.389	P=0.653
COCH-ARM / FISHERS	P=0.562N	P=0.500	P=0.339	P=0.691N
MAX-ISO-POLY-3	P=0.541	P=0.336	P=0.234	P=0.467
HISTCONT SAME RTE	P=0.413	P=0.119	P=0.108	P=0.220
HISTCONT ALL RTES	P=0.120	P=0.193	P=0.074	P=0.410

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>All Organs</b>				
<b>Benign Tumors</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	49/50 (98%)	49/50 (98%)	49/50 (98%)	47/50 (94%)
POLY-3 RATE (b)	49/49.16	49/49.21	49/49	47/47.14
POLY-3 PERCENT (g)	99.7%	99.6%	100%	99.7%
TERMINAL (d)	30/30 (100%)	30/30 (100%)	37/37 (100%)	23/23 (100%)
FIRST INCIDENCE	440	527	533	461
HC TUMORS SAME RTE	95/100 (95%)			
HC TUMORS ALL RTES	970/999 (97%)			

**STATISTICAL TESTS**

POLY 3	P=0.976	P=1.000N	P=1.000	P=1.000
POLY 1.5	P=0.772N	P=0.935N	P=0.929	P=0.934N
POLY 6	P=1.000	P=1.000N	P=1.000	P=1.000
COCH-ARM / FISHERS	P=0.163N	P=0.753N	P=0.753N	P=0.309N
MAX-ISO-POLY-3	P=0.474	P=0.426N	P=0.162	P=0.469
HISTCONT SAME RTE	P=0.192	P=0.261	P=0.182	P=0.240
HISTCONT ALL RTES	P=0.374	P=0.380	P=0.193	P=0.342



TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>All Organs</b>				
<b>Malignant Tumors</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	26/50 (52%)	28/50 (56%)	26/50 (52%)	18/50 (36%)
POLY-3 RATE (b)	26/47.61	28/49.19	26/47.18	18/42.43
POLY-3 PERCENT (g)	54.6%	56.9%	55.1%	42.4%
TERMINAL (d)	12/30 (40%)	12/30 (40%)	18/37 (49%)	5/23 (22%)
FIRST INCIDENCE	464	435	609	570
HC TUMORS SAME RTE	60/100 (60%)			
HC TUMORS ALL RTES	576/999 (58%)			

STATISTICAL TESTS

POLY 3	P=0.125N	P=0.491	P=0.563	P=0.170N
POLY 1.5	P=0.091N	P=0.468	P=0.558	P=0.136N
POLY 6	P=0.170N	P=0.508	P=0.563	P=0.214N
COCH-ARM / FISHERS	P=0.038N*	P=0.421	P=0.579N	P=0.079N
MAX-ISO-POLY-3	P=0.187N	P=0.409	P=0.480	P=0.134N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Males			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**All Organs  
 Malignant and Benign Tumors**

TUMOR RATES	#	#	#	#
OVERALL (a)	49/50 (98%)	50/50 (100%)	49/50 (98%)	48/50 (96%)
POLY-3 RATE (b)	49/49.16	50/50	49/49	48/48.1
POLY-3 PERCENT (g)	99.7%	100%	100%	99.8%
TERMINAL (d)	30/30 (100%)	30/30 (100%)	37/37 (100%)	23/23 (100%)
FIRST INCIDENCE	440	435	533	259
HC TUMORS SAME RTE	98/100 (98%)			
HC TUMORS ALL RTES	996/999 (100%)			

**STATISTICAL TESTS**

POLY 3	P=0.999	P=1.000	P=1.000	P=1.000
POLY 1.5	P=0.896N	P=0.927	P=0.929	P=0.964
POLY 6	P=1.000	P=1.000	P=1.000	P=1.000
COCH-ARM / FISHERS	P=0.247N	P=0.500	P=0.753N	P=0.500N
MAX-ISO-POLY-3	P=0.277	P=0.161	P=0.162	P=0.371
HISTCONT SAME RTE	P=0.101	P=0.078	P=0.082	P=0.232
HISTCONT ALL RTES	P=0.322	P=0.192	P=0.193	P=0.471

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

Adrenal Cortex  
 Adenoma

TUMOR RATES

OVERALL (a)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	0/39.63	1/42.13	0/39.15
POLY-3 PERCENT (g)	0%	0%	2.4%	0%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	1/34 (3%)	0/24 (0%)
FIRST INCIDENCE	---	---	728 (T)	---
HC TUMORS SAME RTE	1/100 (1%)			
HC TUMORS ALL RTES	12/948 (1%)			

STATISTICAL TESTS

POLY 3	P=0.645	(e)	P=0.486	(e)
POLY 1.5	P=0.668	(e)	P=0.487	(e)
POLY 6	P=0.610	(e)	P=0.485	(e)
COCH-ARM / FISHERS	P=0.694	(e)	P=0.500	(e)
MAX-ISO-POLY-3	P=0.400	(e)	P=0.158	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Adrenal Medulla  
 Pheochromocytoma Benign**

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	1/45.3	0/39.63	0/42.13	1/39.15
POLY-3 PERCENT (g)	2.2%	0%	0%	2.6%
TERMINAL (d)	1/36 (3%)	0/27 (0%)	0/34 (0%)	1/24 (4%)
FIRST INCIDENCE	728 (T)	---	---	728 (T)
HC TUMORS SAME RTE	0/100 (0%)			
HC TUMORS ALL RTES	23/942 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.588	P=0.527N	P=0.514N	P=0.727
POLY 1.5	P=0.592	P=0.519N	P=0.513N	P=0.740
POLY 6	P=0.582	P=0.536N	P=0.514N	P=0.709
COCH-ARM / FISHERS	P=0.595	P=0.500N	P=0.500N	P=0.753N
MAX-ISO-POLY-3	P=0.395	P=0.191N	P=0.176N	P=0.461
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Clitoral/Preputial Gland  
 Adenoma**

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	0/50 (0%)	4/50 (8%)	0/50 (0%)
POLY-3 RATE (b)	1/45.3	0/39.63	4/42.13	0/39.15
POLY-3 PERCENT (g)	2.2%	0%	9.5%	0%
TERMINAL (d)	1/36 (3%)	0/27 (0%)	4/34 (12%)	0/24 (0%)
FIRST INCIDENCE	728 (T)	---	728 (T)	---
HC TUMORS SAME RTE	5/100 (5%)			
HC TUMORS ALL RTES	88/948 (9%)			

**STATISTICAL TESTS**

POLY 3	P=0.585N	P=0.527N	P=0.157	P=0.529N
POLY 1.5	P=0.560N	P=0.519N	P=0.160	P=0.518N
POLY 6	P=0.597	P=0.536N	P=0.156	P=0.544N
COCH-ARM / FISHERS	P=0.531N	P=0.500N	P=0.181	P=0.500N
MAX-ISO-POLY-3	P=0.254N	P=0.191N	P=0.078	P=0.194N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Clitoral/Preputial Gland  
 Carcinoma or Adenoma**

**TUMOR RATES**

OVERALL (a)	2/50 (4%)	0/50 (0%)	4/50 (8%)	0/50 (0%)
POLY-3 RATE (b)	2/45.3	0/39.63	4/42.13	0/39.15
POLY-3 PERCENT (g)	4.4%	0%	9.5%	0%
TERMINAL (d)	2/36 (6%)	0/27 (0%)	4/34 (12%)	0/24 (0%)
FIRST INCIDENCE	728 (T)	---	728 (T)	---
HC TUMORS SAME RTE	5/100 (5%)			
HC TUMORS ALL RTES	110/948 (12%)			

**STATISTICAL TESTS**

POLY 3	P=0.378N	P=0.268N	P=0.304	P=0.271N
POLY 1.5	P=0.357N	P=0.259N	P=0.308	P=0.258N
POLY 6	P=0.410N	P=0.279N	P=0.303	P=0.290N
COCH-ARM / FISHERS	P=0.337N	P=0.247N	P=0.339	P=0.247N
MAX-ISO-POLY-3	P=0.219N	P=0.105N	P=0.184	P=0.107N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Intestine Large: Colon/Rectum  
 Carcinoma or Adenoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/45.3	0/39.63	0/42.13	1/39.5
POLY-3 PERCENT (g)	0%	0%	0%	2.5%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	629
HC TUMORS SAME RTE	1/100 (1%)			
HC TUMORS ALL RTES	3/950 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.187	(e)	(e)	P=0.473
POLY 1.5	P=0.192	(e)	(e)	P=0.483
POLY 6	P=0.181	(e)	(e)	P=0.459
COCH-ARM / FISHERS	P=0.198	(e)	(e)	P=0.500
MAX-ISO-POLY-3	P=0.123	(e)	(e)	P=0.158
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Islets, Pancreatic  
 Adenoma**

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	1/45.53	0/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	2.2%	0%	0%	0%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	668	---	---	---
HC TUMORS SAME RTE	1/100 (1%)			
HC TUMORS ALL RTES	18/943 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.283N	P=0.528N	P=0.515N	P=0.530N
POLY 1.5	P=0.292N	P=0.520N	P=0.513N	P=0.518N
POLY 6	P=0.270N	P=0.538N	P=0.516N	P=0.546N
COCH-ARM / FISHERS	P=0.306N	P=0.500N	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.178N	P=0.192N	P=0.177N	P=0.195N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)



TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Kidney: Renal Tubule  
 Carcinoma or Adenoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	0/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	0/100 (0%)			
HC TUMORS ALL RTES	1/944 (0%)			

**STATISTICAL TESTS**

POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

Liver  
 Hepatocellular Adenoma

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	0/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	13/950 (1%)			

**STATISTICAL TESTS**

POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Liver  
 Hepatocellular Carcinoma or Hepatocellular Adenoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	1/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	0%	2.5%	0%	0%
TERMINAL (d)	0/36 (0%)	1/27 (4%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	---	728 (T)	---	---
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	13/950 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.590N	P=0.473	(e)	(e)
POLY 1.5	P=0.585N	P=0.481	(e)	(e)
POLY 6	P=0.594N	P=0.464	(e)	(e)
COCH-ARM / FISHERS	P=0.567N	P=0.500	(e)	(e)
MAX-ISO-POLY-3	P=0.414N	P=0.158	(e)	(e)
HISTCONT SAME RTE	(h)	(h)	(e)	(e)
HISTCONT ALL RTES	(h)	(h)	(e)	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

Liver  
 Hepatocellular Carcinoma, Hepatocellular Adenoma, or Hepatoblastoma

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	1/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	0%	2.5%	0%	0%
TERMINAL (d)	0/36 (0%)	1/27 (4%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	---	728 (T)	---	---
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	13/950 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.590N	P=0.473	(e)	(e)
POLY 1.5	P=0.585N	P=0.481	(e)	(e)
POLY 6	P=0.594N	P=0.464	(e)	(e)
COCH-ARM / FISHERS	P=0.567N	P=0.500	(e)	(e)
MAX-ISO-POLY-3	P=0.414N	P=0.158	(e)	(e)
HISTCONT SAME RTE	(h)	(h)	(e)	(e)
HISTCONT ALL RTES	(h)	(h)	(e)	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Mammary Gland Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	2/45.3	0/39.63	0/42.13	1/39.15
POLY-3 PERCENT (g)	4.4%	0%	0%	2.6%
TERMINAL (d)	2/36 (6%)	0/27 (0%)	0/34 (0%)	1/24 (4%)
FIRST INCIDENCE	728 (T)	---	---	728 (T)
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	12/950 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.441N	P=0.268N	P=0.254N	P=0.551N
POLY 1.5	P=0.448N	P=0.259N	P=0.252N	P=0.531N
POLY 6	P=0.430N	P=0.279N	P=0.253N	P=0.577N
COCH-ARM / FISHERS	P=0.461N	P=0.247N	P=0.247N	P=0.500N
MAX-ISO-POLY-3	P=0.198N	P=0.105N	P=0.092N	P=0.335N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Mammary Gland Carcinoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	3/50 (6%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	3/41.04	0/42.13	0/39.15
POLY-3 PERCENT (g)	0%	7.3%	0%	0%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	---	533	---	---
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	49/950 (5%)			

**STATISTICAL TESTS**

POLY 3	P=0.361N	P=0.102	(e)	(e)
POLY 1.5	P=0.345N	P=0.106	(e)	(e)
POLY 6	P=0.379N	P=0.098	(e)	(e)
COCH-ARM / FISHERS	P=0.311N	P=0.121	(e)	(e)
MAX-ISO-POLY-3	P=0.205N	P=0.038*	(e)	(e)
HISTCONT SAME RTE	(h)	(h)	(e)	(e)
HISTCONT ALL RTES	(h)	(h)	(e)	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Mammary Gland Carcinoma or Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	2/50 (4%)	3/50 (6%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	2/45.3	3/41.04	0/42.13	1/39.15
POLY-3 PERCENT (g)	4.4%	7.3%	0%	2.6%
TERMINAL (d)	2/36 (6%)	0/27 (0%)	0/34 (0%)	1/24 (4%)
FIRST INCIDENCE	728 (T)	533	---	728 (T)
HC TUMORS SAME RTE	4/100 (4%)			
HC TUMORS ALL RTES	61/950 (6%)			

STATISTICAL TESTS

POLY 3	P=0.271N	P=0.455	P=0.254N	P=0.551N
POLY 1.5	P=0.261N	P=0.465	P=0.252N	P=0.531N
POLY 6	P=0.281N	P=0.444	P=0.253N	P=0.577N
COCH-ARM / FISHERS	P=0.242N	P=0.500	P=0.247N	P=0.500N
MAX-ISO-POLY-3	P=0.236N	P=0.293	P=0.092N	P=0.335N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Mammary Gland Fibroadenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	32/50 (64%)	30/50 (60%)	30/50 (60%)	16/50 (32%)
POLY-3 RATE (b)	32/46.25	30/42.24	30/43.43	16/41.63
POLY-3 PERCENT (g)	69.2%	71%	69.1%	38.4%
TERMINAL (d)	27/36 (75%)	21/27 (78%)	24/34 (71%)	7/24 (29%)
FIRST INCIDENCE	668	533	643	461
HC TUMORS SAME RTE	62/100 (62%)			
HC TUMORS ALL RTEs	496/950 (52%)			

**STATISTICAL TESTS**

POLY 3	P<0.001N**	P=0.518	P=0.589N	P=0.002N**
POLY 1.5	P<0.001N**	P=0.567	P=0.572N	P<0.001N**
POLY 6	P<0.001N**	P=0.465	P=0.573N	P=0.003N**
COCH-ARM / FISHERS	P<0.001N**	P=0.418N	P=0.418N	P<0.001N**
MAX-ISO-POLY-3	P<0.001N**	P=0.423	P=0.494N	P=0.002N**
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTEs	(h)	(h)	(h)	(h)



TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Mammary Gland Fibroma, Fibroadenoma or Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	33/50 (66%)	30/50 (60%)	30/50 (60%)	17/50 (34%)
POLY-3 RATE (b)	33/46.25	30/42.24	30/43.43	17/41.63
POLY-3 PERCENT (g)	71.4%	71%	69.1%	40.8%
TERMINAL (d)	28/36 (78%)	21/27 (78%)	24/34 (71%)	8/24 (33%)
FIRST INCIDENCE	668	533	643	461
HC TUMORS SAME RTE	63/100 (63%)			
HC TUMORS ALL RTEs	503/950 (53%)			

**STATISTICAL TESTS**

POLY 3	P<0.001N**	P=0.584N	P=0.498N	P=0.002N**
POLY 1.5	P<0.001N**	P=0.527N	P=0.485N	P<0.001N**
POLY 6	P<0.001N**	P=0.565	P=0.477N	P=0.003N**
COCH-ARM / FISHERS	P<0.001N**	P=0.339N	P=0.339N	P<0.001N**
MAX-ISO-POLY-3	P<0.001N**	P=0.486N	P=0.404N	P=0.002N**
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTEs	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Mammary Gland Fibroma, Fibroadenoma, Carcinoma, or Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	33/50 (66%)	31/50 (62%)	30/50 (60%)	17/50 (34%)
POLY-3 RATE (b)	33/46.25	31/42.82	30/43.43	17/41.63
POLY-3 PERCENT (g)	71.4%	72.4%	69.1%	40.8%
TERMINAL (d)	28/36 (78%)	21/27 (78%)	24/34 (71%)	8/24 (33%)
FIRST INCIDENCE	668	533	643	461
HC TUMORS SAME RTE	65/100 (65%)			
HC TUMORS ALL RTEs	531/950 (56%)			

**STATISTICAL TESTS**

POLY 3	P<0.001N**	P=0.553	P=0.498N	P=0.002N**
POLY 1.5	P<0.001N**	P=0.585	P=0.485N	P<0.001N**
POLY 6	P<0.001N**	P=0.522	P=0.477N	P=0.003N**
COCH-ARM / FISHERS	P<0.001N**	P=0.418N	P=0.339N	P<0.001N**
MAX-ISO-POLY-3	P<0.001N**	P=0.454	P=0.404N	P=0.002N**
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTEs	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Pituitary Gland: Pars Distalis or Unspecified Site  
 Adenoma**

**TUMOR RATES**

OVERALL (a)	16/50 (32%)	15/49 (31%)	13/50 (26%)	11/50 (22%)
POLY-3 RATE (b)	16/47.08	15/41.37	13/44.12	11/41.15
POLY-3 PERCENT (g)	34%	36.3%	29.5%	26.7%
TERMINAL (d)	10/36 (28%)	10/27 (37%)	8/34 (24%)	6/24 (25%)
FIRST INCIDENCE	592	533	459	541
HC TUMORS SAME RTE	46/100 (46%)			
HC TUMORS ALL RTES	540/945 (57%)			

**STATISTICAL TESTS**

POLY 3	P=0.216N	P=0.500	P=0.406N	P=0.306N
POLY 1.5	P=0.180N	P=0.548	P=0.396N	P=0.255N
POLY 6	P=0.270N	P=0.437	P=0.413N	P=0.384N
COCH-ARM / FISHERS	P=0.132N	P=0.527N	P=0.330N	P=0.184N
MAX-ISO-POLY-3	P=0.347N	P=0.414	P=0.327N	P=0.244N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Skin</b>				
<b>Basal Cell Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	1/45.3	0/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	2.2%	0%	0%	0%
TERMINAL (d)	1/36 (3%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	728 (T)	---	---	---
HC TUMORS SAME RTE	1/100 (1%)			
HC TUMORS ALL RTES	2/950 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.284N	P=0.527N	P=0.514N	P=0.529N
POLY 1.5	P=0.292N	P=0.519N	P=0.513N	P=0.518N
POLY 6	P=0.271N	P=0.536N	P=0.514N	P=0.544N
COCH-ARM / FISHERS	P=0.306N	P=0.500N	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.176N	P=0.191N	P=0.176N	P=0.194N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Skin**  
 Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma

TUMOR RATES	#	#	#	#
OVERALL (a)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	1/45.3	0/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	2.2%	0%	0%	0%
TERMINAL (d)	1/36 (3%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	728 (T)	---	---	---
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	7/950 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.284N	P=0.527N	P=0.514N	P=0.529N
POLY 1.5	P=0.292N	P=0.519N	P=0.513N	P=0.518N
POLY 6	P=0.271N	P=0.536N	P=0.514N	P=0.544N
COCH-ARM / FISHERS	P=0.306N	P=0.500N	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.176N	P=0.191N	P=0.176N	P=0.194N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Skin**  
 Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma

TUMOR RATES	#	#	#	#
OVERALL (a)	3/50 (6%)	0/50 (0%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	3/45.3	0/39.63	1/42.74	0/39.15
POLY-3 PERCENT (g)	6.6%	0%	2.3%	0%
TERMINAL (d)	3/36 (8%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	728 (T)	---	533	---
HC TUMORS SAME RTE	4/100 (4%)			
HC TUMORS ALL RTES	18/950 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.083N	P=0.144N	P=0.326N	P=0.147N
POLY 1.5	P=0.083N	P=0.137N	P=0.325N	P=0.136N
POLY 6	P=0.083N	P=0.154N	P=0.324N	P=0.163N
COCH-ARM / FISHERS	P=0.086N	P=0.121N	P=0.309N	P=0.121N
MAX-ISO-POLY-3	P=0.048N*	P=0.060N	P=0.176N	P=0.062N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Skin Fibroma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	0/39.63	2/42.13	0/39.15
POLY-3 PERCENT (g)	0%	0%	4.8%	0%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	2/34 (6%)	0/24 (0%)
FIRST INCIDENCE	---	---	728 (T)	---
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	14/950 (2%)			

STATISTICAL TESTS

POLY 3	P=0.532	(e)	P=0.221	(e)
POLY 1.5	P=0.561	(e)	P=0.223	(e)
POLY 6	P=0.489	(e)	P=0.221	(e)
COCH-ARM / FISHERS	P=0.595	(e)	P=0.247	(e)
MAX-ISO-POLY-3	P=0.266	(e)	P=0.076	(e)
HISTCONT SAME RTE	P=0.351	(e)	P=0.106	(e)
HISTCONT ALL RTES	P=0.308	(e)	P=0.086	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Skin**  
 Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	0/39.63	2/42.13	0/39.15
POLY-3 PERCENT (g)	0%	0%	4.8%	0%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	2/34 (6%)	0/24 (0%)
FIRST INCIDENCE	---	---	728 (T)	---
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	20/950 (2%)			

STATISTICAL TESTS

POLY 3	P=0.532	(e)	P=0.221	(e)
POLY 1.5	P=0.561	(e)	P=0.223	(e)
POLY 6	P=0.489	(e)	P=0.221	(e)
COCH-ARM / FISHERS	P=0.595	(e)	P=0.247	(e)
MAX-ISO-POLY-3	P=0.266	(e)	P=0.076	(e)
HISTCONT SAME RTE	P=0.351	(e)	P=0.106	(e)
HISTCONT ALL RTES	P=0.308	(e)	P=0.086	(e)



TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Skin  
 Fibrosarcoma, Sarcoma, Myxosarcoma, or Fibrous Histiocytoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	0/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	0/100 (0%)			
HC TUMORS ALL RTES	6/950 (1%)			

**STATISTICAL TESTS**

POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Skin</b>				
<b>Keratoacanthoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/45.3	0/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	4.4%	0%	0%	0%
TERMINAL (d)	2/36 (6%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	728 (T)	---	---	---
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	7/950 (1%)			

STATISTICAL TESTS

POLY 3	P=0.102N	P=0.268N	P=0.254N	P=0.271N
POLY 1.5	P=0.106N	P=0.259N	P=0.252N	P=0.258N
POLY 6	P=0.097N	P=0.279N	P=0.253N	P=0.290N
COCH-ARM / FISHERS	P=0.115N	P=0.247N	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.062N	P=0.105N	P=0.092N	P=0.107N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Skin  
 Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	3/50 (6%)	0/50 (0%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	3/45.3	0/39.63	1/42.74	0/39.15
POLY-3 PERCENT (g)	6.6%	0%	2.3%	0%
TERMINAL (d)	3/36 (8%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	728 (T)	---	533	---
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	11/950 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.083N	P=0.144N	P=0.326N	P=0.147N
POLY 1.5	P=0.083N	P=0.137N	P=0.325N	P=0.136N
POLY 6	P=0.083N	P=0.154N	P=0.324N	P=0.163N
COCH-ARM / FISHERS	P=0.086N	P=0.121N	P=0.309N	P=0.121N
MAX-ISO-POLY-3	P=0.048N*	P=0.060N	P=0.176N	P=0.062N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Skin  
 Squamous Cell Papilloma, Papilloma, or Keratoacanthoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	3/50 (6%)	0/50 (0%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	3/45.3	0/39.63	1/42.74	0/39.15
POLY-3 PERCENT (g)	6.6%	0%	2.3%	0%
TERMINAL (d)	3/36 (8%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	728 (T)	---	533	---
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	10/950 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.083N	P=0.144N	P=0.326N	P=0.147N
POLY 1.5	P=0.083N	P=0.137N	P=0.325N	P=0.136N
POLY 6	P=0.083N	P=0.154N	P=0.324N	P=0.163N
COCH-ARM / FISHERS	P=0.086N	P=0.121N	P=0.309N	P=0.121N
MAX-ISO-POLY-3	P=0.048N*	P=0.060N	P=0.176N	P=0.062N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Thyroid Gland: C-Cell  
 Adenoma**

**TUMOR RATES**

OVERALL (a)	6/50 (12%)	7/50 (14%)	5/50 (10%)	3/50 (6%)
POLY-3 RATE (b)	6/45.3	7/40.02	5/42.43	3/39.74
POLY-3 PERCENT (g)	13.2%	17.5%	11.8%	7.6%
TERMINAL (d)	6/36 (17%)	6/27 (22%)	4/34 (12%)	2/24 (8%)
FIRST INCIDENCE	728 (T)	618	646	541
HC TUMORS SAME RTE	16/100 (16%)			
HC TUMORS ALL RTES	100/941 (11%)			

**STATISTICAL TESTS**

POLY 3	P=0.196N	P=0.405	P=0.546N	P=0.310N
POLY 1.5	P=0.176N	P=0.430	P=0.542N	P=0.284N
POLY 6	P=0.225N	P=0.375	P=0.542N	P=0.348N
COCH-ARM / FISHERS	P=0.146N	P=0.500	P=0.500N	P=0.243N
MAX-ISO-POLY-3	P=0.252N	P=0.304	P=0.419N	P=0.213N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Thyroid Gland: C-Cell  
 Carcinoma or Adenoma**

**TUMOR RATES**

OVERALL (a)	6/50 (12%)	7/50 (14%)	5/50 (10%)	4/50 (8%)
POLY-3 RATE (b)	6/45.3	7/40.02	5/42.43	4/40.11
POLY-3 PERCENT (g)	13.2%	17.5%	11.8%	10%
TERMINAL (d)	6/36 (17%)	6/27 (22%)	4/34 (12%)	2/24 (8%)
FIRST INCIDENCE	728 (T)	618	646	541
HC TUMORS SAME RTE	17/100 (17%)			
HC TUMORS ALL RTES	115/941 (12%)			

**STATISTICAL TESTS**

POLY 3	P=0.306N	P=0.405	P=0.546N	P=0.448N
POLY 1.5	P=0.283N	P=0.430	P=0.542N	P=0.419N
POLY 6	P=0.337N	P=0.375	P=0.542N	P=0.487N
COCH-ARM / FISHERS	P=0.246N	P=0.500	P=0.500N	P=0.370N
MAX-ISO-POLY-3	P=0.400N	P=0.304	P=0.419N	P=0.329N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**Thyroid Gland: Follicular Cell  
 Adenoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	0/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	1/100 (1%)			
HC TUMORS ALL RTES	5/941 (1%)			

**STATISTICAL TESTS**

POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

---

**Thyroid Gland: Follicular Cell  
 Carcinoma or Adenoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	0/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	8/941 (1%)			

**STATISTICAL TESTS**

POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

---



TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>Uterus</b>				
<b>Polyp Stromal</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	8/50 (16%)	3/50 (6%)	7/50 (14%)	6/50 (12%)
POLY-3 RATE (b)	8/46.34	3/40.08	7/43.12	6/39.66
POLY-3 PERCENT (g)	17.3%	7.5%	16.2%	15.1%
TERMINAL (d)	5/36 (14%)	2/27 (7%)	5/34 (15%)	5/24 (21%)
FIRST INCIDENCE	561	598	497	572
HC TUMORS SAME RTE	15/100 (15%)			
HC TUMORS ALL RTES	176/950 (19%)			

**STATISTICAL TESTS**

POLY 3	P=0.542	P=0.150N	P=0.560N	P=0.510N
POLY 1.5	P=0.538N	P=0.134N	P=0.552N	P=0.461N
POLY 6	P=0.495	P=0.173N	P=0.563N	P=0.576N
COCH-ARM / FISHERS	P=0.500N	P=0.100N	P=0.500N	P=0.387N
MAX-ISO-POLY-3	P=0.480N	P=0.102N	P=0.449N	P=0.400N
HISTCONT SAME RTE	P=0.696	P=1.000	P=1.000	P=1.000
HISTCONT ALL RTES	P=0.664	P=1.000	P=1.000	P=1.000

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

---

**All Organs  
 Histiocytic Sarcoma**

---

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	0/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	0/100 (0%)			
HC TUMORS ALL RTES	9/950 (1%)			

**STATISTICAL TESTS**

---

POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

---

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

---

**All Organs**  
**Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated**

---

TUMOR RATES	#	#	#	#
OVERALL (a)	6/50 (12%)	9/50 (18%)	8/50 (16%)	9/50 (18%)
POLY-3 RATE (b)	6/45.77	9/41.6	8/42.43	9/40.71
POLY-3 PERCENT (g)	13.1%	21.6%	18.9%	22.1%
TERMINAL (d)	4/36 (11%)	4/27 (15%)	7/34 (21%)	3/24 (13%)
FIRST INCIDENCE	659	500	646	600
HC TUMORS SAME RTE	19/100 (19%)			
HC TUMORS ALL RTES	222/950 (23%)			

**STATISTICAL TESTS**

---

POLY 3	P=0.214	P=0.220	P=0.328	P=0.206
POLY 1.5	P=0.245	P=0.236	P=0.337	P=0.234
POLY 6	P=0.181	P=0.202	P=0.325	P=0.175
COCH-ARM / FISHERS	P=0.301	P=0.288	P=0.387	P=0.288
MAX-ISO-POLY-3	P=0.249	P=0.157	P=0.240	P=0.147
HISTCONT SAME RTE	P=0.330	P=0.221	P=0.336	P=0.209
HISTCONT ALL RTES	P=0.289	P=0.187	P=0.296	P=0.177

---

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

---

**All Organs  
 Mesothelioma: Benign, Malignant, NOS**

---

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	0/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	4/950 (0%)			

**STATISTICAL TESTS**

---

POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

---

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

---

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

---

**All Organs  
 Mesothelioma: Malignant**

---

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.3	0/39.63	0/42.13	0/39.15
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/36 (0%)	0/27 (0%)	0/34 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	2/100 (2%)			
HC TUMORS ALL RTES	3/950 (0%)			

**STATISTICAL TESTS**

---

POLY 3	(e)	(e)	(e)	(e)
POLY 1.5	(e)	(e)	(e)	(e)
POLY 6	(e)	(e)	(e)	(e)
COCH-ARM / FISHERS	(e)	(e)	(e)	(e)
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

---

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>All Organs</b>				
<b>Benign Tumors</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	42/50 (84%)	34/50 (68%)	39/50 (78%)	28/50 (56%)
POLY-3 RATE (b)	42/48.23	34/42.62	39/46.14	28/44.5
POLY-3 PERCENT (g)	87.1%	79.8%	84.5%	62.9%
TERMINAL (d)	32/36 (89%)	24/27 (89%)	29/34 (85%)	12/24 (50%)
FIRST INCIDENCE	561	533	459	461
HC TUMORS SAME RTE	89/100 (89%)			
HC TUMORS ALL RTES	840/950 (88%)			

**STATISTICAL TESTS**

POLY 3	P=0.002N**	P=0.238N	P=0.475N	P=0.004N**
POLY 1.5	P=0.002N**	P=0.159N	P=0.474N	P=0.003N**
POLY 6	P=0.003N**	P=0.378N	P=0.465N	P=0.007N**
COCH-ARM / FISHERS	P=0.004N**	P=0.050N*	P=0.306N	P=0.002N**
MAX-ISO-POLY-3	P=0.002N**	P=0.168N	P=0.358N	P=0.002N**
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG
<b>All Organs</b>				
<b>Malignant Tumors</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	10/50 (20%)	14/50 (28%)	8/50 (16%)	11/50 (22%)
POLY-3 RATE (b)	10/46.47	14/43.34	8/42.43	11/41.08
POLY-3 PERCENT (g)	21.5%	32.3%	18.9%	26.8%
TERMINAL (d)	6/36 (17%)	5/27 (19%)	7/34 (21%)	4/24 (17%)
FIRST INCIDENCE	561	500	646	600
HC TUMORS SAME RTE	31/100 (31%)			
HC TUMORS ALL RTES	358/950 (38%)			

**STATISTICAL TESTS**

POLY 3	P=0.472	P=0.179	P=0.481N	P=0.373
POLY 1.5	P=0.521	P=0.189	P=0.465N	P=0.418
POLY 6	P=0.415	P=0.168	P=0.493N	P=0.321
COCH-ARM / FISHERS	P=0.488N	P=0.241	P=0.398N	P=0.500
MAX-ISO-POLY-3	P=0.472	P=0.131	P=0.381N	P=0.294
HISTCONT SAME RTE	P=0.597	P=0.186	P=1.000	P=0.409
HISTCONT ALL RTES	P=0.555	P=0.156	P=1.000	P=0.370

TDMS No. 20005 - 05  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
 CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
 Time Report Requested: 11:57:36  
 First Dose M/F: 01/21/04 / 01/22/04  
 Lab: BAT

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 104 WEEKS**

DOSE	Females			
	0 MG/KG	1250 MG/KG	2500 MG/KG	5000 MG/KG

**All Organs  
 Malignant and Benign Tumors**

TUMOR RATES	#	#	#	#
OVERALL (a)	45/50 (90%)	40/50 (80%)	40/50 (80%)	34/50 (68%)
POLY-3 RATE (b)	45/48.71	40/45.42	40/46.14	34/45.95
POLY-3 PERCENT (g)	92.4%	88.1%	86.7%	74%
TERMINAL (d)	33/36 (92%)	24/27 (89%)	30/34 (88%)	14/24 (58%)
FIRST INCIDENCE	561	500	459	461
HC TUMORS SAME RTE	97/100 (97%)			
HC TUMORS ALL RTES	901/950 (95%)			

**STATISTICAL TESTS**

POLY 3	P=0.005N**	P=0.352N	P=0.275N	P=0.012N*
POLY 1.5	P=0.004N**	P=0.305N	P=0.261N	P=0.009N**
POLY 6	P=0.006N**	P=0.422N	P=0.297N	P=0.017N*
COCH-ARM / FISHERS	P=0.006N**	P=0.131N	P=0.131N	P=0.006N**
MAX-ISO-POLY-3	P=0.006N**	P=0.234N	P=0.178N	P=0.006N**
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)



TDMS No. 20005 - 05  
Test Type: CHRONIC  
Route: GAVAGE  
Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

Ginseng  
CAS Number: 50647-08-0

Date Report Requested: 07/23/2008  
Time Report Requested: 11:57:36  
First Dose M/F: 01/21/04 / 01/22/04  
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.
  - (h) Value of Historical Controls statistic is only calculated when Poly-3 trend is positive and when there is more than one tumor in the treatment groups.
  - (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 \*\*\*